Innovations

An evaluation of the effect of Cash Flow Activities management on the Financial Performance of Manufacturing Firms Listed at the Nigeria Stock Exchange

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Abstract: *The study examined the cash flow activities on the financial performance of manufacturing firms in Nigeria. Eighteen (16) firms were selected from the forty-three (43) firms listed on the Nigerian Stock Exchange (NSE) judgementally. The Ex-Post facto research design was adopted, and secondary data were extracted from the selected firms' annual reports for eleven years (2011-2021). Cash flow from operating activities, cash flow from investing activities, and cash flow from financing activities were used as proxies for the independent variables. In contrast, ROCE, EPS and TQ were used as proxies for the dependent variable. Three hypotheses were formulated and analysed using the fixed and random effect models. There were mixed results of significant and non-significant cash flow activities on the financial performance of the selected manufacturing firms. Therefore, the study recommended that firms should optimally engage all activities that would generate more cash inflow from operating activities to increase the firm's performance. Management of the firms should thoroughly evaluate investment opportunities to ensure an optimal return, which will lead to improved performance. Firms should use cash flow ratios for investment appraisal and seek a cheaper funding source to reduce the burden of servicing debt to achieve an optimal result.*

Keywords: 1. Cash flow activities, 2. Financial Performance, 3. Panel Analysis, 4. Manufacturing Firms, 5. Fixed and Random Effect

1.   Introduction

As a result of the organisation's financial issue, treasurers are now forced to concentrate their efforts on strategies to enhance their companies' cash management. This has caused government agencies, including the Treasury, to focus on setting up measures and plans to guarantee that businesses follow laws to ensure good cash management (Mohamed, Willy and Mohamed 2019). Worldwide, there is a predisposition to expect a profit from low cash flows (Watson, 2005); businesses can survive in an economy with little or no revenue, but their prospects of surviving without cash flow management are slim.

The opportunity cost of retaining idle capital is quite essential to advanced nations. Manufacturing companies incur costs when holding financial flows. Even though firms adhere to strict cash flow forecasts, some factors can negatively or positively affect their financial performance and pose a greater risk. Cash flow management is critical in many firms because placing temporary cash surpluses has low yields from rising financial costs.

Cash management describes the gathering, storing, and distributing of cash. The objective of managing an enterprise's cash balances is to maximise the amount of available cash not invested in fixed assets or inventory while minimising the danger of insolvency (Mitnick, 2009). According to Nyabwanga, Ojera. Alphonce and Otieno (2011), planning and controlling cash flows in and out of business, cash flows within the firm, and cash balances held by a business at a particular point in time constitute the process of cash management. Choosing the right amount of cash to hold requires considering the trade-off between the opportunity cost of holding too much cash and the trading cost of holding too little (Ross, Westerfield and Jordan, 2008). A cash balance policy set-up ensures cautious cash planning and investment of surplus funds (Nyabwanga et al. 2011).

Dropkin and Hayden (2001) claim that poor cash management can cause a firm's liquidity to decline, increasing the likelihood that it won't be able to pay its debts, driving up operating costs, and ultimately causing the company to go bankrupt. Liquidity management is the core of every business, whether publicly traded or privately owned, for-profit or nonprofit. Due to limited liquidity, a corporation may enter a phase of collapse if the problem with cash management is not resolved (Zietlow, 2007).

A corporation can grow its operations, replace damaged assets, seize market opportunities, and pay dividends to its owners with the help of cash flow (Libby, Libby, & Short, 2014). Understanding the many sources and uses of money generated by business activities is crucial for business managers and analysts. An organisation's cash will largely determine how well it can finance its operations. A company must closely monitor its cash flow and link it to its profitability to succeed in the long run. Profit, according to Turcas (2011), is not cash. A company's profitability does not guarantee that it is solvent. The ability of the company to create positive cash flows from all of its operations is a prerequisite for the firm's solvency, flexibility, and financial performance.

