# CASH FLOW MANAGEMENT AND THE PERFORMANCE OF DEPOSIT MONEY BANKS IN NIGERIA

## Prof. E. O. Nwadialor[1],  P. C. Muotolu[2]

[1,2] *Department of Accountancy Faculty of Management Sciences, Chukwuemeka Odumegwu Ojukwu University   Igbariam Campus, Anambra State, Nigeria*

[2]**momytiti3@gmail.com +2348033837352**

**Abstract**

*The study examined the influence of cash flow management on the performance of Deposit Money Banks in Nigeria. The specific objectives were to ascertain the relationship between cash flow from operating activities (CFOA), cash flow from investing activities (CFIA), cash flow from financing activities (CFFA), free cash flow (FCFA), and cash flow to debt (CFDT), and the performance (Return on Asset-ROA) of deposit money banks in Nigeria. The dependent variable is the ROA while CFOA, CFIA, CFFA, FCFA, and CFDT are the independent variables. Bank Size (BSZE) and Leverage (LEVG) are the control variables. The study adopted an ex-post facto research design and data for the study were secondary, sourced from the annual reports of the selected deposit money banks for a period of eleven years spanning 2009 to 2019. The sample size is twelve (12) Deposit Money Banks. Multiple regression analysis was used to test the hypotheses. The results showed among others that CFIA, CFFA, and FCFA were found to have a positive and significant influence at 5% on ROA while CFOA and CFDT were positive but insignificant in influencing ROA performance in Nigeria. Finally, LEVG and BSZE were found to have a negative but insignificant influence on ROA. The study recommended that a high or lowly leveraged or geared bank does not determine the better performance of ROA of deposit money banks in Nigeria neither does bank size guarantee better performance. The study concluded that cash management by managers should be handle with efficiency since cash flow variables greatly influence the performance of deposit money banks in Nigeria. The study contributed to knowledge by extending the scope of the study, including more variables and modifying existing models.*

**Keywords: Cash flow, Performance, Free cash flow, and Return on asset**

## 1.  Introduction

The economic buoyancy of any organization, whether in production or services depends on careful monitoring and management of the flow of funds within and outside of that organization from time to time. The information provided by the cash flow statement helps the users of financial statements tremendously concerning the source and use of virtually the entire financial system over a given period. In the views of Amah, Ekwe, and Ihendinihu (2016), cash flow permits a company to expand its operations, replace needed assets, take advantage of market opportunities, and pay a dividend to its owners.

Cash management is very vital in every business organization, as cash is said to be the life-blood of any business (Abioro; 2013). The essence of cash management is to ensure that there is a positive cash flow for smooth business operation. The management of cash flows must be in such a manner that the liquid cash is not in excess but must be balanced against the fixed

assets. This means that the sources of finances and the application must be carefully managed (Hughes; 2007). Every business that is planned to achieve its financial obligations cannot do without proper cash management. Bari, Mohamed, Muturi, and Samantar (2019) opined that cash is the utmost imperative current asset in operating any business. Cash is the major input that is needed to keep the business going continuously and additionally, the core output is expected to be generated by selling the services or products manufactured by the firm (Pandy, 2010).

The manner of corporate cash management has developed a major challenge for most companies, because of the role that cash management plays in the results of a company (Abioro, 2013). The purpose of finding the issues in cash management includes ascertaining the areas that are distinctive to resolving cash issues in an organization.

Banks play a crucial role in propelling the entire economy of any nation by channeling surplus funds to the deficit unit where the funds are needed for production. The major factor responsible for growth in any country depends mainly on the strength of the banking system. Deposit money banks are the main pillar of the financial system in West Africa as they provide different opportunities and services to their customers. Economic advancement emanates from seasoned growth in the banking system. The role played by a robust banking system in the effective allocation and utilization of credit cannot be overemphasized (Haque & Tariq, 2012. In Nigeria, the reform process in the banking sector is part and parcel of the government planned agenda aimed toward trans positioning and incorporating the Nigerian banking sector into the African regional and global financial system. The banking sector recently went through outstanding changes in terms of the increase in the number of institutions, structure, likewise the depth and breadth of operations to make the sector a sound one (Akpan, 2007).

Following the arguments of Bingilar and Oyadonghan (2014), a bank should be able to work out diverse ways of choosing the best components of its cash flows needed in the company's operation to raise its productivity or achieve performance for the cash flows to be properly structured and effectively utilized. Ibadin and Arowoshegbe (2017) posit that the capability of any business organization to effectively choose an adequate source of funds to finance its operations would distinguish between strong cash flow governance and poorly managed cash flows.  Existing literature believes that cash flow management enhances bank's financial performance. Financial performance measures how effectively the banks have managed their assets and investments to improve their financial positions (Abaenewe, Ogbulu, and Ndugbu, 2013). The users of financial statements usually evaluate the liquidity, leverage, asset activity, and performance of the concerned organization The income statement and statement of financial position cannot sufficiently evaluate the financial performance of a firm as the cash flow statement has proved to be (Amah, Ekwe, and Ihendinihu 2016). This is because the income statement and the statement of financial position are prepared on an accrual basis while the statement of cash flow is prepared on a cash basis, which is more realistic. It is on this note that this study aims at examining the relationship between cash flow and the performance of listed banks in emerging economies like Nigeria.

The paper is divided into 5 sections: section 1 is the introduction. Section 2 is conceptual/theoretical/empirical reviews. Section 3 is the methodology/ model specification. Section 4 is the Data presentation and discussion of results while section 5 is the Summary of findings, recommendations, conclusion, and contribution to knowledge.

## 1.1 Statement of Problem

Banks would have an efficient liquidity position that would enhance their performance when cash flow is well managed. Cash flow is very crucial in the daily operation of any business and if not properly managed could result in business failure. Over the years, some banks in Nigeria and Ghana have suffered from the problem of not managing cash flows efficiently and this has affected most banks to the extent that some were taken over by the apex bank for restructuring. The interconnection between cash flow management and the performance of business organizations has attracted the interest of researchers in recent times. There are several prior studies on cash flow management and the performance of firms. Cash flow from operations, cash flow from investing activities, and cash flow from financing activities were mostly used in these studies with only a few studies outside West Africa used free cash flow and cash flow to debt variables. The results of these prior studies were contradicting mixed and inconclusive results. For example, studies of Bingilar and Oyadonghan (2014), Okpe, Duru, and Alor (2015), and Ubesie, Chitor, and Ejembi (2016) discovered that cash flow from operating activities has a positive as well as a significant relationship with performance while cash flow from investing activities has a negative and significant relationship with corporate performance. Studies of Muhammad and Aminatu (2018) found the relationship between operating cash flows and financial performance proxied by ROA was positive and insignificant, while the relationship is positive and significant when financial performance was proxied by return on equity (ROE).

