

# Effect of Cash Flow on Corporate Financial Performance of Food and Beverages Companies in Nigeria

Anastesia Nwakaego Duru, Innocent Ikechukwu Okpe and Victor Okolo

Department of Accountancy, Enugu State University of Science and Technology,  
Enugu State, Nigeria.

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## ABSTRACT

The aim of this research work is to examine the effect of cash flow on corporate financial performance of food and beverages companies in Nigeria. The objectives of this study include; to examine the effect of operating cash flow on profit after tax of food and beverages companies in Nigeria, to determine the effect of investing cash flow on profit after tax of food and beverages companies in Nigerian and to ascertain the effect of financing cash flow on profit after tax of food and beverages companies in Nigeria. The study used secondary sources of data which was the annual reports and accounts of the selected foods and beverages companies in Nigeria. The research design used for this study was ex-post-facto design. The analysis of the study was done with multiple regressions for testing of hypotheses. The study therefore, found out that operating cash flow positively and significantly affect profit after tax of food and beverages companies in Nigeria, investing cash flow positively, but insignificantly affect profit after tax of food and beverages companies in Nigeria, and financing cash flow positively and insignificantly affect profit after tax of food and beverages companies in Nigeria. The study recommends that food and beverages companies in Nigeria should devise a means of improving their operating cash flows as it has a positive and significant effect on financial performance, investing cash flow also has a positive effect on financial performance; hence food and beverages companies in Nigeria should invest very wisely so as to increase their profitability as it concerns financing cash flow, that the management should strategically plan on how to increase the cash flow from financing activities because of the positivity of its effect on financial performance.

**Key Words:** Cash Flow, Financial Performance, Multiple Regressions.

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## INTRODUCTION

Cash flow is a concept in accounting and finance used to describe the inflow and outflow of cash within an organization. Inflows represent cash receipts while outflows relate to cash expenditures. A high inflow of cash when compared with the

outflow provides a company with sufficient cash balance for investment purposes. On the other hand, a low inflow leading to excess of outflow over the inflow reduces organizational operations. In the view of Libbys, [1], cash flow permits a company to expand its operations, replace needed assets, take advantage of market opportunities and pay dividend to its owners. They went further to posit that both managers and analysts need to understand the various sources and uses of cash that are associated with business activity.

[2], submitted that a modest way of approaching the performance of a business is that such a business should be capable of generating revenue, along with profits. In the event that a business realizes real profits, chances are that such a business shall also experience an operating cash flow. They went ahead to point out that if the profit is one of creative accounting, then such a business will be lacking in terms of operating cash flow. It is important to note that the comparison here has a lot to do with the operating cash flow of a business since this form of cash flow bears reconciliation with a company's profit. This is the linkage point between the cash flow and the profit or loss that a business makes. Other than the preparation of statement of cash flows that are fraudulent in nature, cash flow may only be manipulated through an arrangement of the time to make payments and receipts. Nevertheless, this form of manipulation proves difficult in terms of continuance in a given specific direction over a period of time.

Cash flow of a company is a crucial factor that enhances its operations. According to [3], due to the relevance of cash flows in the company's operations and performance, corporate organizations need to develop a suitable cash flow mix and apply it in order to maximize shareholders values. [2] , sees cash flows of an organization as those pool of funds that the company commits to its fixed assets, inventories, account receivables and marketable securities" that lead to corporate profit. The ability of the company to effectively choose adequate source of funds to

fiancé its operations will differentiate strong cash flow governance and poorly managed cash flows [3]. For the cash flows to be well structured and effectively utilized, a business firm must be able to devise various ways for selecting the best components of its cash flows which would be used in the company's operation to raise its productivity or achieve performance. This process should be based on the criteria well drawn up by the finance manager after making a careful financial planning and control for the company [2].