In comparison to the manufacturing industries of industrialised nations, Nigeria's manufacturing sector may be considered modest. However, the manufacturing sector provided about 10% of Nigeria's economic output before the oil boom of the 1970s (NBS, 2015). The sector's relatively Gross Domestic Product (GDP) share decreased as oil revenues increased, although growth continued slower. It also stated that manufacturing's share of Nigeria's overall economic output had generally declined since reaching a peak of 7.83% in 1982. The report claims that various factors have contributed to the sector's fluctuating contribution, demonstrating how susceptible manufacturing is to pressures from the global economy and how policy changes can significantly impact the industry's future.

According to Premium Times News (2017), Nigeria's manufacturing sector had a bad year in 2016 due to several difficulties the industry had to deal with. As the Purchasing Managers Index (PMI) indicated, the Central Bank of Nigeria (CBN) noted that the manufacturing sector had a general downturn between January and November. The PMI indicates the manufacturing sector's economic health. The report said that the index representing industrial production was below 50 index points from January through November. The five leading indicators of the PMI are new orders, inventory levels, production, supplier deliveries, and the labour market. Operators in the sector claimed that the industry encountered numerous difficulties, including a lack of foreign currency, infrastructure, exorbitant banking fees and raw materials.

The Manufacturers Association of Nigeria (MAN, 2017) reports that approximately 272 businesses closed, while others cut their output, employee numbers, and worker compensation. Throughout the year, the industrial capacity utilisation averaged about 20%. The survival of the industrial sector is severely threatened by the fact that the research states that more than half of the remaining businesses are ailing.

Activities that affect cash flow are essential to a business's everyday operations. Any company's liquidity makes it easier to provide working capital, enabling it to find inputs, settle its liabilities to suppliers' staff, and take care of its tax requirements. A company should strive to keep a strong cash flow. Manufacturing companies should have adequate liquidity, but not more than what they need each day (working capital), to keep up with daily business and investment opportunities. However, the present situation is a cash crunch, which prevents some companies from making enough cash sales, and debtors are unwilling to abide by credit policy agreements. The problem negatively impacts production, leading to an inadequate supply of manufactured goods and stockouts in certain extreme circumstances.

Poor cash flow problems in many manufacturing firms listed on the NSE were due to a decline in the profitability of the companies. This may be highlighted by a decrease in the sector's financial performance.

Due to the reality mentioned above in the manufacturing sector, businesses cannot access sufficient cash to meet their day-to-day financial transactional demands. There is a need to comprehend the significance of cash flow activities on the performance of manufacturing firms in Nigeria. This study, therefore, set out to determine how cash flow management practices affected the financial performance of Nigeria's listed manufacturing firms. In light of the above, the following hypotheses are formulated:

Ho: Cash Flow Activities do not positively and significantly affect the return on capital employed (ROCE) manufacturing firms in Nigeria.

Ho: Cash Flow Activities do not positively and significantly affect the Earnings per share (EPS) of manufacturing firms in Nigeria.

Ho: Cash Flow Activities do not positively and significantly affect the Tobin Q (TQ)
of manufacturing firms in Nigeria.

2.   Review of Related Literature

2.1   Concept of Cashflow Management

Cash flows are inflows and outflows of cash and cash equivalents. Cash flow results from business activities related to operations, investments and financing. It displays a company's cash sources and uses over a fiscal year. Amah, Ekwe, and Ihendinihu (2016) defined cash flow activities as activities that generate income, such as buying raw materials, paying for material handling, paying for production, selling, and distribution costs, and paying salaries, wages, and taxes. Additionally, it could entail buying and selling assets and borrowing money to pay for daily operations.

Cash flow management is the process of monitoring, assessing, and optimising the net amount of cash receipts less cash expenses (Ward, 2020). For any organisation, net cash flow is a crucial indicator of financial health. To address issues like illiquidity, cash flow management requires a systematic examination. This entails planning, utilising and controlling cash flow, keeping up with banks, and investing extra money (Steiss & Nwagwu, nd).

According to Nyabwanga, Ojera, Lumumba, Odondo and Otieno (2012), effective cash flow management entails choosing the right amount of cash to hold by balancing the opportunity costs of holding too much cash against the trading costs of holding too little. The three categories into which these cash flow activities fall are operating, investing and financing cash flow activities.

