EFFECT OF CASH FLOW ON PERFORMANCE OF LISTED DEPOSIT MONEY BANKS IN NIGERIA

Grace N. Ofoegbn
University of Nigeria, Enugu Campus

&

Eric Chinedu Okoro
University of Nigeria, Enugu Campus

Abstract
This paper examined the effect of cash flow on the performance of listed Deposit Money Banks (DMBs) in Nigeria. With the aid of multi-stage sampling technique which uses both pure random and eliminating method, twelve (12) banks were sampled for investigation over ten years beginning from 2006 to 2015 from a total population of fifteen (15) Deposit Money Banks (DMBs) listed on the Nigerian Stock Exchange. This corresponds to 120 observations from a total of 150. Published financial statements of the selected banking firms under study were the source of data. From the objectives of the study, a total of three hypotheses were formulated and tested at 5% level of significance. Data gathered were subjected to statistical analysis through the simple regression technique, and the EViews statistical software package was used to do the analysis. The findings showed that cash flows from operating, investing and financing activities, have no statistically significant effect on the returns on investment, returns on equity and earnings per share of Deposit Money Banks (DMBs) studied. The study yielded several recommendations, including an urgent and compelling need for the regulatory authorities to rethink the accounting regime for banks. The new regime should specifically take banks' credit, creating function into consideration mostly because this uniqueness in banking operations entails that cash flow from the operating activities functions differently and hence requires being differently accounted for too.

Keywords: Cash flows, corporate performance, Deposit Money Banks (DMBs)

Introduction
Cash flow is a concept used to describe the inflows and outflows of cash and cash equivalents within an entity. Adelegan (2003) refers to it as a more direct measure of liquidity and a contributing factor in corporate performance. Uremadu (2004) maintains that cash flows of an organization are those pools of cash that the company invests in its fixed assets, inventories, account receivables and marketable securities that generate corporate profit. Positive cash flow reveals an increase in the company's liquid assets enabling it to settle debts, reinvest in its business, return money to its shareholders, and provide a buffer against future financial challenges.

On the other hand, negative cash flow shows that a company's liquid assets are decreasing. The implication of the above is that a high inflow of cash, when compared with the outflow (called positive cash flow), provides a company with sufficient cash balance for investment purposes. On the contrary, a low inflow leads to an excess of outflow over the inflow (called negative cash flow) reduces organizational operations (Nwanyanwu, 2015). According to Pandy (1979:357-358) “cash flows – inflows and outflows are inseparable parts of the business operations of all firms”. High level of cash flow does not necessarily mean high profit and high
levels of profit do not automatically translate into higher or even positive cash flow. The level of cash flow is not necessarily a good measure of performance. In evaluating corporate performance, the role of cash flow is prominent. The cash flow position of a company determines the extent to which it finances its operations (Nwanyanwu, 2015). To maintain growth in sales and earnings, the firms need cash to invest in inventories, receivables and fixed (non-current) assets and to make payments for operating expenses. However, it has been known for over one hundred years that banks are different from other types of business; through credit creation, the product of the bank's business is cash (Asgeir, 2014).

Performance can be defined as the result of business activity. The type of organisation and its objective of measurement determine the appropriate measure for the assessment of corporate performance. Therefore, performance measurement is the process by which an entity prescribes the measurement criteria by which programmes, investments, outputs and acquisitions are attaining the desired results (Hunger and Wheelan, 1997). Corporate performance is a term which measures a corporate entity's state of attainment of set objectives at a specified period. Inherent in the above definition is that any consideration of corporate performance is inexorably linked to corporate objectives. Usually, the assessment of performance varies from one company to the other, depending on the nature of the activity. Whereas in profit-making organizations, profit or sales volume may provide an index of performance, non-profit entities may use several measures and service to society, for example, scholarships, as measures of performance.

Statement of the problem
Researches have shown that cash flow challenges are of critical concern among business leaders around the world (Carter, 2013; Hutchison, 2013; and Maimona, 2013 in BDC, 2014). Little wonder that cash flow management has become a critical element of many firms' operational strategies (Fisher, 1998; Quinn, 2011 in Kroes and Manikas, 2014). Moreover, according to Rigby and Sweig (2009), cash flow management is an operational, tactical activity and also a strategic activity. An issue of considerable concern in the literature borders on how cash flow is linked to corporate performance in that, it is not only challenging to business leaders, but its management also commands the attention of all levels of corporate management. Ascertaining of this issue has been the subject of several research efforts over the years, and results of the studies show that the researchers are of two different schools of thought as shown below. Some researchers like Nwanyanwum (2015), Oyadonghan (2014) Brush et al. (2000) have empirically studied the connection between cash flow and corporate performance. Their results revealed a significant positive relationship between cash flow and firms' performance. Brush et al. (2000) added that different governance conditions might affect sales growth and performance in different ways. On the other hand, Ali et al. (2013), Chikashi (2013) and Watson (2005) carried out similar studies and came up with results that revealed that cash flow and firm performance have a significant negative relationship and that comprehensive income issued by the firms were superior to cash flow variables in predicting their future stock returns.