Reinforcing this position, Ross, [3], noted that, cash flow information assists its financial statement users in obtaining the relevant information concerning the uses and sources of virtually the entire financial resources over stated period of time. [4], posits that Cash flow is an index of the money that is actually received by or paid out by a firm for certain time period. This index is not inclusive of non-cash accounting charges such as depreciation. Cash represents the firm's vascular system, if it dwindles, the business will not survive. The fact that a firm is profitable does not mean that it is also solvent. The profit is not cash. The solvency, flexibility and the financial performance of the firm are set on the firm's ability to generate positive cash flows from the operating, investing and financing activities [5]. Cash flows represent all inputs and outputs liquidities and cash equivalents. Liquidities represent cash on hand and demand deposits. Cash equivalents are short-term investments with a liquidity degree that can be easily converted into cash with an insignificant risk of value change. According to [6], cash flows are more direct measure of liquidity and a contributing factor in corporate performance. Cash flow information assists its financial statement users in obtaining the relevant information concerning the use of resources of virtually the entire financial resources over a given time period [3]. Specifically, the kind of information that the cash flow statement contains include details of operating, investing, and financial activities [2].

[3] submitted that a modest way of approaching the performance of a business is that such a business should be capable of generating revenue, along with profits. In the event that a business realizes real profits, chances are that such a business shall also experience an operating cash flow. They went ahead to point out that if the profit is one of creative accounting, then such a business will be lacking in terms of operating cash flow. It is important to note that the comparison here has a lot to do with the operating cash flow of a business since this form of cash flow bears reconciliation with a company's profit. This is the linkage point between the cash flow and the profit or loss that a business makes. Other than the preparation of statement of cash flows that are fraudulent in nature, cash flow may only be manipulated through an arrangement of the time to make payments and receipts. Nevertheless, this form of manipulation proves difficult in terms of continuance in a given specific direction over a period of time.

#### **STATEMENT OF THE PROBLEM**

Managers have a tendency to hold large proportion of firm assets in the form of cash and cash equivalents in order to reinvest on other physical assets, payments to stockholders and to keep cash inside the firm. Lack of proper management of this cash can lead to severe loss or bankruptcy. Another problem related to cash flows was discovered when it was apparent that managers did not invest the excess cash flows to the advantage of shareholders rather they hold it and went for negative NPV projects which worked for their benefits, preferring bonuses and internal projects. Excess cash flow is 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 [7]. Conflicts of interest between shareholders and managers over payout policies are especially severe when the organization generates substantial excess cash flow. The problem is how to motivate managers to disgorge the cash rather than investing it at below the cost of capital or wasting it on organization inefficiencies [6]. The

managers at times do not know the effect each component of cash flow statement has on financial performance of their organizations. Hence they misuse the funds in a non-profitable projects or investments.

This problem can be traced to all sector of the economy with more emphasis to manufacturing sector. The manufacturing sector which is expected to contribute an average of 15percent added contribution to the Gross Domestic Product (GDP), thus serving as the major source of growth registered fluctuations in performance [4].These changes in performance have limited the access the manufacturing sector have to funds which has limited the capability of companies to make investments in modern machines, information technology and human resources development, which are very crucial to reducing production costs, raising productivity, improve competitiveness, and expand operations [3].

### **OBJECTIVES OF THE STUDY**

The main objective of this study is to examine the effect of cash flow on financial performance of food and beverages companies in Nigeria. In order to achieve the above objective, the study strives to achieve the following specific objectives:\

1. To examine the effect of operating cash flow on profit after tax of food and beverages companies in Nigeria.
2. To determine the effect of investing cash flow on profit after tax of food and beverages companies in Nigeria.
3. To ascertain the effect of financing cash flow on profit after tax of food and beverages companies in Nigeria.

### **Statement of Research Questions**

Drawing from the above stated problems as well as the objectives of this study, the following research questions shall guide discussions in this work:

1. To what extent does operating cash flow affects profit after tax of food and beverages companies in Nigeria.
2. To what extent does investing cash flow affects profit after tax of food and beverages companies in Nigeria.
3. To what extent does financing cash flow affects profit after tax of food and beverages companies in Nigeria.