2.1.1   Operating Cash Flows

The amount of cash flows from operating activities is a crucial indicator of how well the entity's operations have produced enough cash flows that can be used to pay off debt, maintain the entity's operational capacity, pay dividends, and make new investments without turning to external sources of funding. When combined with other data, information on the particular elements of historical operating cash flows helps predict future operating cash flows (IAS,7). The guidelines also stipulated that the entity's main revenue-generating activities account for most of the operating operations' cash flows. As a result, they are typically the outcome of the transactions and other occasions that determine profit or loss. Operational cash flow adjusts for receivables, depreciation, and liabilities (Fabozzi & Markowitz 2006). Comparing operating cash flow to more traditional profitability measures like net income, operating cash flow may be considered a more accurate indicator of how much a company has produced.

2.1.2.   Investing Cash Flows

Cash flows arising from investing activities are essential because the cash flows represent the extent to which expenditures have been made for resources intended to generate future income and cash flows. To be classified as investing activities, expenses must result in an asset being recognised in the statement of financial position. Accordingly, investment cash flows should be considered essential components of an organisation's cash flow statement since they may affect its financial future. Investment cash flows after acquisition may vary since they include both the current cash flow of the acquisition investment statement of financial position and the solid assets of the investment that has been purchased.

Keown, Martin and Petty (2014) claim that long-term asset acquisition and disposal create cash flows from investing activities. The sale of long-term assets, like machinery, buildings, etc., is correlated with increased cash inflows. On the other hand, cash outflows result from purchasing long-term assets (Berry, 2011). Generally speaking, investing operations could result in a cash influx or outflow, and future investments will influence a company's prospects of survival and growth (Orhan and Basar, 2015).

2.1.3   Financing Cash Flow

Financing operations, as the name implies, have to do with an organisation's long-term capital or funds, such as cash proceeds from the sale of equity shares, debentures, long-term bank loans, repayment of bank loans, etc. The quantity and makeup of the entity's owner equity (including preference share capital) and other borrowings fluctuate due to financing activities (IAS 7). Disclosing cash flows from financing operations is crucial since doing so helps estimate future cash flow claims from providers of funds and other company funding sources. According to Taillard (2012), financing is acquiring money to pay for a business's initial operations, growth, core functions, or other necessities. Finances may be obtained internally or externally (internal or external). While retained earnings remain the critical internal funding sources, external financing may come from equity, debt, or a combination.

According to Subramanyam and Wild (2014), financial markets should be utilised for external funding. Cash is raised through selling company shares to investors, while debt financing is accomplished through loans and the issuance of bonds. It makes sense that a company's financing activities could result in cash inflows or outflows. "inflows" refers to funds received as debt or equity, such as bank loans and shareholder capital contributions. Acquiring debt and receiving contributions are positive transactions, whereas "outflows" refers to funds paid to shareholders, debenture holders, and debtors who must repay their debts (Nwanyanwu, 2015). In conclusion, activities not classified as operating or investment activities make up cash flow from financing activities.

2.2   Financial Performance of Manufacturing Firms

The evaluation of return on equity and assets based on shareholders' funds has been used to gauge financial success in most organisations. Profitability, as determined by financial ratios, is another name for the company's financial performance. The financial ratio analysis accurately measures the financial

performance of a company. Return on assets, return on equity-based shareholder capital, and net interest income is the measures used to assess a company's financial success. Return on assets, return on equity-based shareholder money, and net interest income are used to evaluate financial success.