There is no agreement among researchers as to the exact relationship between cash flow and performance of firms. In examining the relationship between cash flow and corporate performance, none of the above studies extends the phenomenon to the banking industry or any of the financial services subsector. Asgeir (2014:56) documents that textbooks generally do not separate financial institutions when discussing cash flow, but usually considered banks and other financial-sector firms the same as any other company.
Conscious of the above gaps in knowledge, the present study, therefore, aims at contributing to the ongoing debate by factoring in evidence drawn from the Nigerian banking industry from 2006 through 2015, thereby helping to update and enrich the existing literature as much as possible. The findings of this work will provide stakeholders such as bankers, accountants, financial analysts, theorists, financial advisors/consultants, investors, stockbrokers and other related professionals bodies with up to date information for advisory and consulting services. Appropriate authorities may find the findings of this research work useful in formulating their economic, financial and regulatory policies. Finally, the study provides literature for students and researchers who may refer to it in subsequent relevant studies.

Objectives of the study

The primary objective of this paper is to examine the effect of cash flow individually on the listed deposit money banks in Nigeria performance, using evidence gathered from 2006 to 2015. Specifically, the study seeks to:

1. Ascertain the effect of operating cash flow on the returns on investment, returns on equity and earnings per share of listed deposit money banking firms in Nigeria.
2. Examine the effect of investing cash flow on the returns on investment, returns on equity and earnings per share of listed deposit money banking firms in Nigeria.
3. Determine the effect of financing cash flow on the returns on investment, returns on equity and earnings per share of listed deposit money banking firms in Nigeria.

Hypotheses were formulated in line with the objectives as follows:

H₀₁: Operating cash flow of listed Nigerian deposit money banks has no significant effect on their returns on investment, returns on equity and earnings per share.

H₀₂: Investing cash flow of listed Nigerian deposit money banks does not significantly affect their returns on investment, returns on equity and earnings per share.

H₀₃: Financing cash flow of listed Nigerian deposit money banks does not have any significant effect on their returns on investment, returns on equity and earnings per share.

Theoretical framework and previous studies

Theoretical framework

The theoretical base on which this study is anchored is that corporate cash flow status affects its performance and that the degree of such effect is dependent on the financing and investment decisions and behaviours of the corporation. Stemming from these assumptions agency theory that present clear direction and firm behaviour regarding cash flows.

Agency theory

Jensen and Meckling developed the Agency theory in 1976, and it represents their postulation about how the governance of a company is based on conflict of interests between the company's owners (shareholders) and its managers. The theory is based on the idea of separation of ownership and management (principal and agent) and thereby looks at the tendency of directors to act in their own best interests, pursuing salary and status. Oyejide and Soyibo (2001) opine that the principal/agent relationship suggests that managers will have different objectives from those of the owners as they will use the firm's resources to satisfy their demands. This presupposes that managers tend to engage in wasteful expenditure of firms' free cash flows either by increasing perquisite consumption and shirking behaviour or through taking sub-optimal investment decisions (Jasen, 1986; Stulz, 1990). In this regard, the presence of
internally generated cash flow above that needed to maintain existing investment and finance new positive NPV projects creates the potential for those funds to be wasted. This situation affects corporate performance negatively, and it is in agreement with Hafford (1999), which opines that cash-rich firms are more likely to make acquisitions that subsequently experience abnormal declines in operating performance.

In summary, the primary duty of managers is to manage the firm in such a manner that it increases profit and cash flow to generates returns to the shareholder (Elliot and Elliot, 2002). Boodhoo (2009) states that the Agency cost theory contribution is that leverage firms are more advantageous to shareholders because they can use the debt level to monitor managers. Thus, improvement in corporate performance can be achieved through higher leverage, which is expected to lower agency costs as well as inefficiency (Akintoye, 2008).

