

Impacts of Components of Cash Flow Statements on Bank Performance in Nigeria

Ugwu Ikechukwu Virginus

Department of Accountancy Chukwuemeka Odumegwu Ojukwu University (COOU), Igbariam Anambra State, Nigeria

Email: virginusugwu418@gmail.com

ABSTRACT

This study determined the impact of components of cash flow statements on bank performance in Nigeria. Time series and cross sectional data was collected from the annual statements of 14 sampled banks: 2009 to 2018. The analyses, determined whether the components of cash flow statements have any explanatory impact on Return on Asset (ROA). Four explanatory variables of cash flow statements used were: Free Cash Flow Activities (FCFA); Cash Flow from Operation (CFOA), Cash Flow from investing (CFIA) and Cash Flow from Financing (CFFA) and one control variable Leverage (LEV). Analyses used Pool and Hausman Test that selected Random Effect model for data analyses. The results were that one explanatory variable Cash Flow from Operation Activities (CFOA) has a significant positive effect on the criterion variable- Return on Asset (ROA), and the rests of the explanatory variables of (FCFA); (CFIA) and (CFFA) have negative and insignificant impact on return on asset (ROA). We conclude that (8.7880) F-statistics of cash management impacts bank performance, but only 25% of the R- Squared of Net Cash Flow from operation (CFOA) explains the reason for asset growth. Other variables failed to explain the growth of the banks. We recommend that managers should improve cash management.

Keywords: Cash flow Statements, Bank Performance, Investing, Operating, Free Cash Flow and Financial Activities

INTRODUCTION

Section 334 and 335 of Company & Allied Matters Act (CAMA) 1990 and 2004, and with the adaption of IFRS in 2012, require that companies prepare each year, financial statements which must comprise components of cash flow statements. In their opinion, [1]; [2], see cash flow as a vital source of information that assist firms to take the right decisions.

It is the components of the cash flow statement contained in the financial statement that shows the cash inflows and outflows of a firm during a given accounting year. There is no doubt that investors depend on the statement of cash flows to find out any company's financial strength and performance. [3] [4], insist that firms has to work out

diverse ways to choose the best components of their cash flows in the company's operation in order to raise her productivity or achieve performance for the cash flows to be properly structured and effectively utilized and that the ability of a company to effectively choose adequate source of funds to finance its operations will differentiate strong cash flow governance and poorly managed cash flows at any given period. Further, the Statement of Accounting Standard (SAS), 18 presents the Cash flow statement as an avenue for assessing corporate viability and liquidity and also as a means of performance ratios for making good investment decision and

preventing corporate failure; while International Accounting Standard, (IAS), 7, sees it as a lay down rules regarding statements of cash flow preparation and reporting.

Literatures above have stated that components of cash flow statements can impacts bank's financial performance. Bank Financial performance simply means the measure of how well the banks have applied the available assets and investments in accordance to the laid down rules (CAMA, 1990, 2004; SAS, 18; IAS, 7), to improve its financial positions. [5] stated that, financial performance is a measure of bank profitability. Thus, profitability is the ability of a firm to utilize its resources to generate profit and returns to the investors. It can also be seen as the measure of the management efficiency in generating earnings from the resources. We see financial performance as one of the proxies for profitability. Therefore it is an important means of evaluating the overall efficiency of banking operations.

The major components and proxies of cash flow statements as enshrined in (CAMA, 1990, 2004; SAS, 18; IAS, 7) are, Investing, Operating, free cash Flow and Financial Activities. Concerning this, Financial Accounting Standards Board (FASB) states that the principal purpose of the cash flow statement is to evaluate the liquidity, solvency, viability and financial adaptability of any organization. This study intends to see how these components of cash flow impacts banking performance in Nigerian using the financial statements as reported in Nigeria Stock Exchange from 2009-2018