2.4 Theoretical Review

2.4.1 Free Cash Flow Theory

According to Jensen's (1986) free cash flow theory, managers do not always act in a way that maximises profits. Instead, managers use the additional cash flow to pursue goals that are less about boosting revenues and more about enhancing the manager's quality of life. According to Jensen's free cash flow hypothesis, managers can escape market control with more internal funds. In this instance, they can choose investments at their discretion without shareholder consent. According to Jensen, Clifford, and Smith (1995), the complexity of monitoring creates the possibility that management will invest domestically produced cash flow in advantageous initiatives from a management standpoint but expensive from a shareholder one. According to this theory, investments reduce the free cash flow available for opportunistic spending and poor investments. According to Donaldson and Preston (1995), managers of companies with free cash flows frequently waste money by making unprofitable investments. Instead of paying dividends to shareholders or repurchasing shares already in the market, managers are more likely to use free cash flows to undertake investments that will increase the company's size. The agency hypothesis has the testable conclusion that businesses with free cash flows are more likely to expand past the point at which shareholder wealth is maximised. Any managerial choice that prevents these unnecessary expenditures will benefit the shareholders of such companies. Share repurchases use surplus cash flows to stop such waste (Jensen & Smith, 1995).

2.5 Empirical Review

The impact of cash flow accounting on the financial performance of publicly listed consumer goods companies in Nigeria from 2015 to 2019 was examined by Ebimobowei, Awuji and Anuogwo in 2021. The study used a correlational and ex-post facto research design. The study included a population of 26 firms and a sample size of 23 firms. Descriptive, correlational, and panel ordinary least squares were utilised to analyse the data. In contrast to investing activities and financial leverage, which showed a negative and significant relationship, the study found a positive and significant relationship between operating cash flow, financing cash flow, and firm size to profit after tax of listed consumer goods manufacturing companies.

Egwu, Orugun and Adelakun (2021) looked into how Nigerian businesses may improve their cash flow management. A survey research design was used, and regression analysis and the descriptive approach were used to analyse the data. The study found that cash flow management affects how well financial obligations are met and that cash flow management strategies affect how healthy businesses function in Abuja. The study concluded that a company's cash flow is essential to success. The relationship between cash flow management and the financial performance of listed Nigerian oil and gas companies was examined by (Nangih, Ofor & Onuorah 2020). Data were taken from the annual reports of five selected public companies from 2013 to 2018 using a judgemental research design. The data gathered were examined using correlation and multiple regression methods. The study's results showed that profitability had a negative and insignificant relationship with operating and investment cash flows. In Northern Uganda, Eton, Uwonda, Mwosi, Ogwel, and Obote (2019) investigated the relationship between cash management and the financial performance of business organisations. Data were gathered using closed-ended questionnaires and a cross-sectional study methodology. According to the study, cash management had an insignificant effect on financial performance.

The relationship between operating cash flow and corporate financial performance of listed conglomerate firms in Nigeria over ten years, from 2005 to 2014, was explored by Liman and Mohammed (2018). The

data were analysed using descriptive statistics, correlation analysis, and regression techniques to identify the variance in financial performance caused by the variation in operating cash flow. A panel data regression method was used to analyse the data. The findings showed a positive and insignificant impact between Cash Flow from Operating Activities and financial performance proxied by ROA. Alslehat and AI-Nimer (2017) investigated the relationship between Jordanian insurance companies' financial success and cash flow management. In Jordan, there are 23 insurance firms which served the population from 2009 to 2013. The study found that the net cash flows from operating operations influence the return on assets.

From 2007 to 2011, Tariverdi, Amanolahi and Faal (2014) investigated the impact of the Tehran Stock Exchange's listed companies' operational performance using the four-part model of cash flow statements. The ex post facto study approach was adopted, and the Pearson correlation was used in data analysis. According to the study, returns on assets and equity for cash flows from investments are positively correlated.

3.   Research Methods

This study adopted the *ex-post facto* research design. The study used secondary data (Panel data) extracted from the annual report and accounts of the selected listed manufacturing firms from 2011-2021. The study population consists of the forty-three (43) firms listed on the Nigeria Stock Exchange as of the year-end of 2022. With the adoption of the non-probability sampling technique, a sample of 16 out of the 43 manufacturing companies was selected. The selection was based on the available annual reports that contain the items needed for the study's analysis. Different statistical tools were used in testing and analysing all the hypotheses stated. Descriptive statistics, correlation analysis and finally, the panel least square was used to properly assess the effect of cash flow indices and the financial performance of the companies.

The Functional model of the study is given as follows:
Financial performance (FP; Dependent Variable) is a function of cash flow activities (CFA).