Conversely, Sayari and Mugan (2013) found a negative relationship between cash flow from operations, size of the company, and financial distress score of companies after studying Cash Flow Statement as an Evidence for Financial Distress in the manufacturing and service sectors in Turkey for a period of five years spanning from 2005 to 2009.

Based on the mixed and contradicting results of prior studies, the researcher embarked on investigating the influence of cash flow management on the performance of Deposit Money Banks in Nigeria. Two additional variables (free cash flow and cash flow to debt) were added and the scope was widened in the study and hence, the gap the study seeks to fill.

## 1.2 Objectives of the Study

The main objective of this study is to examine the relationship between cash flow and the performance of deposit money banks in Nigeria. The specific objectives are to:

1. Determine the relationship between cash flow from operating activities and the performance of deposit money banks in Nigeria.
2. Examine the relationship between cash flow from investing activities and the performance of deposit money banks in Nigeria.
3. Ascertain the influence of cash flow from financing activities on the performance of deposit money banks in Nigeria.
4. Investigate the relationship between free cash flow and the performance of deposit money banks in Nigeria.
5. Examine the influence of cash flow to debt on the performance of deposit money banks in Nigeria.

### 1.3 Hypotheses

1. $H0_1$: Cash flow from operating activities has no significant relationship with the performance of deposit money banks in Nigeria.

2. $H0_2$: Cash flow from investing activities has no significant relationship with the performance of deposit money banks in Nigeria.

3. $H0_3$: There is no significant influence of cash flow from financing activities on the performance of deposit money banks in Nigeria.

4. $H0_4$: Free cash flow has no significant relationship with the performance of deposit money banks in Nigeria.

5. $H0_5$: Cash flow to debt has no significant influence on the performance of deposit money banks in Nigeria.

### 1.4 Significance of the Study

Managers: The study would assist managers in working out diverse ways of choosing the best parts of its cash flows to be used in the company's operation to raise its productivity or achieve better performance.

Investors/Shareholders: Investors depend on the statement of cash flows to determine a company's financial strength to make the right investment decisions.

Suppliers: are interested in the firm's liquidity because their rights are generally in a short term and in this case, the banks' ability to pay is best reflected by the liquidity indicators.

Policy Maker/Regulators: This study would assist policymakers/regulators to ensure compliance in the preparation of cash flow statements by banks and other organizations.

Students/Researchers: The study would be helpful to future researchers and students interested in furthering the findings as the work would be a reference point

### 1.5 Scope of the study

This study covered eleven (11) years from 2009 to 2019 with twelve (12) deposit money banks in Nigeria based on the availability of complete data

## 2. Review of Related Literature

### 2.1 Conceptual Framework

### 2.1.1 Performance

Performance is the company's capability to come up with new resources from daily operations over a given period. Performance is measured by the level of cash flows generated from the operations of any business. Toutou (2011), viewed financial performance as a collective

measure of how effective an organization obtains revenues from its capital. It helps to compare one organization and another, in this case, different banks across the banking industry at the same time. To assess the financial performance of deposit money banks, there are a variety of indicators that may be used. Some of the major financial performance indicators include Return on assets (ROA), Return on Equity (ROE), Return on Capital Employed (ROCE), Earnings per Share (EPS), etc. (Bagh, Khan, Azad, Saddique, & Khan, 2017), though the current study made use of Return on Asset (ROA) and the Return on Equity (ROE)

### 2.1.2 Return on Assets (ROA)

The ROA, defined as net income divided by total assets, reflecting how well a company's management is using the company's real investment resources to generate profits. To calculate a company's ROA, the net income is divided by its total assets. The ROA is used in deciding a company's efficiencies in creating earnings, using its assets. According to Yao, Haris, and Tariq (2018), ROA is the ratio of the profit after tax and total/average assets, which is commonly used as a cost-effectiveness indicator that defines the efficient consumption and revenue generation proficiency of/from the assets of any business organization. It is calculated as ROA= EBIT/ Total Assets.

### 2.1.3   Cash Flow

Cash flow according to Helen (2002) is one of the most common financial reports that shows the steps and decisions adopted by management in the running of the organization. Cash flow is a concept in accounting and finance used to describe the inflow and outflow of cash within an organization, inflow represents cash receipts while outflow relates to cash expenditure. Cash flows signify all inputs and outputs liquidities and cash equivalents (Bingilar & Oyadonghan, 2014). According to Periu (2015), Cash flow is improved by (1) additional sale of goods or services, (2) disposing of an asset, (3) decreasing costs, (4) increasing the selling price, (5) faster collection of cash, (6) paying later, (7) additional equity, or (8) borrowing.

### 2.1.4   Cash Flow from Operating Activities

Cash Flow from Operations refers to the cash flow that a business generates through its operating activities. Cash is generated from customers and used to pay for expenses including inventories. When cash inflows from operating activities are being put into consideration, it may be helpful to consider that it is not a measure of revenues as the organization will need to use cash to accomplish new orders. It is crucial to ensure that it has adequate cash or access to cash to avoid a cash crunch. Eyisi and Okpe (2014) opined that cash flows from operating activities arise from the activities a business uses to produce net income. For example, operating cash flows consist of cash springing from sales and cash mainly for the purchase inventory and the payment for operating expenses like salaries, utilities, etc. Operating cash flows are inclusive of cash flows from interest, dividend revenue, interest expense, and income tax.

### 2.1.5 Cash Flow from Investing Activities

Cash flow from investing activities denotes cash flows mainly from the purchase or sale of fixed assets (Nwanyanwu, 2015). The purchase or sale of a fixed asset like property, plant, or equipment normally should be regarded as an investing activity. Likewise, cash derived from

the sale of a part of the business or cash out from a merger or acquisition also falls under investing activities. Ibadin and Arowoshegbe (2017) argued that cash flows from investing activities are cash business transactions related to a business's investments in long-term assets. Investing activities include the purchase of property plant, and equipment (PP&E) ie, capital expenditures, proceeds from the sale of PP&E, acquisitions of other businesses or companies, proceeds from the sale of other businesses (divestitures), purchase of marketable securities (i.e., stocks, bonds, etc.) and cash realizable form of marketable securities.