### **Statement of Research Hypotheses**

In order to achieve the stated objectives and answer the research questions, and also in line with effects and variables in the research questions, the following hypotheses have been formulated for this research:

1. Operating cash flow does not significantly affect profit after tax of food and beverages companies in Nigeria.
2. Investing cash flow does not significantly affect profit after tax of food and beverages companies in Nigeria.
3. Financing cash flow does not significantly affect profit after tax of food and beverages companies in Nigeria.

## **METHODOLOGY**

### **Research Design**

The research therefore adopted the ex-post facto (after the facts) research design in order to establish the effect these cash flow indices have on organizational financial performance of food and beverages companies in Nigeria. The work is treated as ex-post facto research since it relied on historical data.

### **Area of Study**

The research is conducted in Nigeria, in the food and beverages sub sector of the economy with forty one private and publicly quoted firms as at 31<sup>st</sup> December, 2016.

### **Sources of Data**

This work adopted the approaches of [8]; [6] and [2] and [4] in the studies. The research therefore, made use of secondary data. Time series data [1] is extracted from the annual reports and accounts of the selected listed manufacturing firms.

### **Population of the Study**

The population for the study centered on the performance indices of the forty one (41) Foods and Beverages companies in Nigeria from the Nigeria Stock Exchange.

### **Sample Size**

Due to the inability of the most of the firms to provide data for a period of up to five (5) years, the researcher was constrained into selecting four (4) foods and beverages companies under manufacturing sector whose inventories have consistently been very vibrant and active by volume of their inventory turnover in the Exchange, and were able to provide data for up to 5 years. The researcher judgmentally but logically selected the following firms: Nutri Food and Beverages Nigeria Limited, Nasco Food Nigeria Limited, Unilever Nigeria Plc and Flour Mills Nigeria Plc.

### **Analytical Technique**

The analytical technique used was Multiple Regression; it involves the graphical representation of the movements in dependent and independent variables; descriptive statistics in terms of measures of central tendency, distribution and dispersion; estimated coefficients to evaluate the predictable power of each independent variable on the dependent; coefficient of multiple determination ( $R^2$ ) and adjusted coefficient of multiple determination.

### **Model Specification**

The model is specified in line with previous related literature in the area of the study. [5] as cited in [3], states that model specification involves the determination

of the dependent and explanatory variables, which will be included in the model, the theoretical expectations about the sign and the size of the parameters of the function. The models are specified as follows:

$$PAT_t = \beta_0 + \beta_1 OCF_t + \varepsilon_t - - - - [Equation (1)]$$

$$PAT_t = \beta_0 + \beta_1 ICF_t + \varepsilon_t - - - - [Equation (2)]$$

$$PAT_t = \beta_0 + \beta_1 OCF_t + \varepsilon_t - - - - [Equation (1)]$$

The composite multiple regression (prediction) model is statistically formulated as;

$$PAT_{ti} = \beta_0 + \beta_1 OCF_t + \beta_2 ICF_t + \beta_3 FCF_t + \varepsilon_t - - - - [Equation (5)]$$

Where,

|                       |   |
|-----------------------|---|
| PAT                   | Profit after Tax  |
| OCF                   | Operating Cash Flow                                     |
| ICF                   | Investing Cash Flow                                     |
| FCF                   | Financing Cash Flow                                     |
| $\varepsilon$         | Stochastic disturbance (Error) Term                     |
| $\beta_0 =$           | Coefficient (constant) to be estimated                  |
| $\beta_1 - \beta_6 =$ | Parameters of the independent variables to be estimated |
| t                     | = Current period  |

#### Description of Variables in the Model

**Dependent Variables:** the dependent variable of the study is profit after tax.

**Profit after Tax:** is the total amount that a business earns after all tax deductions have taken place. It is used as the barometer to determine how much it can utilize from its day to day activities. Profit after all its expenses have been deducted and can be fully utilized by the company to conduct its business. Shares holders are also paid dividends from this amount.