Empirical review
Nwanyanwu (2015) examines the relationship between cash flow and organizational performance from the perspective of the hospitality and print media industrial sectors of the Nigerian economy. The researcher performed analyses of a sample of forty-five small and medium enterprises (SMEs) of the studied sectors employing descriptive statistics and Pearson's product-moment coefficient of correlation using the statistical package for social sciences (SPSS). The results indicate a significantly strong positive relationship between cash flow position and net profit. Even though the above study reveals the existence of a significantly positive connection between cash flow position and corporate performance denoted by net profit, however, it neither specified the class of cash flow (operating, investing or financing) nor the ratio of the cash flow class (whether individually or the aggregate) that bears such relationship with organizational performance. Similarly, in a study carried out by Ali et al. (2013) on the association between various earnings and cash flow measures of firm performance and stock returns in Iran, using both simple and multiple regressions to analyze the data for a period of nine (9) years from 2003 to 2011. The result revealed that the company's performance and cash flow have a significant negative relationship. More so, earnings-based measures are more related to stock returns and depict the company's performance better than cash flow measures in some companies with higher accruals. The findings also fail to specify which cash flow class (individually or jointly) does have a significant negative relationship with firm performance. The same line was towed by Adelegan (2003) in an empirical study of the relationship between cash flow and dividend changes in Nigeria using the Ordinary Least Squares (OLS) method to analyze the data on a sample of 63 quoted firms in Nigeria over a more extensive testing period from 1984 to 1997. The empirical results revealed that the relationship between cash flow and firm performance is positively significant.

An investigation of comprehensive income and firm performance: the case of the electric appliances industry of the Tokyo Stock Exchange, carried out by Chikashi (2013) using the data for the fiscal years of 2009 to 2011 and employing the pooled regressions (panel data regression analysis). The result revealed that cash flow and firm performance have a significant negative relationship and that comprehensive income published by the firms were superior to other earnings or cash flow variables in predicting their future stock returns.

Other related studies whose conclusions depict similar gap include Al-Saedi (2014), Watson (2005) and Brush et al. (2000). Specifically, Al-Saedi (2014) indicates that there is no significant statistical relationship between the cash flows of Iraqi companies and their market values, which suggests that investors do not consider the statement of cash flows when making
their investment decisions. Watson (2005) examines the association of various earnings and cash flow measures of firm performance and stock returns using simple and multiple regressions to analyze the data. The study reveals that cash flow and firm performance have a significant negative relationship, which suggests that a company whose performance is acceptable in the opinion of both management and shareholders may not be socially acceptable. On the other hand, Brush et al. (2000) examine the free cash flow hypothesis for sales growth and firm performance using the White and Durbin-Watson tests on the data that covers the years 1988 to 1995. The results reveal that a significant positive relationship exists between firm performance and cash flow have a significant positive relationship, but different governance conditions affect sales growth and performance in different ways.

The study that sets out to examine the association of accrual earnings and operating cash flows with stock returns carried out by Farshadfar (1999) using the statistical linear regression method per year and mean of five (5) years to analyse the data is an apparent attempt at addressing these gaps, albeit in part. It was, however, deduced that there is not any meaningful linear relationship between operating cash flows, operating accrual earnings with stock returns. Nevertheless, Ashitiani (2005) extends this effort in a study titled "The relationship between accounting ratios, operating cash flows, investments, financing and stock returns in the Tehran Stock Exchange." The researcher used Pearson's correlation and simple linear regression to analyze the data of a sample of 650 listed companies for the years 1998 to 2004. The results showed that there is a meaningful relationship among the growth of operating earnings, growing of net profit, operating cash flows, investing cash flows with stock returns; but there is no meaningful relationship among the growing of trade sale, financing cash flows and stock returns.

A further attempt at bridging these gap is by Bingilar and Oyadonghan (2014) in a research work titled "Cash flow and Corporate Performance: A study of selected Food and Beverages companies of Nigeria," using multiple regressions statistical technique to analyze a sample of six (6) food and beverages companies quoted on the Nigerian Stock Exchange (NSE) for the period 2007 to 2011. The results of the study reveal that operating and financing cash flows have a significant positive relationship with corporate performance in the food and beverages sectors of Nigeria. It was also empirically verified that investing in cash flow and corporate performance has a significant negative relationship. Indeed, the conclusions reached by the study represent a significant extension of those by earlier mentioned studies in this review, which also attempted an investigation of similar variables. However, it fails to examine corporate performance and cash flow in its aggregate.