## 2.1.6 Cash Flow from Financing Activities

Cash flow from financing activities signifies cash flows to and from third-party financiers. It consists of cash associated with debt, like proceeds (cash in) and loan payments (cash out). It also extends to cash flow relating to equity, like share purchases (cash in) and dividends (cash out). Cash flow from financing activities assists in determining how much cash an organization generates from third parties on a net basis as against cash from on-going operations. In the words of Eyisi and Okpe (2014), cash flows from financing activities are cash transactions related to the business raising money from debt or stock, or repaying that debt. Usually, these can be recognized from changes in long-term liabilities and equity. Cash flow from financing cash flows consists of cash proceeds from the issuance of debt instruments such as notes or bonds payable, cash proceeds from the issuance of capital stock, cash payments for dividend allocations, principal repayment or redemption of notes or bonds payable, or purchase of treasury stock. The cash flows from changes in equity, seen on the Statement of Stockholder's Equity, and cash flows associated with long-term liabilities are recognized by changes in long-term liabilities on the balance sheet.

## 2.1.7 Free Cash flow

Free cash flow denotes cash generated by a business organization from its operations, minus the cost spent on assets. Again, free cash flow (FCF) can be taken as cash that is left, after a company has paid for its operating and capital expenditures (CAPEX). It is the cash flow accessible to all the creditors and investors in a company, which includes common stockholders, preferred shareholders, and lenders. Investors mostly prefer FCF or FCF per share to earnings or earnings per share as a measure of profitability since it does not include non-cash items from the income statement. Nonetheless, as FCF accounts for investments in property, plant, and equipment, it is usually lumpy and irregular over time. It is beneficial to the firm. Working capital being added as a measure of profitability offers an insight not included in the income statement (Ibadin & Arowoshegbe, 2017).

## 2.1.8 Cash flow to debt

The cash flow to debt ratio is a coverage ratio that shows the relationship between cash flow made by a business and its total debt. Cash flow from operations is mostly made use of, although using unlevered free cash flow is another possible option. The cash flow-to-debt ratio is the ratio of a company's cash flow from operating activity to its total debt. This ratio is a type of coverage ratio and is used to know the length of time it would take a company to pay back its debt if it dedicates all of its cash flow to debt repayment (Ibadin & Arowoshegbe, 2017). Cash flow is moderately used than earnings since it gives a better estimate of a company's capacity to pay its obligations. The cash flow-to-debt ratio matches a company's generated cash flow from operating activities to its total debt. The cash flow-to-debt ratio

shows how long it takes a company to pay off all of its debt if it uses its entire operating cash flow for debt repayment.

## 2.2 Theoretical Framework

Various scholars on cash flow statements and firm performance have used several theories. This study is anchored on the free cash flow theory.

### 2.2.1 Free Cash Flow Theory

Free cash flow theory-The work is anchored on the theory because the effectiveness and efficiency of the management of free cash flow would differentiate between strong cash flow governance and poorly managed cash flows which either increase or decrease agency cost (as a result of conflict between shareholders and managers) as the case might be. The theory states that more internal cash makes the managers avoid market control. In this situation, they do not need the shareholders' agreement and they are free to make investment decisions on their own. Managers do not tend to pay cash (like the dividends) and they are moved to invest, even when there is no investment with positive net present value (Drobetz et al., 2010). Based on this theory, managers are motivated to collect the funds to increase their under-controlled resources and to secure the powers of judgment and discernment on the firm's investment decisions. The management of free cash flow could improve performance by way of reducing agency cost or lead to abysmal performance if agency cost is increased. Efficient and effective management of free cash flow is a good quality the managers of deposit money banks should strive to have as this invariably would lead to better performance.

## 2.3 Theoretical Exposition

### 2.3.1 Cash flow from operating activities and Firm Performance

Several researchers have investigated the relationship between cash flow from operations and financial performance. Okpe, Duru, and Alor (2015) studied the effect of the cash flow statement on companies' profitability in Nigerian banks. Data were extracted from the cash flow statements, in the Annual reports of these banks from 2009-2013. Multiple regressions were used for analyzing the data. The findings showed that cash flows from operating activities have a significant positive effect on the company's profitability in the Banking sector of Nigeria. Khozhdel (2006) studied the relationship between free cash flow and operating earnings with stock return and growth of net market values of operating assets in the Tehran stock exchange. Pearson correlation and simple linear regression method were employed in testing the hypotheses. The study revealed that there is a positive meaningful relationship between operating earnings with return on equity, return on assets, and gearing of net market values in operating assets.

Ubesie, Chitor, and Ejembi (2016) investigated the relationship of cash flow and performance in the Food and Beverages sector of Nigeria from 2007 to 2011, using six (6) companies quoted in the Nigerian Stock Exchange for the survey. Data were gotten from the annual report and accounts of these companies. Multiple regression techniques were made use of in analyzing the data. The findings from the study proved that cash flows from operations and financing activities have a significant positive relationship with corporate performance in the Food and Beverage Sector of Nigeria.

### 2.3.2    Cash flow from investing activities and Firm Performance

Several researchers have examined the relationship between cash flow from investing activities and firm performance. Ibadin and Arowoshegbe (2017) investigated the relationship between cash flow and corporate performance of deposit money banks in Nigeria. The purposive method was used in selecting four deposit money banks from 2010 to 2014. The ordinary least square regression model was used. The result proved that investing cash flow had a positive and significant relationship with performance. Alslehat and Al-Nimer (2017) investigated the impact of cash flow management on the financial performance of Jordanian Insurance companies. The population used was 23 companies for a period covering 2009 to 2013. The result revealed that the net cash flow from investing activities played a significant role in financial performance.

### 2.3.3    Cash Flow from Financing Activities and Firm Performance

The relationship between cash flow from financing activities and firm performance has been investigated by some researchers. Ibadin and Arowoshegbe (2017) investigated the relationship between cash flow and corporate performance of deposit money banks in Nigeria. The purposive method was used in selecting four deposit money banks from 2010 to 2014. The ordinary least square regression model was used. The result proved that investing cash flow had a positive and significant relationship with performance. Bingilar and Oyadonghan (2014) studied the relationship between cash flow and corporate performance focusing on the Food and Beverages sector of Nigeria. The study made use of Six (6) Food and Beverages companies listed on the Nigerian Stock Exchange. Data used were extracted from the annual report and accounts of the selected companies under study. Data analysis was done with the aid of multiple regression techniques. From the findings, the study showed that operating cash flows have a significant positive relationship with performance in the Food and Beverage Sector of Nigeria.