Cash Flow Activities (CFA; Independent Variable) are measured with indicators and variables given as CFOA; cash flow from operating activities, CFIA; Cash Flow From Investing Activities and CFFA; cash flow from financing activities

Financial performance, on the other hand, is measured using the financial performance indicators; Return on capital employed (ROCE), Earnings per shares (EPS) and Tobin Q (TQ)

Therefore:
$$FP = \beta_0 + a_1CFOA + a_2 CFIA + a_3CFFA + \mu \quad - \qquad - \qquad - \qquad - \qquad - \qquad - \qquad [1]$$

Specifically,
$$ROCE = \beta_0 + a_1CFOA + a_2 CFIA + a_3CFFA + \mu \qquad - \qquad - \qquad - \qquad - \qquad - \qquad - \qquad [2]$$
$$EPS = \beta_0 + a_1CFOA + a_2 CFIA + a_3CFFA + \mu \quad - \qquad - \qquad - \qquad - \qquad - \qquad - \qquad [3]$$
$$TQ = \beta_0 + a_1CFOA + a_2 CFIA + a_3CFFA + \mu \quad - \qquad - \qquad - \qquad - \qquad - \qquad - \qquad [4]$$

4.   Results and discussion

The raw data extracted from the annual report of the sampled manufacturing companies were analysed using different analytical tools, starting from the pre-test to answer the identified problems: descriptive statistics, correlation analysis and the main test.

4.1 Pre-Test

Table 4.1   Descriptive Statistics and Pearson Correlation

Descriptive Statistics						
	ROCE	**EPS**	**TQ**	**CFOA**	**CFIA**	**CFFA**
Mean	0.283861	12.05631	0.591507	15.66523	14.93923	14.86181
Mediam	0.176232	2.540000	0.504326	15.78461	15.05583	15.16316
Maximum	2.894318	351.0000	15.64070	19.32313	18.94316	18.21722
Std. Dev	0.364158	36.18272	1.158522	1.834833	1.787236	2.071267
kurtosis	22.65887	61.17668	164.5829	2.355994	2.657759	3.371486
Observations	176	176	175	176	176	176
Pearson Correlation						
	ROCE	**EPS**	**TQ**	**CFOA**	**CFIA**	**CFFA**
ROCE	1.000000					
EPS	0.235829	1.000000				
TQ	-0.103507	-0.047100	1.000000			
CFOA	0.197081	-0.089928	0.004278	1.000000		
CFIA	0.143826	-0.102598	0.046856	0.775675	1.000000	
CFFA	0.009436	0.036570	0.024582	0.701427	0.714801	1.000000

Table 4.1 shows the outcome of the descriptive statistics and the Pearson correlation. From the result, the listed manufacturing firms at the Nigeria Stock Exchange had maximised the cash flows activities generated from the three channels; operation, financing and investing, as indicated by the mean of 15.66523 for CFOA, 14.93923 for CFIA, 14.86181 for CFFA, 12.05631 for EPS, 0.283861 for ROCE and 0.591507 for TQ respectively. These figures are closer to the variables' maximum mean and standard deviation. All variables show positive values for kurtosis; all values are greater than three. This revealed that the tailedness in all variables has a heavier tail called leptokurtic.

The result of the Pearson correlation showed our variables are not closely related. That is to say, the variables are not highly correlated among themselves.

4.4   Test of Hypotheses

4.4.1 Hypothesis One

Ho: Cash Flow Activities do not positively and significantly affect the return on capital employed (ROCE) of the manufacturing firms in Nigeria.

The fixed and random effects options of panel data were analysed side by side using the Hausmann test. In interpreting the Hausman test result, the following hypotheses are stated
Ho: Random Effect is appropriate
H1: Fixed Effect is appropriate

Decision Rule
If the p-value of the test result presented above is less than 5%, reject the null hypothesis; otherwise, accept the alternate.