**Independent Variables:** the independent variables of the study is operating cash flow, investing cash flow, financing cash flow.

**Operating Cash Flow:** is a measure of the amount of cash generated by a company's normal business operations. Operating cash flow indicates whether a company is



able to generate sufficient positive cash flow to maintain and grow its operations, or it may require external financial capital for capital expansion. Generally accepted accounting principles (GAAP) require public companies to calculate operating cash flow using an indirect method by adjusting Net income to cash basis using changes in non-cash accounts such as depreciation, accounts receivable and changes in inventory.

**Investing Cash Flow:** Cash Flow from investing activities is an item on the cash flow statement that reports the aggregate change in a company's cash position resulting from any gains or losses from investing in the financial market and operating subsidiaries and changes resulting from amount spent on investments in capital assets such as plants and equipments.

**Financing Cash Flow:** Cash flow from financing activities is a line item in the statement of cash flow. This statement is one of the documents comprising a company's financial statement. The line item contains the total sum of changes that a company experience during a designated reporting period that were caused by transactions with owners or lenders to either provide long term funds to the company or to return those funds to the owners or lenders.

**Table 1: Model Variables Description**

| Short Form | Details             | Source of Data             |
|------------|---------------------|----------------------------|
| PAT        | Profit After Tax    | Annual Report and Accounts |
| OCF        | Operating Cash Flow | Annual Report and Accounts |
| ICF        | Investing Cash Flow | Annual Report and Accounts |
| FCF        | Financing Cash Flow | Annual Report and Accounts |

**Source: Author's Arrangement**

**Table 2: Raw Data for Nutri Food and Beverage Nigeria Limited**

| YEARS | PAT ₦      | OPCF ₦     | INVCF ₦    | FCF ₦      |
|-------|------------|------------|------------|------------|
| 2012  | 17,927,934 | 19,530,773 | 9,887,540  | 14,267,829 |
| 2013  | 14,671,195 | 21,224,240 | 12,143,523 | 17,318,069 |
| 2014  | 11,863,726 | 24,298,137 | 14,081,901 | 10,617,820 |
| 2015  | 9,573,480  | 19,157,202 | 13,683,695 | 3,304,804  |
| 2016  | 7,794,899  | 32,538,985 | 8,454,576  | 21,361,905 |

Source: Company's Annual Reports and Accounts

**Table 3: Raw Data for Nasco Food Nigeria Limited**

| YEARS | PAT ₦     | OPCF ₦    | INVCF ₦   | FCF ₦     |
|-------|-----------|-----------|-----------|-----------|
| 2012  | 5,217,530 | 4,206,63  | 2,085,618 | 2,984,934 |
| 2013  | 2,410,498 | 3,459,722 | 1,181,360 | 3,566,720 |
| 2014  | 5,321,187 | 9,738,717 | 1,400,485 | 1,989,316 |
| 2015  | 5,082,747 | 7,451,110 | 2,699,576 | 9,145,712 |
| 2016  | 4,570,878 | 4,298,160 | 2,540,613 | 3,906,624 |