### 2.3.4   Free cash flow and Firm Performance

Several researchers have studied the relationship that existed between free cash flow and firm performance. Ali, Ormal, and Ahmad (2018) examined the Impact of Free Cash Flow on Profitability of the Firms in the Automobile Sector of Germany. A descriptive survey was adopted in analyzing the effect. Moreover, the population of the study comprised majorly of large firms. A simple random sampling method was used in selecting only five firms that were comparatively identified for the purpose. Secondary data was used for the study, extracted from the audited annual reports and financial statements of the firms listed in the automotive industry in Germany for a period of ten years, spanning from 2007 to 2016. The regression. Similarly, Hau (2017) consistently showed that free cash flows have a positive effect on firm performance or all sectors. Nevertheless, the impact of free cash flows on firm performance is not the same as the firms with and without investment opportunities. Zhou et al (2012) investigated the relationship between free cash flow and financial performance as indicated by the listed Real estate companies in China. The principal component analysis was employed and regression analysis on the data from 2006-2011 of all listed Real estate companies in China was made use of. The findings proved that the free cash flow of a company is negatively linear correlated to its financial performance meaning that excess free cash flow will lead to a decline in the financial performance.

### 2.3.5  Cash flow to debt and firm performance

In a study in South Africa, Jooste (2006) examined Cash flow ratios as a yardstick for evaluating financial performance in African businesses. The cash flow sufficiency ratio proved that the industries in South Africa had sufficient cash for the payment of basic obligations while the industries in the USA did not. Moreover, the levels of cash made for investments in assets and dividend payouts in the SA were greater than that of US industries. Also, the cash flow created by assets used in South Africa is more than that of the US nevertheless; US industries retire long-term debt in a shorter period than SA industries

### *2.4  Empirical Studies*

Ahmed, Hoque, Hasan, and Alam (2018) thought that there are substantial arguments in favor of and against the positive relationship between free cash flow (FCF) and profitability. Here it tried to ascertain whether there was a positive or negative relationship between the retention of FCF for a firm and its profitability. It was done on substantial empirical evidence. Data for Six (6) years were collated from the 28 companies quoted on Bangladesh Stock Exchange, Dhaka. Descriptive and inferential statistical tools were both made use to analyze the data. Two-panel regression models were used. The dependent variables were returned on equity (ROE) and earnings per share (EPS), while FCF together with some other control variables served as the independent variables. A mix of both positive and negative relationships amongst the variables was evidenced by the empirical study. The study showed a positive relationship between the dependent and independent variables. The huge investment nature of the pharmaceutical sector and the greater withholding rate of FCF are somewhat descriptive in explaining the reason for the increase in the return of companies

Muhammad and Aminatu (2018) investigated the impact of Operating Cash flow and Corporate financial performance of listed Conglomerate companies in Nigeria for over 10 years (2005 to 2014). Of the six listed Conglomerate companies, five of them were used for the study. Secondary data collected from the Annual Reports and Accounts of the sampled firms were used. Descriptive statistics, correlation analysis as well as regressions techniques were used in analyzing data to finding out the variation in financial performance due to the variation in operating cash flow.  Because the data has both time series and cross-sectional characteristics, a panel data regression technique was used. As a result of the above, OLS and random effects regressions were applied to estimate the study models. The findings revealed that the relationship between Cash Flow from Operating Activities (CFO) and financial performance proxied by ROA, is positive and insignificant while the relationship between financial performance which was proxied by ROE of the listed conglomerate companies in Nigeria, is positive and significant.

In the automotive sector in Germany, Ali, Ormal, and Ahmad (2018) examined the effect of free cash flow on the profitability of firms listed in the automotive sector of Germany. A descriptive survey method was adopted in the analysis. The population of the study consisted of prominent and large firms. A simple random sampling method was used and every firm within the automotive industry had an equal chance of being studied, but only 5 firms were selected for the study. Secondary data was used for the study and was sourced from the audited annual reports and financial statements of the firms listed under the automotive industry of Germany for a period of ten years spanning from 2007-2016. Following the regression results, there was a positive relationship between the free cash flows and profitability of listed firms.

Mukor, Muturi, and Oluoch (2018) investigated the effect of operating cash flow management on the financial performance of mutual funds in Kenya. The study employed causal research. The data used was secondary and this was from the audited financial statements of Twenty-Two (22) mutual funds extracted for the period of six years spanning from 2011-2016. The data were evaluated using regression techniques. From the study, it was discovered that cash flow management had a significant and positive effect on return on assets but had an insignificant and positive effect on the return on equity. The study recommends that managers should come up with a compulsory cash flow policy such as investment policy and dividend policy. Mutual funds should come up with clear policies for cash flow management including the investments of surplus funds that need to be established.

Achjen and Slim (2017) examined the effect of free cash flow and agency costs on firm performance. The study indeed aimed at re-examining the free cash flow hypothesis and the agency theory. Data were from the publicly listed companies on the French Stock Exchange for periods covering 2003 to 2007. The result showed that free cash flow has a positive impact on agency costs. This meant that with free cash flows, the inducement of management to invest in destructive value projects could increase thus, bringing about a rise in agency costs. The findings include that there is a positive relationship between free cash flows, operating performance, and firm value. R& D ratio and operating income volatility are statistically significant to firm value amongst the proxy variables of agency cost.

Alslehat and Al-Nimer (2017) examined the relationship between Cash flow management and financial performance of Jordanian Insurance Companies. The population under study was twenty-three companies for a period covering from 2009 to 2013. The study revealed that Net cash flow from Operating activities affected the return on assets. Moreover, the Net cash flow from investing activities was revealed to have significantly affected Financial Performance.

Ogbeide and Akanji (2017) studied the relationship between cash flow and financial performance of insurance companies in a developing economy – Nigeria. Twenty-seven firms involved in the insurance business were used as the sample size for the study with time-series data covering from 2009 -2014 (i.e. for 6 years). Both descriptive and inferential statistics using time series data were used to determine the relationship between the variables. The findings disclosed that cash flow determined insurance firms' financial performance and is statistically significant. Cash flow from operating activities was shown to significantly increase the financial performance of insurance companies in the period examined. Cash flow from financing activities was seen to have improved the financial performance of the sampled insurance firms, though it was not statistically significant.

Ibadin and Arowoshegbe (2017) investigated the relationship between cash flow and corporate performance of deposit money banks in Nigeria. A sample size of four banks from the seventeen listed on the Nigerian stock exchange as of 2014 was selected using a purposive sampling method. Data used was from a secondary source, extracted from the annual audited financial statement of the banks for a period of five years spanning from 2010 to 2014. Data analysis was done using the ordinary least square regression model. The result showed that operating, investing, and financing cash flow has a positive and significant effect on the performance of deposit money banks in Nigeria.