Examining the performance of Nigerian banks over the years, have shown that banks have collapsed due to poor cash management, idle or under utilization of or lack of cash, or over or under leverages that have no impact on banks financial performances. Therefore, these evidences have brought about several bank restructuring. Studies in the past investigated the relationship between cash flow and corporate performance. Some of these studies like, [6]; [7]; [8],

found that operating and financing cash flows have significant positive relationship with corporate performance while investing cash flow and corporate performance have significant negative relationship. But others like, [9]; [10] found significant and strong positive and negative and weak relationship with performance while [11] found significantly increase but not statistically significant; [12] [13], found that cash flow has positive impact on financial performance, the [14] found a positive and insignificant impact between Cash Flow from Operating activities and [15] found that free cash flows have a positive relationship on firm performance. Examinations of these prior studies indicated that some of these studies were focused on relationship and varied in their study approach: methodology, analyses, findings and recommendations. We thus tends to further this study using impact and effects and not relationship and also, use four explanatory variables instead of two and three explanatory variables applied by prior authors. We want to see if our results would agree or contradicts these prior studies that used two or three components in their studies. The study will further include free cash flow activities (FCFA), which many of the prior authors did not observe in their studies, and the study will be on Nigeria banking sector.

The main objective of our study is to determine how these identified components of cash flow statement impacts bank performance in Nigeria. In other words, it is to determine whether, free cash flow activities (FCFA), cash flow from operating activities (CFOA), cash flow from investing activities (CFIA) and cash flow from financial activities (CFFA): determine the deterioration or growth of banks in Nigeria, whether the cash flow statements have any explanatory capacity in forecasting banks existence.

The following hypotheses were formulated to guide the study

H₀₁. Free cash flow activities (FCFA) do not significantly impact on return

- on asset of banks in Nigeria
- H₀₂. Cash flow from operating activities (CFOA) do not significantly determine on return on asset of banks in Nigeria
- H₀₃. Cash flow from investing activities (CFIA) do not significantly impact on return on asset of banks in Nigeria
- H₀₄. Cash flow from financial activities (CFFA) do not significantly impact on return on asset of banks in Nigeria

The study is presented into five sections: introduction, review of related literature, methodology, analyses and results, and conclusions

Concept of Financial Performance

Financial performance is a subjective measure of how well a firm can use assets from its primary mode of business to generate revenues. Business dictionary defined it as a means of measuring the results of a firm's policies and operations in monetary form. These results are reflected in the firm's return on assets, investment etc.

In this study, Financial Performance is proxy by return on assets (ROA). In other words, we use return on assets (ROA) as our criterion i.e. dependent variable and that will be our basic focus analysis to determine the profitability of the banks in relation to its total assets. The accounting format to calculate firms' ROA is: the net income divided by its total assets, [16] defined ROA as the ratio between the profit after taxation and total/average assets, which is widely used as profitability indicator that determines the, efficient utilization and revenue generation proficiency arising from the assets of any firm. Return on Asset is better applied in comparing companies with the same level of capitalization and hence the use of banks. It answers the question of 'what can you do with the asset that you have available, is there idle cash, underutilized cash, excess or under leverage? [17].

Free Cash Flow activities (FCFA)

Free cash flow is the cash a company

produces through its operations less the cost of expenditure on assets. Cash flow represents incomings and outgoings of cash from the operating activities of an organization. Cash flow is the difference in amount of cash available at the beginning of a period (opening balance) and the amount at the end of that period (closing balance). It is said to be positive if the closing balance is higher than the opening balance, otherwise it will be negative. Cash flow is increased 'by (a) selling more goods or services, (b) selling an asset, (c) reducing costs, (d) increasing the selling price, (e) collecting faster, (f) paying slower, (g) bringing in more equity, or (h) taking a loan. [18], stated that the statement of cash flows details all cash inflows and outflows and brings it down to how much cash the company has generated in a given period, [19] [20] said that Cash flows represent all inputs and outputs liquidities and cash equivalents. Also, [21] sees free cash flow as the cash flow in excess of that required to fund all projects that have positive net present values when discounted at the relevant cost of capital.

Cash flow from operating activities

Cash flow from operating activities is a section of a firm's cash flow statement that explains the sources of and uses of cash from ongoing regular business activities at a given period. This includes net income from the income statement, adjustments to net income, and changes in working capital.