Sayed (2017) extends this effort in the study that tests the relationship between cash flows from operational, investment, and financial activities individually and jointly, and the stock returns of financial investment banks on the Khartoum Stock Exchange using an analytical approach to analyze the financial statements for 2010 – 2015. However, its analysis was limited to just one financial investment bank for six years.

**Methodology**

This study adopted an *ex post facto* design. The population of the study comprises all the 15 deposit money banks (DMBs) in the Nigerian banking industry listed on the board of the Nigerian Stock Exchange (NSE). From the above population figure, twelve (12) banks were sampled for investigation for ten years beginning from 2006 to 2015 using a multi-stage sampling technique involving the application of both probability and non-probability methods.
Banks’ Performance is dependent or explained variable. It is proxied by returns on investment (ROI), returns on equity (ROE) and earnings per share (EPS). The independent or explanatory variables of the study are three, viz:

i. Operating Cash flow (OPCF): This refers to net cash flows resulting from operating activities.
ii. Investing Cash flow (INVCF): This discloses the net cash flows from investing activities.
iii. Financing Cash flow (FINCF): This is defined as the net flow of cash emanating from financing activities.

To capture the interrelationship of cash flow with banks’ performance, a linear model was developed as follows:

ROI, ROE, EPS = F (OPCF, INVCF, FINCF) ………………………………………1

This means that banks’ performance (ROI, ROE or EPS) is a function (F) of the explanatory variables (OPCF, INVCF and FINCF).

For ease of experimental verification, the model is transformed into simple linear regression equations as follows:

ROI, ROE, EPS = $\beta_0 + \beta_1 \text{OPCF} + \mu$ ………………………………………2
ROI, ROE, EPS = $\beta_0 + \beta_1 \text{INVCF} + \mu$ ………………………………………3
ROI, ROE, EPS = $\beta_0 + \beta_1 \text{FINCF} + \mu$ ………………………………………4

Where:
ROI, ROE, EPS = Returns on Investment, Returns on Equity and Earnings Per Share, respectively.
$\beta_0$ = Intercept of the dependent variables’ axes
$\beta_1$ = Parameter to be estimated
OPCF = Operating Cashflow
INVCF = Investing Cashflow
FINCF = Financing Cashflow
$\mu$ = Stochastic Error Term

Secondary (or documentary) data were collected from the annual report and accounts of the twelve banks under study, including their websites, the Central Bank of Nigeria annual report, and the Fact Book as well as a library of the Nigerian Stock Exchange, Onitsha branch. The relevant data were subjected to statistical analysis using simple linear regression technique. The study analysed was done through the EViews statistical software package, version 8.0.

The statistics tested for include the regression equations for the variables, coefficient of determination ($R^2$), Student’s $t$-test, $f$-test and Durbin-Watson $d$ statistic.

Where:
• Coefficient of determination ($R^2$) test is a measure of the explanatory power of the independent variables.
• Students’ $t$-test is a measure of the special significance of the estimated independent variables.
• $F$-test is a measure of the overall statistical significance of the model. It will be used to generalize the hypotheses.
• Durbin-Watson $d$ statistic will test for auto-correlation in the regressions.

**Decision criterion**
Using the EViews statistical software package, version 8.0 p-value:
- Reject the null hypothesis ($H_0$) if $p < 0.05$ or
- Accept the null hypothesis ($H_0$) if $p > 0.05$
All tests of significance are done at 5% level.

**Data presentation and analysis**

**Presentation of data**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Dependent Variables (Corporate Performance)</th>
<th>Independent Variables (Cash Flows) (₦’Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>ROI (%), ROE (%), EPS (K)</td>
<td>OPCF, INVCF, FINCF</td>
</tr>
<tr>
<td>2006</td>
<td>(11.4), 12.7, 84</td>
<td>109,311, (46,989), 8,701</td>
</tr>
<tr>
<td>2007</td>
<td>2.0, 15.1, 101</td>
<td>66,177, (27,823), 13,470</td>
</tr>
<tr>
<td>2008</td>
<td>1.5, 15.1, 133</td>
<td>70,220, (29,177), 84,383</td>
</tr>
<tr>
<td>2009</td>
<td>0.5, (7.7), 4.5</td>
<td>(147), (24,813), 1,983</td>
</tr>
<tr>
<td>2010</td>
<td>3.2, 12.9, 137</td>
<td>43,256, (71,418), 14,187</td>
</tr>
<tr>
<td>2011</td>
<td>(0.6), (6.6), 37</td>
<td>46,003, (63,357), 35,051</td>
</tr>
<tr>
<td>2012</td>
<td>2.0, (18.9), 119</td>
<td>56,617, 3,608, (7,879)</td>
</tr>
<tr>
<td>2013</td>
<td>4.5, 13.1, 122</td>
<td>12,369, (24,784), 10,821</td>
</tr>
<tr>
<td>2014</td>
<td>3.4, 11.9, 119</td>
<td>(55,939), 17,348, 28,857</td>
</tr>
<tr>
<td>2015</td>
<td>2.6, 9.5, 112</td>
<td>(41,113), (15,753), 31,815</td>
</tr>
</tbody>
</table>

*Source:* The Researcher’s Computations from the Published Annual Report moreover, Accounts of the studied Banks from 2006 – 2015.