Hau (2017) investigated the impact of free cash flows on the firm performance of manufacture, trade, and real estate sector listed firms on the Hochiminh Stock Exchange. Data were obtained

from the audited financial statements of listed companies on the Ho Chi Minh City Stock Exchange, and the market price of stocks is derived from websites of VN direct Securities Company (vndirect.com.vn). The sample consists of 90 nonfinancial corporations for the period 2009 - 2015 The findings constantly showed that free cash flows have a positive effect on firm performance for all sectors. On the other hand, the impact of free cash flows on firm performance is different between firms with and without investment opportunities. This explains the significance of Jensen's free-cash flows theory (1986) to the firms quoted on the Vietnam stock exchange, at the sectoral level.

In the food and beverage industry in Nigeria, Ubesie and Ejembi (2016) examined the relationship between cash flow and performance of six (6) companies listed in the Nigerian Stock Exchange, for a covering from 2007 to 2011. Data were taken from the annual report and accounts of the selected companies under study. Multiple regression techniques were used in analyzing the data used for the study. The findings showed that operating and financing cash flows have a significant positive relationship with corporate performance in the Food and Beverage Sector of Nigeria. It was also revealed that investing in cash flow and corporate performance has a significant negative relationship.

Amah, Ekwe, and Ihendinihu (2016) in the Nigerian banking industry explored the relationship between cash flow and performance in the Banking sector of Nigeria. Four (4) Banks quoted on the Nigeria Stock Exchange were surveyed between a period spanning from 2005 to 2013. Data from the secondary sources were gotten from the annual report and accounts of selected Banks. The data were analyzed with the aid of the correlation technique. The operating cash flow was discovered to have a significant and strong positive relationship with performance in the Banking sector in Nigeria. It also revealed that investing in cash flow and financing cash flow has negative and weak relationships.

In Kenyan Construction Company, Ndungu and Oluoch (2016) examined the effect cash flow management has on the market returns of the companies. Secondary bi-annual data was gathered for the 5 listed construction companies at the Nairobi Securities Exchange (NSE) for a period of eight years covering 2008 to 2015. The modified capital asset pricing model (CAPM) was used to regress construction company equal-weighted bi-annual portfolio returns on the market excess returns over risk-free rate of return as the first variable and Cash flow ratio, an indicator of cash flow management as the second variable. The results indicated that cash flows from operations have a positive effect on the market performance of construction companies and while the cash flows from investing; financing and free cash flows all have an adverse effect on the market performance of companies involved in construction.

Okpe, Duru, and Alor (2015) explored the effect of cash flow statements on companies' profitability in Nigeria. Three Banks; Fidelity bank of Nig. Plc, First Bank of Nigeria Plc, and First City Monument Bank Plc were surveyed. Secondary data were extracted from the cash flow statements contained in the Annual reports of these banks for a period of five years spanning from 2009-2013. The hypotheses were tested using multiple regression analytical tools. The results of the study proved that operating and financing cash flows have a significant positive effect on the company's profitability in the Banking sector of Nigeria. It was also revealed that investing in cash flow has a significant negative effect on the profitability of these companies studied.

In the SME sector in Nigeria, Nwanyanwu (2015) studied the relationship between cash flow and organization performance, focusing on the hospitality and print media industrial sectors of the economy. Primary data were collected using a questionnaire prepared in 2015. Descriptive statistics and Pearson's product-moment coefficient of correlation using the statistical package for social sciences (SPSS) were used in the analysis. Using a pilot study, 45 SMEs in those sectors were sampled. It was found that the relationship between cash flow position and net profit is significantly strong and positive. He, therefore, suggested that with advances in technology and quality of service delivery which create competition, hospitality, and print media organizations should develop strategies to enhance their cash inflow.

Moussavi et al (2015) investigated the effect of free cash flow on change in evaluation indicators of the financial performance of listed in the Tehran Stock Exchange firms over 8 years covering from 2008to 2015. The population consisted of all companies listed on the Stock Exchange in Tehran after the imposition of restrictions, including 406, company. Linear regression analysis was used in testing the hypotheses with correlation software SPSS version 16. The results revealed that there existed a relationship between free cash flow and evaluation indicators of financial performance. There is no relationship between free cash flows with three variables, the rate of return on equity, investment opportunities, and quality profitable but exists a relationship amongst free cash flow earnings before interest and tax together with Market value-added. As free cash flow increases, earnings before interest and taxes and market value-added increases.

Heydari, Mirzaeifa, and Javadghayedi (2014) examined the relationship that existed between free cash flows and the performance of firms listed in the Tehran stock exchange of Iran. 63 firms are selected from listed firms in the Tehran stock exchange for a period of seven years covering from 2006 to 2012. Correlative regression was used in testing the hypotheses. Panel analyses for four factors were used: return on assets, return on equity ratio, Tobin's Q ratio, and stock return. The result showed that there is a significant negative relationship between free cash flows with all evaluative factors of performance. This meant an increase in the conflict of interests between managers and property owners due to free cash flows, which lead to a decrease in the firm's performance.

Bingilar and Oyadanghan (2014) in their Nigerian study examined the relationship between cash flow and corporate performance in the Food and Beverages sector of Nigeria for a period spanning from 2007 to 2011. Six (6) Food and Beverages companies quoted in the Nigerian Stock Exchange were surveyed. Data were extracted from the annual report and accounts of the selected companies under study. The data were analyzed using multiple regression techniques. The results proved that both the operating and financing cash flows have a significant positive relationship with corporate performance, having examined the Food and Beverage Sector of Nigeria. It was equally observed that investing in cash flow

Eyisi and Okpe (2014) examined the uses of cash flow ratio as a better tool for evaluating corporate performance. In the study, liquidity ratio and asset management ratio were used to measure performances and these ratios were calculated based on accrued and cash basis accounting. The findings revealed that liquidity ratios computed on an accrued basis gave a positive liquidity position while that computed on a cash basis showed negative liquidity position/inefficient asset management which meant that the organization studied is not likely to meet up its financial obligation. Thus, this may result in corporate failure, if management does not take the proper course of action.