Source: Company's Annual Reports and Accounts

**Table 4: Raw Data for Flour Mills Nigeria Plc**

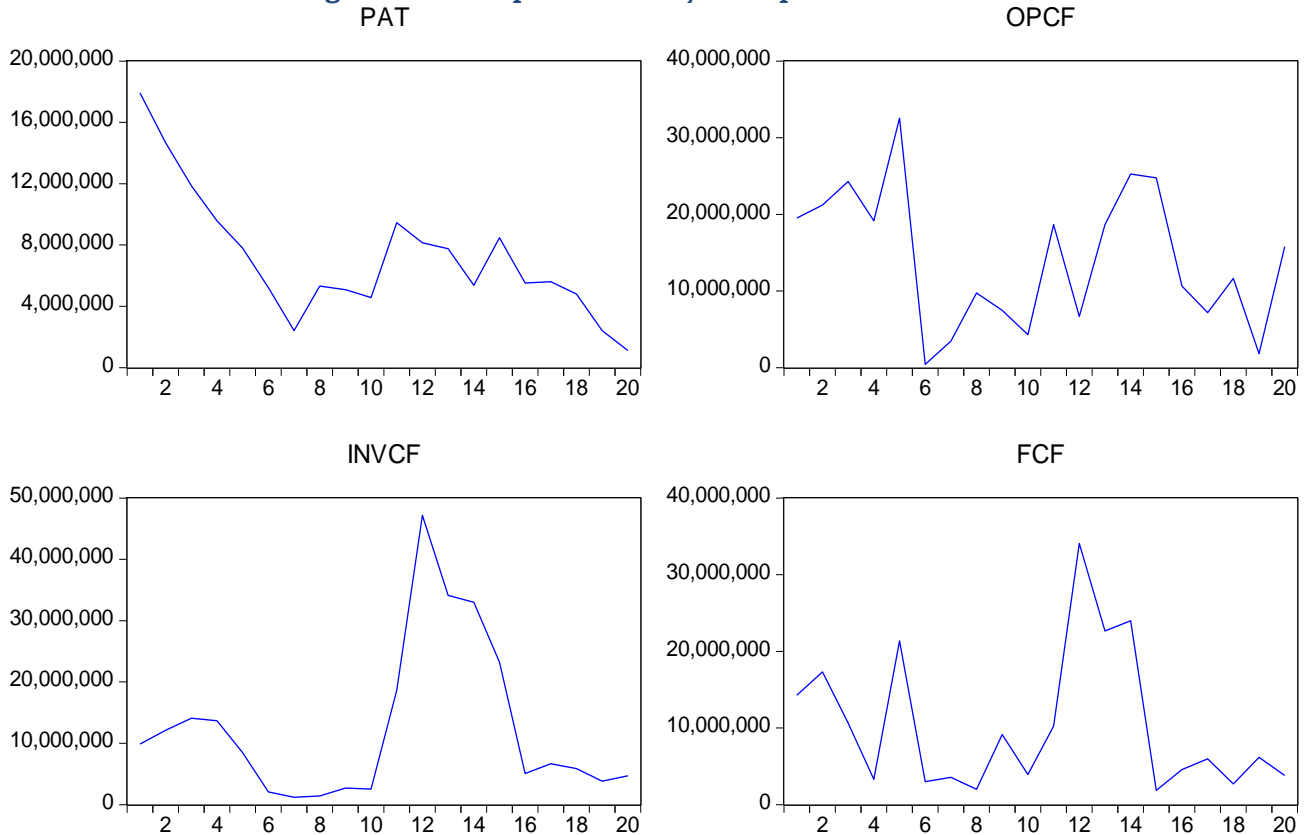
| YEARS | PAT ₦     | OPCF ₦     | INVCF ₦    | FCF ₦      |
|-------|-----------|------------|------------|------------|
| 2012  | 9,450,204 | 18,664,095 | 18,641,152 | 10,222,411 |
| 2013  | 8,146,715 | 6,671,123  | 47,163,287 | 34,071,403 |
| 2014  | 7,761,883 | 18,661,551 | 34,134,822 | 22,665,823 |
| 2015  | 5,367,815 | 25,268,636 | 32,999,469 | 23,982,673 |
| 2016  | 8,474,342 | 24,753,135 | 23,244,225 | 1,846,783  |

Source: Company's Annual Reports and Accounts

**Table 5: Raw Data For Unilever Nigeria Plc**

| YEARS | PAT ₦     | OPCF ₦     | INVCF ₦   | FCF ₦     |
|-------|-----------|------------|-----------|-----------|
| 2012  | 5,515,213 | 10,622,492 | 5,063,362 | 4,563,664 |
| 2013  | 5,597,613 | 7,164,096  | 6,648,227 | 5,959,322 |
| 2014  | 4,806,907 | 11,652,482 | 5,858,527 | 2,679,673 |
| 2015  | 2,412,343 | 1,824,795  | 3,834,183 | 6,172,701 |
| 2016  | 1,102,366 | 15,773,000 | 4,684,542 | 3,787,354 |