**Hypothesis One:**

**Analysis of data and testing of hypotheses**

**Objective one:**
To investigate the effect of operating cash flow on the returns on investment, returns on equity and earnings per share of listed deposit money banking firms in Nigeria.

**H01a:** Operating cash flow of listed Nigerian deposit money banks has no significant effect on their returns on investment.
Table 4.2.1: Regression result highlights 1

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>t-statistic</th>
<th>Prob.</th>
<th>DW d stat</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPCF</td>
<td>-5.26E-05</td>
<td>-2.126307</td>
<td>0.0662</td>
<td>1.842674</td>
<td>0.361083</td>
</tr>
<tr>
<td>T-tabulated</td>
<td>= 1.76</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Author's compilation from regression result 1

The table above indicates that the coefficient value is -5.26E-05, the t-statistic value is -2.126307, and t-tabulated value is 1.76, while the p-value is 0.0662 all at 5% level of significance. Given the decision rule, since the coefficient value is negative, and the probability (p-value) is higher than 0.05% level of significance, the study, therefore, accepts the null hypothesis one (H₀₁ₐ) and reveals that operating cash flow has no positive and significant effect on the returns on investment of listed deposit money banking firms in Nigeria. The R² (coefficient of determination) indicates that the independent variable will account for 36.11% change in the dependent variable. While the f-statistic value of 0.066172 shows that the overall regression model is not significant, the Durbin-Watson d stat value of 1.842674 reveals that serial correlation is not absent from the model.

H₀₁ₐ: Operating cash flow of listed Nigerian deposit money banks has no significant effect on their returns on investment.

Table 4.2.2: Regression result highlights 2

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>t-statistic</th>
<th>Prob.</th>
<th>DW d stat</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPCF</td>
<td>-5.20E-07</td>
<td>-0.006267</td>
<td>0.9952</td>
<td>1.902493</td>
<td>0.000005</td>
</tr>
<tr>
<td>T-tabulated</td>
<td>= 1.76</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Author's compilation from regression result 2

It is indicated in the above table, that the coefficient value is -5.20E-07, the t-statistic value is -0.006267, t-tabulated value is 1.76, while the p-value is 0.9952 all at 5% level of significance. Consequently, since the coefficient value is negative, and the probability (p-value) is higher than 0.05% level of significance, we, therefore, accept the null hypothesis one (H₀₁₉) and confirm that operating cash flow has no positive and significant effect on the returns on equity of listed deposit money banks in Nigerian. The R² (coefficient of determination) value of 0.00005% indicates the independent variable's inability to account for any change in the dependent variable significantly; that is, the operating cash flow stance of Nigerian listed deposit money banks carries no explanation for any variation in their returns on equity. Similarly, while the f-statistic value of 0.995153 shows that the overall regression model is not significant, the Durbin-Watson d stat value of 1.902493 equally reveals the presence of autocorrelation.

H₀₁₉: Operating cash flow of listed Nigerian deposit money banks has no significant effect on their earnings per share.
The table above indicates that the coefficient value is 4.53E-06, the t-statistic value is 0.015192, and t-tabulated value is 1.76, while the p-value is 0.9883 all at 5% level of significance. Since the coefficient value is positive, and the probability (p-value) is higher than 0.05% level of significance, the study, therefore, accepts the null hypothesis one (H0tc) and accordingly reveals that operating cash flow of listed deposit money banking firms in Nigeria has a positive but non-significant effect on their earnings per share. The insignificant \(R^2\) (coefficient of determination) value of 0.0003% indicates the failure of the independent variable to account for any change in the dependent variable. While the f-statistic value of 0.988251 shows that the overall regression model is not significant, the Durbin-Watson d stat value of 3.051345 shows the presence of autocorrelation in the model.

**Objective two:**
To examine the effect of investing cash flow on the returns on investment, returns on equity and earnings per share of listed deposit money banking firms in Nigeria.