Vogt (2014) explored the reasons for the strong relationship between cash flow and capital investment spending. The equilibrium level of Tobin's Q was used to differentiate between liquidity constraints arising from asymmetric information and administrative over the investment of free cash flow. The outcomes prove that both the Jensen (1986) free cash flow and that of Myers and Majluf (1984) pecking order hypotheses are likely reasons for the relationship between investment and cash flow. The behavior of free cash flow seems to rise more sturdily in large, low-dividend firms when the investment is made in fixed assets. Pecking order behavior seems to go higher in smaller, low-dividend firms, and in firms that spend minimal cash on fixed assets.

In Turkey, Sayari and Mugan (2013) explored the effect of cash flow components on financial distress scores for the 124 companies selected from the Istanbul Stock Exchange (ISE). Analysis of whether the components of cash flow have a descriptive effect on bankruptcy risk and the financial health of companies was further carried out. Four unconnected models were established and Linear Regression Model was used to measure the age of the company, the size of the company, cash flow from operations (CFO), cash flow from investing (CFI) as well as cash flow from financing (CFF) activities as a cause of financial misery score of companies. The results proved that there was a negative relationship between CFO, company size, and financial distress score of companies. Conversely, CFF is seen to be positively related to the financial distress score. In the interim, it was equally observed that the standardized coefficient of CFI is statistically insignificant and hence it does not offer any evidence for the financial weakness or bankruptcy risk of companies.

Abioro (2013) reviewed practically the impact of cash management on the performance of production companies in Nigeria, using Cadbury Nigeria Plc as a case study. Both secondary and primary data were collected for the study. Two main variables were focused on and they are performance which is the dependent variable and cash management as the independent variable. Two different hypotheses were formulated and tested using descriptive statistics and correlation coefficients techniques respectively to establish whether there is a significant relationship between cash management, performance, and liquidity. It was observed from the study that the relationship that existed between cash management and the performance of manufacturing companies in Nigeria was significant. It was equally noticed that the sheer availability of cash (liquidity) devoid of adequate management does not necessarily translate into enhanced performance for manufacturing companies. Therefore, the need for adequate cash management for better performance.

Zhou, Yang, and Zhan (2012) China studied the relationship between the free cash flow and the financial performance of all real estate companies listed in the China stock exchange to enhance the finance decision for management and investment. Data were collected from the annual financial statements of the listed real estate companies for a period of five years covering from 2006-2010. The principal component analysis and regression analysis were used to calculate 21 financial performance indicators out of the key financial performance indicators, and these key indicators of the sampled companies were correlated to their free cash flow. The result depicted that the free cash flow of a company is negatively linear-correlated to its financial performance. This meant that excess free cash flow will lead to a decrease in financial performance.

Amuzu (2010) examined 'Cash flow as a measure of performance of listed companies in emerging Economies using the Ghana Example'. Twenty (25) companies listed on the

Ghana Stock exchange for the period under study is 2003 -2005were used for the study. The data collected through the observation method and the paper was a qualitative study. The researcher founds that the efficient —cash flow‖ has been strongly influencing the success or failure of a particular firm. He found out that Cash Flow analysis is a healthier measure of performance and effectiveness for firms that are contending in evolving markets. They also found that the magnitude of excess returns observed in large free cash flow firms varies in a manner consistent with the free cash flow hypothesis. Cross-sectional regression analysis shows that higher free cash flow firms with enhancing levels of capital spending in the past are associated with small intensities of excess returns.

## 3. Methodology

Research Design: The ex-post facto research design was adopted for this study.

Nature and Source of data: Secondary data, extracted from the annual report and accounts of the selected deposit money banks from 2009 to 2019 were used.

Population and Sample size: The population for this study consists of the 27 deposit money banks quoted on the Nigerian Stock Exchange. A purposive sampling technique was employed in selecting twelve (12) banks in Nigeria as the sample size. The selected banks were those with complete data for the period of study.

### 3.1 Model Specification

A multivariate regression equation was set up to evaluate the hypothesized relationships between the dependent variables and the independent variables and our model was adopted from prior studies of Bingilar and Oyadonghan (2014), with modification. The linear regression model expressed in its econometric form of the equation given as follows:

$$Y = \beta_0 + \beta_1 X + \beta_2 X + \beta_3 X + \beta_4 X + \beta_5 X + \beta_6 X + \beta_7 X + \mathcal{C} \quad - \quad - \quad - \quad equ\ 1$$

Taking the explicit model as:

ROA = f (CFOA + CFIA + CFFA+FCFA+ CFDT+LEVG+BSIZE) …..............1

Where:

ROA represents the return on Asset, a proxy for banks' performance (the dependent variable).

CFOA = Net cash flow from operating activities measured as net cash flow operations to the asset.

CFIA represents Net cash flow from investing activities measured as net cash flow investing to the asset.

FCFA stands for free cash flow measured as free cash to assets.

BSIZE means Bank size measured as log of revenue

$\beta0$ = Constant (intercept) while $\beta1 - \beta7$ are the regression coefficients or multipliers of the parameters of estimation (independent variable).

$\epsilon it$ = The stochastic error term Note one control variables was introduced to control for performance. Subscripts i denote the number of banks, t denotes years or time-series dimensions ranging from 2009-2019.

### 3.2 Data and variables description

**Operationalization of Variables**

| S/N | Variable Code | Variable Name | Variable type | Measurements | Source |
|---|---|---|---|---|---|
| 1 | CFOA | Cash flow from operating activities | Independent | 'Net operating cash flows to assets | Amah, Ekwe and Ihendinihu (2016) Bingilar and Oyadonghan (2014) |
| 2 | CFIA | Cash flow from investing activities | '' | Net investing cash flows to assets | Heydari, Mirzaeifa, and Javadghayedi (2014), Bingilar and Oyadonghan (2014)) |
| 3 | CFFA | Cash flow from financing activities | '' | Net financing cash flows to asset | Amah, Ekwe and Ihendinihu (2016), Bingilar and Oyadonghan (2014) |
| 4 | FCFA | Free cash flow activities | '' | Operating cash flows minus capital expenses | Vinh and Chi (2013), Yungchih, (2010) and Liao, (2008) |
| 5 | CFDT | Cash flow to debt | '' | ratio of cash flow from operations to total debt | Hau (2017) |
| 6 | ROA | Return on Asset | Dependent | Net Profit after tax divided by Total Asset | Vinh and Chi, (2013) Yungchih |
| 7 | BSIZE | Bank Size | Control Variable | Log of banks total revenue | Orjinta & Okoye (2018) |
| 8 | LEVG | Leverage | Control Variable | | |

Source: Researchers idea (2020)