The accounting formula given for operating cash flow from activities is Operating Cash Flow = Net Income + Depreciation + Stock Based Compensation + Deferred Tax + Other None Cash Items - Increase in Accounts Receivables - Increase in Inventory + Increase in Account Payables + Increase in Accrued Expenses + Increase in Deferred Revenue, (Corporate Finance Institute, 2019). If a company's cash flow from operation activities increase, the financial and credit health of the firm increases as the firm may not require borrowing and cash interest expenses would decrease drastically, [22]

Cash Flow from Investing Activities CFIA

The accounting Cash flow from investment activities displays cash flows mainly from the purchase or sale of fixed assets, [23]. CFIA focuses on plant, property and equipment and other less common investment-related activities, Cash from these activities is separate from operations because they tend to be for long-term planning and are not directly related to the day-to-day cash operations of a business. An organization that applies large amounts of cash for investment purposes is an indication that the firm is investing for future growth. Therefore if the cash from operations

THEORETICAL FRAMEWORK

Cash Flow Theory

Free cash flow is seen as the main crust of examining performance and financial health condition of firms. The theory of free cash flow was propounded by Jensen in 1976. In his view, Jensen explained free cash flow as the cash flow in excess of funds needed for all projects which have positive net present value (NPV). Jean propounded that the essence of anchoring on the theory is that the effective and efficient management of free cash flow would distinguish between strong cash flow governance and poorly managed cash flows. This he said would either increase or decrease agency cost (as a result of conflict between shareholder and managers). The theory states that more internal cash enables the managers to avoid market control. Thus in this situation, they do not need the shareholders' agreement but they are free to decide on what investments to make on their own. Therefore Managers do not tend to pay cash (like the dividends) before they are motivated to invest, even when there is no investment with positive net present value. Based on this theory, managers are motivated to collect the funds in order to increase their under-controlled resources and they also acquire the powers of judgment and discernment on firm's investment decisions.

Therefore, they act using the firm funds

isn't enough to cover investment activities, there is the need that another type of cash flow will be helpful.

Cash Flow from Financing Activities CFFA

Cash flow from financing activities is stemming from third-party and other financial sources. It consists of cash related to debt such as proceeds (cash in) and loan payments (cash out). It also covers cash flow related to equity, such as share purchases (cash in) and dividends (cash out). Cash flow from financing activities helps gauge how much cash the organization is generating on a net basis from third parties as opposed to cash from ongoing operations

in order to avoid presenting detailed information to the capital market, although it is possible that managers invest in projects that may have negative effects on the shareholders' wealth.

Empirical Review

[24] investigated the relationship between cash flow and corporate performance in the Food and Beverages sector of Nigeria with secondary data using the multiple regression technique. They found that operating cash flows have significant positive relationship with corporate performance. [25], also examined the effect of cash flow statement on companies' profitability in Nigeria. They study surveyed three Banks, using data extracted from the cash flow statements from their annual reports 2009-2013. Applying multiple regression operating cash flows has significant positive effect on company's profitability. The study of [26] was on the relationship between cash flow and performance in the Food and Beverages sector of Nigeria from 2007 to 2011. Using six (6) Food and Beverages companies, data were extracted from the annual report, and using multiple regressions, they found that operating and financing cash flows have significant positive relationship with the corporate performance. Further, [27] studied the relationship between cash flow and performance in the Banking sector of Nigeria on four (4)

Banks covering from 2005 to 2013. Secondary data were obtained and analyzed using correlation technique and the result indicated that operating cash flow has a significant and strong positive relation with performance in the Banking sector in Nigeria.

[28] investigated the relationship between cash flow and corporate performance of deposit money banks in Nigeria from 2010 to 2014. The study applied ordinary least square regression model and found that investing cash flow had a positive and significant relationship with performance. [29] examined the impact of cash flow management of financial performance of Jordanian Insurance companies. The population of 23 companies covering 2009 to 2013 was used and the result was that net cash flow from investing activities played a significant role in the financial performance of Jordan Insurance Companies. Data were gotten from the annual report and accounts of the selected companies under study. The related data were subjected to statistical analysis using the multiple regression technique. The results of the study showed that operating cash flows have significant positive relationship with corporate performance in the Food and Beverage Sector of Nigeria. [30]