**H0_{2a}**: Investing cash flow of listed Nigerian deposit money banks does not have a significant effect on their returns on investment.

The table above indicates that the coefficient value is 5.43E-05, the t-statistic value is 0.983828, and t-tabulated value is 1.76, while the p-value is 0.3540 all at 5% level of significance. Granted that the coefficient value is positive, and the probability (p-value) is higher than 0.05% level of significance, the study, therefore, accepts the null hypothesis two (H0_{2a}) and consequently reveals that investing cash flow of listed deposit money banks in Nigeria has a positive but non-significant effect on their returns on investment. The \(R^2\) (coefficient of determination) value of 10.8% indicates the extent to which a variation in the dependent variable could be accounted for by the independent variable. The f-statistic value of 0.354015 shows that the overall regression model is not significant while the Durbin-Watson d stat value of 1.401503 reveals that auto-correlation is insignificant in the model.

**H0_{2b}**: Investing cash flow of listed Nigerian deposit money banks does not have a significant effect on their returns on equity.
Table 4.2.5: Regression result highlights 5

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>t-statistic</th>
<th>Prob.</th>
<th>DW d stat</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>INVCF</td>
<td>-7.27E-05</td>
<td>-0.470257</td>
<td>0.6507</td>
<td>1.673660</td>
<td>0.026899</td>
</tr>
<tr>
<td>T-tabulated = 1.76</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Author's compilation from regression result 5

The table above indicates that the coefficient value is -7.27E-05, the t-statistic value is -0.470257, and t-tabulated value is 1.76, while the p-value is 0.6507 all at 5% level of significance. Since the coefficient value is negative, and the probability (p-value) is higher than 0.05% level of significance, the study consequently accepts the null hypothesis two (H₀₂b) and therefore reveals that investing cash flow of listed deposit money banking firms in Nigeria has no positive and significant effect on their returns on equity. The R² (coefficient of determination) value of 0.027% indicates that the independent variable is unable to account for any change in the dependent variable significantly. Similarly, while the f-statistic value of 0.650725 shows that the overall regression model is not significant, the Durbin-Watson d stat value of 1.673660 reveals the presence of autocorrelation in the model.

H₀₂c: Investing cash flow of listed Nigerian deposit money banks does not have a significant effect on their earnings per share.

Table 4.2.6: Regression result highlights 6

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>t-statistic</th>
<th>Prob.</th>
<th>DW d stat</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>INVCF</td>
<td>0.000335</td>
<td>0.608424</td>
<td>0.5598</td>
<td>3.346720</td>
<td>0.044226</td>
</tr>
<tr>
<td>T-tabulated = 1.76</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Author's compilation from regression result 6

In the table above, the coefficient value is 0.000335; the t-statistic value is 0.608424, t-tabulated value is 1.76, while the p-value is 0.5598 all at 5% level of significance. Granted that the coefficient value is positive, and the probability (p-value) is more significant than the 0.05% level of significance, the study, therefore, accepts the null hypothesis two (H₀₂c) and reveals that investing cash flow of listed deposit money banking firms in Nigeria has a positive but non-significant effect on their earnings per share. The R² (coefficient of determination) statistically insignificant value of 0.044% shows how much of a change in the dependent variable that could be explained by the independent variable. Similarly, while the f-statistic value of 0.559780 shows that the overall regression model is not significant, the Durbin-Watson d stat value of 3.346720 reveals that serial correlation is present in the model.

Objective three:
To determine the effect of financing cash flow on the returns on investment, returns on equity and earnings per share of listed deposit money banking firms in Nigeria.

H₀₃a: Financing cash flow of listed Nigerian deposit money banks does not have any significant effect on their returns on investment.
Table 4.2.7: Regression result highlights 7

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>t-statistic</th>
<th>Prob.</th>
<th>DW d stat</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>FINCF</td>
<td>2.07E-05</td>
<td>0.335494</td>
<td>0.7459</td>
<td>1.240707</td>
<td>0.013874</td>
</tr>
</tbody>
</table>

T-tabulated = 1.76

Source: Author's compilation from regression result 7

The table above indicates that the coefficient value is 2.07E-05, the t-statistic value is 0.335494, and t-tabulated value is 1.76, while the p-value is 0.7459 all at 5% level of significance. Since the coefficient value is positive, and the probability (p-value) is more significant than the 0.05% level of significance, we, therefore, accept the null hypothesis three (H0₃a) and accordingly reveal that financing cash flow of listed deposit money banking firms in Nigeria has a positive but non-significant effect on their returns on investment. The R² (coefficient of determination) figure of 0.014% suggests that the independent variable cannot offer a significant explanation for a change in the dependent variable. The f-statistic value of 0.745881 shows that the overall regression model is not significant. The Durbin-Watson d stat value of 1.240707, on the other hand, reveals the absence of a statistically significant autocorrelation in the model.