Table 4.2: Hausman Test and Panel Least Square for Hypothesis One

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.	
Cross-section random	3.814562	3	0.2822	
Summary of Panel Least Square for Hypothesis One **Dependent Variable: ROCE**				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
CFOA	0.020444	0.021477	0.951920	0.3425
CFIA	0.036967	0.022917	1.613087	0.1086
CFFA	-0.043216	0.016980	-2.545046	0.0118
C	0.053610	0.285070	0.188058	0.8511
R-squared 0.05 F-statistics 2.8 Durrrbin-Watson stat 2.42 Prob (F-statistics) 0.041566				

Source: E-view Extract from Full Result, 2023

From the test summary, the p-value of the Chi-Square (0.2822) is greater than 5%. As a result, the null hypothesis is accepted. In conclusion, the random effect is better than the fixed effect option for hypothesis one. Table 4.2 result indicates that the coefficient values for all variables are 0.020444, 0.036967, and -0.043216, respectively. The p-values are 0.3425, 0.1086, and 0.0118, all at a 5% significant level. The result revealed that the variables CFOA and CFIA used as proxies for cash flow activities management have a positive but insignificant effect on the return on capital employed. By implication, the Cash flow activities management of the selected manufacturing firms did not impact the return on capital employed for the period. However, these cash flow activities may affect the return on capital employed in the long run. The positive nature of the variable shows this. CFFA, on the other hand, has a negative but significant effect on the return on capital employed. This implies CFFA did not predict the return on capital employed by manufacturing firms. The R^2 measures the goodness of fit of the regression line model. For this hypothesis, table 4.2 revealed that the R^2 is 5%. This indicates that the independent variable accounted for just a 5% change in the dependent variable. The 95% unexplained variation suggests that they are other variables other than the explanatory variables that affected the dependent variable. This figure may be significant, but it can not discredit the outcome as, on the whole, the result revealed that cash flow activities management significantly affects the return on capital employed. This is evidenced by the F-statistic of 2.8, Durrrbin-Watson of 2.42 and the corresponding probability value of 0.041566. Together, these figures show a joint significance of the variables. This implies the result is good enough for a meaningful analysis.

4.4.2 Hypothesis Two

Ho: Cash Flow Activities do not positively and significantly affect the Earnings per share (EPS) of manufacturing firms in Nigeria.

Table 4.3: Hausman Test and Panel Least Square for Hypothesis Two

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.	
Cross-section random	3.585267	3	0.3099	
Summary of Panel Least Square for Hypothesis Two **Dependent Variable: EPS**				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
CFOA	-2.579554	2.433864	-1.059859	0.2907
CFIA	-0.791309	2.592389	-0.305243	0.7606
CFFA	3.512482	1.928027	1.821801	0.0702
C	12.08532	30.34492	0.398265	0.6909
R-squared 0.02 F-statistics 1.2 Durrrbin-Watson stat 0.30 Prob (F-statistics) 0.297210				

Source: E-view Extract from Full Result, 2023

From the test summary, the p-value of the Chi-Square (0.3099) is greater than 5%. We accept the null hypothesis and conclude that the random effect is better than the fixed effect option for hypothesis two.

Table 4.3 result indicates that the coefficient values for all variables are -2.579554,-0.791309, and 3.512482, respectively. The p-values are 0.2907, 0.7606, and 0.0702. The result revealed that the variables CFOA and CFIA have a negative and non-significant effect the earnings per share. By implication, the cash flow activities management of the selected manufacturing firms did not impact the earnings per share for the period; -2.579554, 0.2907 and -0.791309, 0.7606. CFFA, on the other hand, is positive but has an insignificant effect on the earnings per share. This implies CFFA can affect the earnings per share in the long run as the coefficient value is positive.

For this hypothesis, the R^2 is 2%. This indicates that the independent variable accounted for just a 2% change in the dependent variable. The 95% unexplained variation suggests that they are other variables other than the explanatory variables that affected the dependent variable. The F-statistic of 2.8, Durrrbin-Watson of 2.42 and the corresponding probability value of 0.297210 further stressed that the outcome of hypothesis two is not statistically significant of the variables.

4.4.3 Hypothesis Three

Ho: Cash Flow Activities do not positively and significantly affect the Tobin Q (TQ) of manufacturing firms in Nigeria.