## 4. Data Presentation, Results and Discussion of Findings

*Table 4.1: ROA Panel Fixed Effect Regression Result*

Dependent Variable: ROA
Cross-sections included: 12
Total panel (balanced) observations: 132

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | 1.390625 | 0.588907 | 2.361367 | 0.0199 |
| CFOA | 0.124318 | 0.125505 | 0.990543 | 0.3240 |
| CFIA | 0.258001 | 1.052236 | 0.245193 | 0.0067 |
| CFFA | 0.047333 | 0.149755 | 0.316072 | 0.0525 |
| FCFA | 0.010990 | 0.023203 | 0.473674 | 0.0366 |
| CFDT | 0.323644 | 0.233488 | 1.386125 | 0.1684 |
| LEVG | -0.044720 | 0.051675 | -0.865404 | 0.3886 |
| BSIZE | -0.007263 | 0.312016 | -0.023276 | 0.9815 |

| | | | | |
|---|---|---|---|---|
| R-squared | 0.332896 | Mean dependent var | | 1.269545 |
| Adjusted R-squared | 0.268503 | S.D. dependent var | | 3.041937 |
| S.E. of regression | 2.856016 | Akaike info criterion | | 5.062856 |
| Sum squared resid | 929.8781 | Schwarz criterion | | 5.455965 |
| Log likelihood | -316.1485 | Hannan-Quinn criter. | | 5.222598 |
| F-statistic | 2.035935 | Durbin-Watson stat | | 1.819020 |
| Prob(F-statistic) | 0.014441 | | | |

*Source: Researchers summary of Nigeria Banks analysis (2020) from E-view 9.0 statistical package.*

### 4.1 Interpretation of result

In the table, 4.1, R-squared and its adjusted R-squared values were (0.33) and (0.19) respectively. This is an indication that all the independent variables jointly explain about 33% of the systematic variations in Return on Assets (ROA) of our sampled banks over the eleven years (2009-2019) while 67% of the systematic variations are captured by the error term. The F-statistics 2.035935 and its P-value of (0.01) portrays the fact that the ROA regression model is well specified.

The specific findings from each explanatory variable are provided as follows:

### 4.2 Test of Hypotheses

### 4.2.1 Test of Hypothesis One

Cash Flow from Operating Activities (CFOA) and Performance (ROA), based on the t-value of 0.990543 and P-value of 0.32, in table 4.3.1 above, was found to have a positive influence on our sampled banks ROA but this influence is not statistically significant as the p-value is

more than 5% significance level. This result, therefore suggests that we should accept our null hypothesis one (H01) which states that Cash flow from operating activities has no significant relationship with performance, proxy as ROA of deposit money banks in Nigeria. This means that in Nigeria, huge or lean cash flow from operating activities (CFOA) of deposit money banks does not signify better performance of ROA of such banks and therefore should not be considered by investors when making investment decisions.

### 4.2.2 Test of Hypothesis Two

Cash Flow from Investing Activities (CFIA) and Performance (ROA), based on the t-value of 0.245193 and P-value of 0.01, was found to have a positive influence on our sampled banks' ROA and the influence is statistically significant at 5% level as the p-value is less than 0.05. This result, therefore suggests that we should reject our null hypothesis two (H02) which states that Cash flow from investing activities has no significant relationship with performance, proxy as ROA of deposit money banks in Nigeria, to accept the alternative. In other words, with the coefficient value of CFIA being 0.258001, it then means that for every N1.00 cash investment of such banks, will result in an increase of about 0.26 kobo on their ROA performance, all things being equal. This means that in Nigeria, huge cash flow from investing activities (CFIA) of deposit money banks signifies the better performance of ROA of such banks and therefore should be considered by investors when making investment decisions.

### 4.2.3 Test of Hypothesis Three

Cash Flow from Financing Activities (CFFA) and Performance (ROA), based on the coefficient value of 0.047333, t-value of 0.316072, and P-value of 0.05, was found to have a positive influence on our sampled banks ROA and this influence is also statistically significant at 5% level, as the p-value is within 0.05. This result, therefore suggests that we should reject our null hypothesis three (H03) which states that Cash flow from financing activities has no significant relationship with performance, proxy as ROA of deposit money banks in Nigeria, to accept the alternative. In other words, with the coefficient value of CFFA being 0.047333, it then means that for every N1.00 cash from financing activity of such banks, will result in an increase of about 0.05kobob on their ROA performance, all things being equal and since this influence is statistically significant, it should be considered by investors when making investment decisions.

### 4.2.4 Test of Hypothesis Four

Free Cash Flow (FCFA) and Performance (ROA), based on the t-value of 0.473674 and P-value of 0.04, was found to have a positive influence on our sampled banks' ROA and this influence is statistically significant at the 5% level, as the p-value is within 0.05. This result, therefore suggests that we should reject our null hypothesis four (H04) which states that Free cash flow has no significant relationship with performance, proxy as ROA of deposit money banks in Nigeria, to accept the alternative. This means that in Nigeria, huge free cash flow (FCFA) of deposit money banks signify the availability of cash that can be used for investment or financing activities or cash that can be plowed back into the system for growth and development of such banks. This no doubt will result in a better performance of ROA of such banks as such should be considered by investors when making investment decisions.

### 4.2.5 Test of Hypothesis Five

Cash Flow to Debt (CFDT) and Performance (ROA), based on the t-value of 1.386125 and P-value of 0.17, in table 4.3.1 above, was found to have a positive influence on our sampled banks ROA but this influence is also not statistically significant as the p-value is more than 5% significance level. This result, therefore suggests that we should accept our null hypothesis five (H05) which states that Cash flow to debt has no significant influence on the performance of deposit money banks in Nigeria. This means that in Nigeria, huge or lean cash flow to debt (CFDT) of deposit money banks does not signify better performance of ROA of such banks and therefore should not be considered by investors when making investment decisions.

### 4.2.6 Test of Control variables

Leverage (LEVG) and Performance (ROA), based on the coefficient value of -0.044720, t-value of -0.865404, and P-value of 0.39, was found to have a negative influence on our sampled banks ROA and this influence is also not statistically significant as the p-value is more than 5% significance level. In other words, with the coefficient value of LEVG being -0.044720, it then means that for every N1.00 increase in leverage value of deposit money banks in Nigeria, it can result in a decline of about 0.05kobob on their ROA performance, all things being equal. However, since this influence is not statistically significant, it should be ignored by investors, as highly or lowly leveraged or geared does not determine the better performance of ROA of deposit money banks in Nigeria

Bank Size (BSIZE) and Performance (ROA), based on the coefficient value of -0.007263, t-value of -0.023276, and P-value of 0.98, was found to have a negative influence on our sampled banks ROA and this influence is also not statistically significant as the p-value is more than 5% significance level. However, since this influence is not statistically significant, it should be ignored by investors, as bank size does not determine the better performance of ROA of deposit money banks in Nigeria.