Source: Company's Annual Reports and Accounts

**Fig. 1: Line Graph – Industry Group Data**

Source: Eviews 9.0 Software

Figure 1 indicates that operational cash flow and profit after tax have a pattern of movement that is similar to each other between 2012 and 2016. The difference is within the early stages where profit after tax was higher the operational cash flow. The figure also depicts that investing cash flow has similar movement pattern with financing cash flow. There exists a little disparity in their movement pattern within the middle of the graph. Such is the case of the data variable of cash flows and profit after tax in the manufacturing industry of Nigeria.

The above table shows that the entire data variables have skewness value that is above one except operational cash flow which has a less than one skewness coefficient. This is an indication that the entire data variables selected for the study are normally distributed except the data for operational cash flow that its distribution is not normal. The kurtosis coefficient confirms that the entire data

series are normally distributed except operational cash flow. The P-value for all the variables is insignificant for the Jarque-Bera statistics except the value for investing cash flow. This confirms a fairly normal distribution for all the variables: profit after tax, operational cash flow, financing cash flow, with an exception of investing cash flows.

**Table 6: Descriptive Statistics - Industry Data Series**

|                     | PAT      | OPCF     | INVCF    | FCF      |
|---------------------|----------|----------|----------|----------|
| <b>Mean</b>         | 7153474. | 14158656 | 12521534 | 10220777 |
| <b>Median</b>       | 5556413. | 13712741 | 7551402. | 6066012. |
| <b>Maximum</b>      | 17927934 | 32538985 | 47163287 | 34071403 |
| <b>Minimum</b>      | 1102366. | 420663.0 | 1181360. | 1846783. |
| <b>Std. Dev.</b>    | 4122392. | 9073157. | 12763110 | 9154609. |
| <b>Skewness</b>     | 1.009048 | 0.200224 | 1.394076 | 1.160326 |
| <b>Kurtosis</b>     | 3.783582 | 2.017373 | 4.024908 | 3.362785 |
| <b>Jarque-Bera</b>  | 3.905596 | 0.938262 | 7.353525 | 4.597529 |
| <b>Probability</b>  | 0.141877 | 0.625546 | 0.025305 | 0.100383 |
| <b>Sum</b>          | 1.43E+08 | 2.83E+08 | 2.50E+08 | 2.04E+08 |
| <b>Sum Sq. Dev.</b> | 3.23E+14 | 1.56E+15 | 3.10E+15 | 1.59E+15 |
| <b>Observations</b> | 20       | 20       | 20       | 20       |

**Source: Eviews 9.0 Software**

The above table depicts the descriptive statistics of the variables used in the study.

Normality test ascertained with the aid of skewness and kurtosis is the core concept of descriptive statistics. Therefore, from the ongoing, all the variables such as profit after tax, operating cash flow, investing cash flow and financing cash flow are positively skewed while the kurtosis of profit after tax, investing cash flow and

financing cash flow are above normal kurtosis while the operating cash flow is below normal kurtosis.

**Table 7: Correlation Analysis - Industry Data Series**

|       | PAT      | OPCF     | INVCF    | FCF      |
|-------|----------|----------|----------|----------|
| PAT   | 1.000000 | 0.582617 | 0.281716 | 0.356702 |
| OPCF  | 0.582617 | 1.000000 | 0.360634 | 0.362742 |
| INVCF | 0.281716 | 0.360634 | 1.000000 | 0.783931 |
| FCF   | 0.356702 | 0.362742 | 0.783931 | 1.000000 |

**Source: Eviews 9.0 Software**

The above table indicates that a weak, positive relationship exists between profit after tax, investing cash flow and financing cash flows. Profit after tax and operational cash flow have a positive and significant association but in a small proportion. The strength of the relationship between operational cash flow and profit after tax is 58% and this is the strongest association amongst the variables. This implies that operational cash flow is stronger in association with profit after tax than the other variables under study. Such is the case in food and beverages companies in Nigeria.