H₀₃b: Financing cash flow of listed Nigerian deposit money banks does not have any significant effect on their returns on equity.

Table 4.2.8: Regression result highlights 8

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>t-statistic</th>
<th>Prob.</th>
<th>DW d stat</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>FINCF</td>
<td>0.000202</td>
<td>1.337048</td>
<td>0.2180</td>
<td>1.832016</td>
<td>0.182647</td>
</tr>
</tbody>
</table>

T-tabulated = 1.76

Source: Author's compilation from regression result 8

The table above indicates that the coefficient value is 0.000202, the t-statistic value is 1.337048, and t-tabulated value is 1.76, while the p-value is 0.2180 all at 5% level of significance. Since the coefficient value is positive, and the probability (p-value) is greater than 0.05% level of significance, the study, therefore, accepts the null hypothesis three (H₀₃b) and reveals that financing cash flow of listed deposit money banking firms in Nigeria has a positive but non-significant effect on their returns on equity. The R² (coefficient of determination) indicates that the independent variable will only account for 18.3% of the change in the dependent variable. The f-statistic value of 0.217977 presents the overall regression model as not significant, while the Durbin-Watson d stat value of 1.832016 reveals that the model of serially correlated.

H₀₃c: Financing cash flow of listed Nigerian deposit money banks does not have any significant effect on their earnings per share.

Table 4.2.9: Regression result highlights 9

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>t-statistic</th>
<th>Prob.</th>
<th>DW d stat</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>FINCF</td>
<td>0.000422</td>
<td>0.726263</td>
<td>0.4884</td>
<td>2.956229</td>
<td>0.061854</td>
</tr>
</tbody>
</table>

T-tabulated = 1.76

Source: Author's compilation from regression result 9
In the table above, the coefficient value is 0.000422, and the t-statistic value is 0.726263, t-tabulated value is 1.76, while the p-value is 0.4884 all at 5% level of significance. Since the coefficient value is positive, and the probability (p-value) is more significant than the 0.05% level of significance, the study, therefore, accepts the null hypothesis three (H0₃c) and consequently concludes that financing cash flow of listed deposit money banking firms in Nigeria has a positive but non-significant effect on their earnings per share. The R² (coefficient of determination) indicates that the independent variable will only account for 0.062% of the variation in the dependent variable. The f-statistic shows that the overall regression model is not significant with a value of 0.488379. In the same vein, the Durbin-Watson d stat value of 2.956229 portrays the presence of autocorrelation in the model.

Discussion on findings
Findings from results of the above regression agree with all the hypotheses of this study, that cash flow (i.e. operating, investing, and financing) does not have a statistically significant effect on the performance (proxied by ROI, ROE and EPS) of listed Deposit Money Banks (DMBs) in Nigeria. Even though these findings are in perfect tandem with Al-Saedi (2014) and Sayed (2017), they most significantly bring to the fore the existence of differences between financial (such as banks) and non-financial firms and consequently necessitate a consideration of the unique issues of the former's cash flow to understand what possibly gave rise to such findings.

The cash flow statement in accounting reports is based on the idea of showing cash receipts (inflows) and cash payments (outflows) in a firm. These flows are split into three main groups of cash coming in from activities of operations, investment and financing. The main direction is operational inflow from revenue and outflow of cost, financing inflow from loans to cover outflow for investment, while investment assets sold change the direction to inflow. Similarly, the repayment of loans leads to outflow from borrower to lender. These relate the cash flow situation from non-financial firms’ perspective.

However, banks are different, and the reporting of banks’ cash flow functions differ because cash is their product and while providing loans to their customers, they at the same time, create deposits on their statement of financial position. The accounting transaction of lending does not involve any prior funding or cash inflow, but occurs in the accounting system, creating deposits as a liability and loan as an asset of the bank. As noted by Asgeir (2014), if a firm runs out of cash, they are soon out of business – liquidated. If a firm is not seen as able to pay back its debts, they are unlikely to get more loans and soon to become insolvent. Banks, on the other hand, can keep negative cash accounts without liquidation or insolvency. This is because they create more cash by giving more credit to customers. Thus, the product of banks' business is cash - which is lent to borrowers and kept for depositors. When needed, the banks can also borrow from each other, increasing further the amount of both debt and cash. Banks’ operations can be described as transacting the flow of money, inflow of deposits (and repayment of loans) and outflow of lending (and withdrawals of accounts).