Table 4.4: Hausman Test and Panel Least Square for Hypothesis Three

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.	
Cross-section random	12.903235	3	0.0049	
Summary of Panel Least Square for Hypothesis Three				
Dependent Variable: TQ				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
CFOA	0.531522	0.074211	7.162276	0.0000
CFIA	0.143226	0.062390	2.295674	0.0230
CFFA	0.057095	0.068015	0.839449	0.4025
C	5.554080	1.014602	5.474144	0.0000
R-squared 0.74				
F-statistics 24.9				
Durrrbin-Watson stat 1.72, approximately 2				
Prob (F-statistics) 0.000000				

Source: E-view Extract from Full Result, 2023

From the test summary in table 4.4, the p-value of the Chi-Square (0.0049) is less than 5%. As a result, the alternate hypothesis is accepted. In conclusion, the fixed effect is better than the random effect option for hypothesis three.

Table 4.4 result indicates that the coefficient values for all variables are 0.531522, 0.143226, and 0.057095, respectively. The p-values are 0.0000, 0.0230, and 0.4025. CFOA and CFIA positively and significantly affected TQ. By implication, the cash flow activities management using CFOA and CFIA were statistically significant in predicting the TQ of manufacturing firms. On the contrary, CFFA has a positive but non-significant effect on TQ. By implication, the Cash flow activities management of the selected manufacturing firms did not impact TQ for the period.

The R^2 of 0.74 indicates that the independent variable accounted for a 74% change in the dependent variable. The F-statistic of 1.2, Durrrbin-Watson of 1.72 and the corresponding probability value of

0.000000 further support the outcome of the hypothesis. This result, therefore, is good enough for a meaningful analysis.

5   Conclusion and Policy Recommmission

5.1 Conclusion

The study evaluates the effect of cash flow activities management on the financial performance of the manufacturing firms listed on the Nigeria Stock Exchange from 2011-2020. The study concluded that the CFOA and CFIA have a positive but no significant effect, and CFFA has a negative but significant impact on the return on capital employed. The Cash flow activities management of the selected manufacturing firms did not impact the return on capital employed for the period. However, these cash flow activities may affect the return on capital employed in the long run. The findings substantiate the findings of Ofor and Onuorah (2020), whose results showed that performance had a negative and insignificant relationship with operating and investment cash flows.

Further, the variables CFOA and CFIA have a negative and non-significant effect, while CFFA has a positive but insignificant impact on the earnings per share of the selected manufacturing firms in Nigeria. By implication, the cash flow activities management did not impact the earnings per share for the period. The study concluded that a change in cash flow activities causes a decrease in the financial performance (earnings per share) of manufacturing firms listed on the Nigeria Stock Exchange. The finding agreed with the results of Liman and Mohammed (2018). Their findings showed a positive and insignificant impact between Cash Flow from Operating Activities (CFO) and financial performance.

CFOA and CFIA positively and significantly affected TQ. The cash flow activities management using CFOA and CFIA were statistically significant in predicting the TQ of manufacturing firms. CFFA has a positive but non-significant effect on TQ. The study indicated that a change in cash flow management activities causes an increase in manufacturing firms' financial performance (TQ). This finding aligns with Ebimobowei, Awuji and Anuogwo's (2021) results. Their study found a positive and significant relationship between cash flow activities and the financial performance of listed consumer goods manufacturing companies in Nigeria.

5.2   Policy Recommendations

Based on the findings, discussions, and conclusions, recommendations were made. Managers of manufacturing firms in Nigeria should optimally engage in all activities that will generate more inflow from cash flow activities. This will lead to an increase in the financial performance of manufacturing firms. This is because the value of the companies will increase with an increase in the level of cash flow activities. This could be achieved through aggressive marketing and promotion and increased sales outlets. Management of the firms should thoroughly evaluate investment opportunities to ensure the optimal return, which will lead to improved performance. Firms should use cash flow ratios for investment appraisal and seek a cheaper funding source to reduce the burden of servicing debt and achieve an optimal result.

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