### *4.3  Discussion of Findings*

Cash Flow from Operating Activities (CFOA) and Performance (ROA): It was found that CFOA does not influence the performance of deposit money banks in Nigeria. This finding is in line with the findings of prior studies such as Mukor, Muturi, and Oluoch (2018), Muhammad and Aminatu (2018) who documented positive and insignificant result between cash flow from operations and banks performance when measured using a return on assets but negates the findings of Khanji and Siam (2008), Mong'a (2010) that found negative and significant results. Our finding also disagreed with findings of prior studies such as Bingiar and Oyadongham (2014), Okpe, Duru and Alor (2015), Ubesie, Chitor and Ejembi (2016), and Amah, Ekwe, and Ihendinihu (2016) who documented positive and significant result between cash flow from operations and performance of banks. Based on this result, our first null hypothesis (H1), which states that net cash flow from operating activity has no significant effect on the performance of deposit money banks in Nigeria is accepted.

Cash Flow from Investing Activities (CFIA) and Performance: CFIA was found to influence the ROA of deposit money banks in Nigeria, meaning that CFIA will benefit bank owners as they will have higher returns on their assets. This result agrees with the findings of prior studies such as Ibadin and Arowoshegbe (2017), Alslehat and Al-Nimer (2017), and Nwanyanwu

(2015) who documented a positive and significant result between net cash flow from investing activity and performance of banks but negates the findings of Khanji and Siam (2015) that found negative and significant results. This result, therefore, rejects our second null hypothesis (H02), which states that net cash flow from investing activity has no significant effect on the performance of deposit money banks in Nigeria, and accept the alternate hypothesis and conclude that net cash flow from investing activity has a significant effect on return on asset of banks, which were statistically significant at 5% level of significance.

Cash Flow from Financing Activities (CFFA) and Performance: CFFA was found to influence the ROA of deposit money banks in both Nigeria. The result agrees with the findings of Ubesie, Chitor, and Ejembi (2016), Nwanyanwu (2015), Khanji and Siam (2015), Sayari and Mugan (2013) that recorded positive and significant result but negates the findings of Ogbeide and Akanji (2017) who documented positive but insignificant results. As a result of this significant result obtained, we, therefore, reject our third null hypothesis (H03) and conclude that net cash flow from financing activity has a significant effect on both returns on assets and return on equity of deposit money banks in Nigeria.

Free Cash Flow (FCFA) and Performance: FCFA was found to influence the ROA. This means Nigerian banks will have free idle cash that can be pushed into investment activities in the future, thereby recording higher returns on both assets to bank managers. The result also indicates that, for banks with low investment or no good investment opportunities, profits have a positive relationship with the free cash flow present in the banks as they can easily embark on aggressive investment decisions due to the amount of idle cash with them and vice versa. Furthermore, from the above analysis, it can be seen that free cash flow control is always one of the most important issues of banks. If a bank does not have good investment opportunities available, holding more cash may not increase their performance. In contrast, for banks without good investment, free cash flow may create opportunity costs or bank managers may abuse this free cash flow for personal gain. These problems can reduce the overall performance of the business. However, while our study recorded a positive significant influence of free cash flow on bank performance in Nigeria alone and insignificant performance in Ghana, other empirical studies like Hau (2017) and Zhou et al (2012) found that corporate profits are negatively correlated with business free cash flow, especially for firms without good investment opportunities (Q<1). However, when FCFA was also tested jointly as a combined effort in West Africa, using deposit money banks in Nigeria and Ghana as our sampled countries, the result is slightly different from what we obtained in country-specific. In West Africa, FCFA shows a significant positive influence on ROA performance and a strong significant positive influence on ROE performance at 5% and 1% levels respectively. Other empirical studies like Hau (2017) and Zhou et al (2012) also found that corporate profits are negatively correlated with business free cash flow, especially for firms without good investment opportunities. Cash Flow to Debt Activities (CFDT) and Performance: it was found that CFDT did not influence the performance of deposit money banks in Nigeria. Our finding contradicts the findings of Jooste (2013) that recorded positive and significant results. As a result of this insignificant result obtained, this study, therefore, accepts the fifth null Hypothesis (H05), which states that cash flow to debt has no significant effect on the performance of deposit money banks in Nigeria.

Leverage (LEVG) and Performance: LEVG was found to have a negative and insignificant influence on the ROA of deposit money banks in Nigeria. The implies that leverage decreases returns of the owners of the bank as the profits made will be used for debt servicing instead of

serving as a return to them. This also implies that a 1% increase in the level of leverage financing is associated with a decrease in the return on assets of banks. It is discovered that the debt to equity ratio which was a measure of leverage has a positive-negative relationship with ROA. The higher the leverage value of banks, the lesser the returns on assets of the owners. This finding is in agreement with the findings of Pierluigi (2015) that documented negative and significant effects between leverage and banks' performance and disagree with the findings of Ndirangu (2017) that documented positive and significant effects.

Bank Size and Performance: It was discovered that bank size has a negative but insignificant effect on the performance of deposit money banks in Nigeria. Likewise, bank size is introduced to report for present economies and diseconomies of scale in the market place. A study conducted by Tariq, Usman, Mir, and Aman (2014) using bank size as an independent factor found that bank size has a mixed impact on the bank's profitability. Bank size has directly impacted performance by reducing the cost of raising the capital for large banks. The study, therefore, found a considerable and direct association between bank size and profitability in their study. Our study, therefore, supports the findings of Fraker (2006) who documented an indirect association between bank size and profitability but negates the findings of Tariq et al. (2014).

## 5. Summary of Findings, Conclusion, Recommendations and Contribution

The results showed among others that CFIA, CFFA, and FCFA were found to have a positive and significant influence at 5% on ROA while CFOA and CFDT were insignificant in influencing ROA performance in Nigeria. Finally, LEVG and BSIZE were found to have a negative but insignificant influence on ROA. The study recommended that a high or lowly leveraged or geared bank does not determine the better performance of ROA of deposit money banks in Nigeria neither does bank size guarantee better performance. The study concludes that cash management by managers should be handle with efficiency since cash flow variables greatly influence the performance of deposit money banks in Nigeria. The study contributed to knowledge by extending the scope of the study, including more variables and modifying existing models.

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