METHODOLOGY

This research applied cross sectional ex-post research design with focus on Nigeria banks. The study made use of the available published financial statement from 2009 to 2018. The sampled size consisted of 14 banks from the entire population of all the listed commercial banks in Nigeria. The choice of the sample size was based on the consolidation identity for the period and the availability of published financial statement from 2009 to 2018. The data for the analyses was extracted from the 2019 Nigeria Security Exchange Fact Book to determine the impact that the data of the independent variables would have on the dependent variable.

investigated the relationship between cash flow and performance in the Food and Beverages sector of Nigeria. Six (6) Food and Beverages companies quoted in the Nigerian Stock Exchange were involved in the survey. Data were extracted from the annual report and accounts of the selected companies under study. The data were statistically analyzed using the multiple regression technique. The results proved that operating and financing cash flows have significant positive relationship with corporate performance in Food and Beverage Sector of Nigeria.

[31] studied the Impact of Free Cash Flow on Profitability of the Firms in Automobile Sector of Germany. Both primary and secondary data gathered from 2007 to 2016 were applied. A descriptive survey was adopted that aimed at analyzing the effect and the regression results indicated that there was a positive relationship between the free cash flows and profitability of listed firms. However, Leverage has an inverse insignificant impact on profitability (ROA) and evidence for this comes from testing the proxies (Leverage, Current asset, Firm size, Capital liquidity, Sales growth, FCF).

Operation Models: Variables, Specification, Method of Analyses, Estimation, Selection and Test

The criterion i.e. dependent variable (performance) was proxy with Return on Asset (ROA) which is net asset divided by total asset for the period. Five Proxies of explanatory, independent variables of cash flow statement applied as: Free Cash Flow Activities (FCFA) = Operating cash flows minus capital expenses; Cash Flow From Operation Activities (CFOA) = Net Operating Cash Flows; Cash Flow From Investing Activities (CFIA) = Net Investing Cash Flows; Cash Flow From Financial Activities (CFFA) = Net Financing Flows and one Control Variable; Debt Ratio (DR) i.e. Leverage (LEV) = Total Liabilities divided by Total Asset.

Our model adapted with modification the works of these authors: [2]; [3]; [4]; [5].

$$ROA = b_0 + b_1FCFA + b_2CFOA + b_3CFIA + b_4CFFA + b_5LEV + e$$

Where b_1 to b_5 represents the coefficients of parameters of estimations and have been explained above. The ' b_0 ' is the intercept, ' n ' represents the number of banks which is 14, ' t ' is represented by the time covered by the study and the ' e ' represents the stochastic error term.

A panel regression technique was applied to analyze the model {the banking period of ten years (10)}; and estimation model Pooled Ordinary Least Square can apply only when bank specific effects are constant and related and no time specific effect; Fixed Effects Model is used to control as bank specific effect is constant over time and Random effects model is used to control as bank effect is constant

ANALYSES AND PRESENTATION OF DATA

Table one in the appendix shows the result of the descriptive statistics. The mean distribution of the criterion variable

over time. But, Pooling Test or fixed effect and random effects model will apply using any of this decision rule; H_0 : Pooled Model; H_1 : Fixed Effect Model. Therefore at, 0.05 level of significant, reject H_0 if the probability of the test statistic (H) is less than 5% significant level, on the other hand do not reject. Also, Hausman Test assumption apply when fixed and random effect model do not differ substantially and the hypothesis says; H_0 : Random Effect Model is better and when it is H_1 : Fixed Effect Model is better. Thus, use Chi-square if the probability value is greater at 0.05 level but if otherwise estimation random effect and fixed effects is preferred. The final hypotheses of the study will be tested using the above result of either Pooled OLS and Random effect, or Pooled OLS and Fixed Effect.

and the explanatory variables were very small and some were negative. Mean values were