For any firm, according to Asgeir (2014), the statement of cash flow can be seen as an overview of their cash account from the beginning of the period, until the end. Then, transactions are classified after the activity, to see where the money is generated from and in what activity it is spent. For a bank, its cash reserve on 'bank account' is kept at the central bank. Accounting classifications are turned around in banks so that a loan (to the customer) is an asset (of the bank), and the customer’s cash in the bank is the bank's liability to the customer. Banks finance their liabilities both with deposits from customers and bonds and borrowings from other banks.
Banks can also get funding from the Central Bank. The investment of a new bank is additionally made in other types of financial instruments, but the focus of this study is put on traditional banking and typical lending to customers.

In line with the above claim of bankers that the standard cash flow statement is not relevant for banks, Weiss and Yang (2007) submit further that the figure of cash provided by operations is meaningless for financial institutions. Therefore, the official statements of cash flows do not work for banks because banks' operations are different from non-financial firms concerning cash. Though, the International Accounting Standard for Statement of cash flows, (IAS 7) states that banks and financial institutions like any other firms, need cash to conduct their operations. Moreover, as a result, banks are required to prepare the statement of cash like any other firm (IAS 7, 2010: A340, paragraph 3). According to the Standard, banks are allowed to classify cash flow differently, but there is no provision for treatment of their credit created cash, nor mention that negative cash flow from operations can apply to banks as opposed to non-banking firms. For the reason of this ignorance, it is evident that bankers only prepare statements of cash flows merely to comply with regulatory requirements strictly, but neither consider as relevant, the information provided by such statements nor make any further use of them. Hence, statements of cash flows prepared by banks in the current regulatory regime do not represent their actual state of affairs.

Given the above, the findings under discussion can be said to accurately portray the actual circumstances of deposit money banks in Nigeria. The relevant accounting standard for a statement of cash flows (IAS 7) completely ignores banks' credit creation of cash in its guidelines on cash flow reporting but expects strict compliance with the guidelines from the same banks for whose main product (cash) is not being provided. Given this state of affairs and to avoid regulatory sanction, banks devise a culture of 'feigned compliance' by making up figures to prepare statements of cash flows that strictly satisfy regulatory requirements. These 'made up' figures are the ones that got published in the studied banks' annual reports as statements of cash flow, and which eventually gave rise to the independent variables of this study. However, as the study statistically examined the figures intending to ascertain their effect on the banks' performance, the end was caught truly justifying the means – the figures are not the banks' actual cash flow dispositions, hence they pose no significant effect (either individually or jointly) on the latter's performance.

Conclusions
Based on the findings summarized above, the study, therefore, concludes as follows:

1. Cash flow (in its operating, investing and financing classes) has no statistically significant effect on the performance of listed Nigerian deposit money banks. Factors other than cash flow generating activities account more significantly for any improved performance seen in these banks.

2. Cash flow accounting in banks is a speciality area of financial reporting. Until the uniqueness of banks' operations is duly recognized and legally provided for, cash flow from credit creation will remain unaccounted for, a situation that would continue to present as questionable, results arising from studies on banks' cash flow.

3. The failure of existing accounting theories to primarily focus on banks coupled with the omission of credit creation in the conceptual frameworks of relevant accounting standard is responsible for the prevalence of little academic works with a real focus on accounting for banks.
Recommendations
Following the above findings and the conclusions drawn thereupon, the following are recommended:

1. The reporting of cash flows arising from the investment activities of a bank should be made to reflect the distinctiveness of the banking business. In this way, banks' performance vis-à-vis these activities can be more reasonably assessed. While regulators should urgently provide for this, practitioners should comply strictly.

2. Banks finance their liabilities both with deposits from customers and bonds and borrowings from other banks. Also, banks can get funding from the central bank. In reporting banks' financing cash flows, these various sources of funding should be adequately taken into account as an aspect of the particular cash flow issues of banks, to always ensure that the effect of such flows on these entities' performance is accurately measured.

3. There is an urgent and compelling need for the regulatory authorities to rethink the accounting regime for banks. The new regime should specifically take banks' credit, creating function into consideration mostly because this uniqueness in banking operations entails that cash flow from the operating activities functions differently and hence requires being differently accounted for too.

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