ROA	CFOA	CFIA	CFFA	F CFA	LEV
0.012454;	0.014176	-0.045461	0.017337	-0.076643	0.856059

ROA, CFOA, CFFA and the control variable LEV have a positive but small mean values; while CFIA and FCFA have a negative mean values. Test of the goodness of the fit of the sample data also showed from the result a zero probability values of a non normal distribution. This also could be observed from the non normal Jarque-Bera test of result of a probability test less than 0.05 and the result of the Skewness of the whole variables distributions skewed to the left i.e. negative. The Kurtosis has a high leptokurtic distribution of which the normal distribution should not be more than (3). But we observed that the abnormal result from the table one in the appendix ranged from (7 to 114) which is above normal. It can be observed that from the non normal distribution of the banks variables predictions: changes may

be impossible and the two variables (CFIA) and (FCFA) with negative mean are symptoms of lack of cash for investment or idle cash not invested. Also, the variable result of Durbin Watson test (DW) is (2.7664) which shows that the models did not show any autocorrelation detection of the samples size and therefore will achieve the desired result. The tables of Pooled and Hausman Test in appendix table 6 showed that the Null Hypothesis was accepted at a value > 0.05 significant level and the Fixed Effect was rejected. Thus the result Preferred Pooled Ordinary Least Square (OLS) and the Random Effect for our estimation for their similarity in yielded results, (See table 2 &). Therefore, estimation model OLS and Random Effect Model was adapted for our cash flow and yielded result extracted from appendix (table 2 & 4)

ROA=	FCFA	CFOA	CFIA	CFFA	LEV	C
	-0.266	7.667	- 0.7559	-0.6788	-16.166 +	14.17

The above figures has the R-squared, i.e. the coefficient of the determination of 26% from both models of the explanatory variables of (FCFA of value -0.2667); (CFOA of value 7.667); (CFIA of value - 0.7559); (CFFA of -6.788); (LEV of value of 16.16 Plus C value of 15.15), impact on the criterion variable i.e. banks cash management's Return on Assets (ROA). Probability values of (0000) shows that the overall F-statistic values of (8.6770) is significant and also reveals that the explanatory variables impact on the criterion variable.

Hypotheses of the study were tested to know whether the explanatory variables are significant on the dependent variable. Results from the coefficient of the regression tables in appendix (See table 2, 4 & 5) which explains that Free Cash Flow Activities (FCFA) has the negative value of (-0.266) with t-statistic value of (-0.339) has an insignificant negative impact on the return on assets of banks. Cash Flow Operating Activities (CFOA), has (7.667) coefficient values from the table with t-statistic value of (3.376) tested at (0.05) level rejected the Null Hypothesis and concludes that it has a significant positive impacts on bank's return on assets. Cash Flow Investment Activities (CFIA), has the

values from the table (-0.756) and F-statistic values of (-0.889) tested at (0.05) level, has an insignificantly negative impacts on Return On Asset (ROA) of banks. The coefficient of Cash Flow from Financial Activities (CFFA), is (-0.6788), F-statistic values is (-2.8573), has an insignificant negative impact at (0.05) level and the coefficient of the control variable (LEV) is (-16.166) with F-statistic values of (-05.8890), has an significant negative impact on the return of the assets of the sampled banks. This could mean that any of the banks that ventures into a high leverage will suffer because it has no positive impact on their performance but will simply be an accumulation of debts.

Discussion of Findings

The discussions of these findings show that only one explanatory variable (CFOA) has a significant positive impact on firm's financial performance. This finding agrees with the findings of [13]; [14]; [15], that (CFOA) has significant positive impact on firm performance. But the rest of the three explanatory variables (FCFA), (CFIA), (CFFA) and the control variable (LEV) have negative insignificant impacts on banks financial performance.

CONCLUSION

We therefore conclude that (8.6770) of the F-statistics from cash flow impacts bank performance but only 25% of the R Squared evidenced in one independent variable- Net Cash Flow from operation (NCFO) explains the reason for asset growth. The rest of the variables did not actually explain the growth of the banks as a result of possible idle or unutilized cash, lack of cash, over or under leverage. The result of the Free Cash Flow Activities showing insignificant negative impact in the findings actually agrees with the theory of Free Cash Flow propounded by Jensen, 1976, that free cash flow does not

always guarantee firm profitability. The theory opines that (FCFA) can motivate managers; because of self interest, to invest even when there is no investment with positive net value or to put (Cash) fund on investment that has negative effects on shareholder's wealth. Even though the result of the control variable (LEV), suggest or tried to negate the agreement with the theory that a possible leverage from the findings of this study may not increase the banks performance. There may be other possible ways of increasing shareholders wealth.

RECOMMENDATION

The study findings therefore make some of these recommendations: That since (CFOA) has significant positive impacts on bank performance then, bank managers should invest wisely; Care must be taken in leverage because certain level of leverage from the findings, may have a negative insignificant impact on the bank performance; (CFIA), should be carefully studied before any investment should be made in the banks in any period because

some investment can have insignificant negative impacts; (FCFA), should be properly checked before investment to avoid wastages since the result showed an insignificant negative impact on (ROA); Idle cash should be avoided but where there is insufficient fund for operations, adequate provision should be made for short term funds for day to day operations.

REFERENCES

1. Achjen, L. & Slim, C. (2017). The impact of free cash flow and agency costs on firm performance. *Proceedings of ISER 56th International Conference, Rome, Italy*
2. Adelegan, O. J. (2003). An empirical analysis of the relationship between cash flow and dividend changes in Nigeria. *R&D Management*, 15(1)
3. Aiyegbusi, O.O. & Akinlo, A. E. (2016). The effect of cash holdings on the performance of firms in Nigeria: Evidence from generalized method of moments (GMM). *FUTA Journal of Management and Technology*, 1(2),1-12.
4. Ali 1, U., Ormal, L. & Ahmad, F. (2018). Impact of free cashflow on profitability of the firms in automobile sector of Germany. *Journal of Economics and Management Sciences*, 1 (1- V)
5. Alslehat, N. & Al-Nimer, M. (2017). Empirical study of the relationship between cash flow management and financial performance of Jordanian Insurance companies. *International Business Management*, 11(3), 776-782.
6. Amah, K. O, Ekwe, M. C. & Uzoma, I. J.(2016). Relationship of cash flow ratios and financial performance of listed banks in emerging economies - Nigeria example. *European Journal of Accounting, Auditing and Finance Research*,4(4), 89-97.
7. Andreas, A. (2017). Analysis of operating cash flow to detect real activity manipulation and its effect on market performance. *International Journal of Economics and Financial Issue*, 7(1),524-529
8. Belobo, A. B. & Peiser, F. (2014). Cash Flow management: assessing its impact on the operational performance of small and medium size enterprises at the Mafikeng Local Municipality in South Africa Prior to the global financial crisis. *Mediterranean Journal of Social Sciences*, 5(27),226-234
9. Bingilar P. F. & Oyadonghan K. J. (2014) Cash flow and corporate performance: A study of selected food and beverages companies in Nigeria. *European Journal of Accounting Auditing and Finance Research*, 2(7), 77-8.
10. Brycza, B. & Pauka, M. (2015).The effect of cash flow on share price of the Jordanian commercial banks listed in Amman stock exchange. *International Journal of Economics and Finance*, 7(5)
11. Dukic, T. & Novicevic, B. (2013). The analysis of key financial performances of banks. *Economics and Organization*, 10(2), 129 - 145.
12. Eyisi A. S. & Okpe, I. I. (2014). The impact of cash flow ratio on corporate performance. *Research Journal of Finance and Accounting*, 5(6),149-158.
13. Hau, L. L. (2017)Free cash flow and firm performance: Evidence from sectoral levels for Vietnamese

- listed firms. *International Journal of Advanced Engineering, Management and Science*. 3(4),296-300.
14. Heydari, 1., Mirzaeifa, M. & Javadghayedi, M.(2014). Investigating the relationship between free cash flow and firm performance: Evidence from Tehran Stock Exchange. *Indian Journal of Scientific Research*, 4 (6), 269-279.
15. Hsiao, C. (2003). Analysis of Panel Data. (2nd ed.). United Kingdom: Cambridge University Press.
16. Ibadin, L. A. & Arowoshegbe, A. (2017).Analyzing corporate performance using cash flow statement. *International Journal of Accounting and Financial Management*, 1(1)
17. Jensen, M., & Meckling, W. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure, *Journal of Financial Economics* 4, 305-360.
18. Jooste, L. (2006). Cash flow ratios as a yardstick for evaluating financial performance in African businesses. *Journal of Managerial Finance*, 32(7), 569-576.
19. Khanji, I. M. & Siam, A. Z. (2015). The effect of cash flow on share price of the Jordanian commercial banks listed in Amman Stock Exchange. *International Journal of Economics and Finance*, 7(5), J 09- J J 5.
20. Kroes, J. R. & Manikas, A.S. (2014). Cash flow management and manufacturing firm financial performance: A longitudinal perspective. *International Journal of Production Economics*, 148, 1-27.
21. Moussavi, S.M.K., Barzegarnezhad, A. H. & Barzegarnezhad, Y. K(2015).The investigation of the relationship between free cash flow and evaluation indicators of financial performance. *IJABER*, 13(6),3717-3728.
22. Muhammad, L. & Aminatu, S. M. (2018). Operating cash flow and corporate financial performance of listed conglomerate companies in Nigeria. *IOSR Journal of Humanities And Social Science*, 23(2-J J), I-I I.
23. Muthama, R. A. (2016). Effects of cash management practices on operational performance of selected public hospitals in Kisii County, Kenya. *Unpublished Masters thesis of the Department of Business Administration, Jomo Kenyatta University of Agriculture and Technology*. <https://iiste.org/Journals/index.php/IJEBM/article/view/29814>
24. Ndirangu, L. W. (2017). Effect of cash management on the financial performance of the companies listed at the Nairobi securities exchange. *Unpublished Masters Thesis from School of Business, University of Nairobi*. Retrieved from<http://erepository.uonbi.ac.ke/bitstream/handle/11295/103008/Ndirangu>.
25. Ndungu, B. W. & Oluoch, O. (2016). Effect of cash flow management on market performance of public construction companies in Kenya *International Journal of Social Sciences and Information Technology*, II (VIII), 778-790.
26. Nwanyanwu, L. A. (2015) Cash flow and organizational performance in Nigeria: Hospitality and print media industries perspectives. *European Journal of Business, Economics and Accountancy*, 3(3),66-72
27. Ogbeide, S. & Akanji, B. (2017). A study on the relationship between cash-flow and financial performance of insurance companies: Evidence from a developing economy. *Review of International Comparative Management*, 18(2), 148-157.
28. Okpe, I., Dum, A. N. & Alor, C. (2015). The effect of cash flow statement on companies

- profitability: A study of some selected banks in Nigeria. *African Journal of Basic & Applied Sciences*, 7(6), 350-356.
29. Sayari, N. & Mugan, F.N. C. (2013). Cash flow statement as an evidence for financial distress. *Universal Journal of Accounting and Finance*, 1 (3), 95-103.
30. Ubesie, M. C., Chitor, I. L. & Ejembi, E.A. (2016). Effect of cash flow statement on performance of selected food beverage companies in Nigeria. *International Digital Organization for Scientific Research (IDOSR) Journal of Current Issues in Social Sciences*, 2(1), 47-54.
31. Yao, Haris & Tariq (2018). Profitability Determinants of Financial Institutions: Evidence from Banks in *Pakistan Int. J. Financial Stud.*, 6, 53; doi: 10.3390/ijfs6020053

APPENDIX

Table 1: Descriptive Statistics

	ROA	CFOA	CFIA	CFFA	FCFA	LEV
Mean	0.012454	0.014176	0.04561	0.017337	-0.076643	0.856059
Median	0.014734	0.014000	-0.015000	0.008000	0.000000	0.860000
Maximum	0.095365	0.373000	0.176000	0.234000	0.680000	1.240000
Minimum	-0.202329	-0.517000	-2.695000	-0.511000	-1.030000	0.690000
Std. Dev.	0.029007	0.112336	0.238023	0.068639	0.308117	0.070397
Skewness	-3.244927	-	-10.17669	-2.585171	-1.933052	1.595587
Kurtosis	24.90633	7.589675	114.7629	28.33948	8.556033	10.94745
Jarque-Bera	2979.788	78.29181	72395.72	3817.839	157.5151	418.6730
Probability	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Sum	1.706013	1.942000	-6.228000	2.375000	-10.50000	1172800
Sum Sq. Dev.	0.114435	1.716217	7.706008	0.640749	12.91127	0.672073
Observation	137	137	137	137	137	137