#### **Interpretation of Durbin Watson- Statistic**

The Durbin-Watson statistic is 0.895442 which is not up to 2. In this case, the Durbin Watson statistic is closer to 0 than 2 which indicate the presence of autocorrelation in the series. The result indicates the presence of positive serial correlation in the time series data extracted from the annual report and accounts of selected manufacturing firms in Nigeria.

### Coefficient of Determination ( $R^2$ )

The Adjusted R-squared is 0.189407. The adjusted  $R^2$  reveals that only about 19% of the variations in PAT could be explained by OPCF, INVCF and FCF while about 71% could be explained by other factors capable of influencing PAT in Nigeria manufacturing industry; such as government influence through price regulation, as well as the error term and the unexplained variables.

**Table 8: Regression Analysis - Industry Data Series**

| Dependent Variable: PAT    |             |                       |             |          |
|----------------------------|-------------|-----------------------|-------------|----------|
| Method: Least Squares      |             |                       |             |          |
| Date: 08/01/17 Time: 18:58 |             |                       |             |          |
| Sample: 1 20               |             |                       |             |          |
| Included observations: 20  |             |                       |             |          |
| Variable                   | Coefficient | Std. Error            | t-Statistic | Prob.    |
| OPCF                       | 0.214476    | 0.101592              | 2.111163    | 0.0508   |
| INVCF                      | -0.028421   | 0.108402              | -0.262179   | 0.7965   |
| FCF                        | 0.114580    | 0.151264              | 0.757484    | 0.4598   |
| C                          | 3301549.    | 1645372.              | 2.006567    | 0.0620   |
| R-squared                  | 0.317396    | Mean dependent var    |             | 7153474. |
| Adjusted R-squared         | 0.189407    | S.D. dependent var    |             | 4122392. |
| S.E. of regression         | 3711510.    | Akaike info criterion |             | 33.26863 |
| Sum squared resid          | 2.20E+14    | Schwarz criterion     |             | 33.46778 |
| Log likelihood             | -328.6863   | Hannan-Quinn criter.  |             | 33.30751 |
| F-statistic                | 2.479881    | Durbin-Watson stat    |             | 0.895442 |
| Prob(F-statistic)          | 0.098345    |                       |             |          |

**Source: Eviews 9.0 Software**

### Interpretation of Regression Coefficient Result

The above table, indicates that a one naira change in OPCF and FCF will increase PAT by 0.214476 and 0.114580. Meanwhile a naira change in INVCF will result in a decrease of 0.028421 in PAT. In summary, PAT is influenced positively by OPCF and FCF while it is affected negatively by INVCF in varied proportions. This is the situation in Nigeria manufacturing industry.

### Hypothesis One

**Ho:** Operating cash flow does not significantly affect profit after tax of food and beverages companies in Nigeria.

**H<sub>1</sub>:** Operating cash flow significantly affects profit after tax of food and beverages companies in Nigeria.

**Table 9:**

| Variable           | Coefficient | Std. Error            | t-Statistic | Prob.    |
|--------------------|-------------|-----------------------|-------------|----------|
| OPCF               | 0.241995    | 0.090638              | 2.669918    | 0.0156   |
| C                  | 3727154.    | 1513059.              | 2.463324    | 0.0241   |
| R-squared          | 0.283681    | Mean dependent var    |             | 7153474. |
| Adjusted R-squared | 0.243885    | S.D. dependent var    |             | 4122392. |
| S.E. of regression | 3584620.    | Akaike info criterion |             | 33.11684 |
| Sum squared resid  | 2.31E+14    | Schwarz criterion     |             | 33.21642 |
| Log likelihood     | -329.1684   | Hannan-Quinn criter.  |             | 33.13628 |
| F-statistic        | 7.128464    | Durbin-Watson stat    |             | 0.701270 |
| Prob(F-statistic)  | 0.015617    |                       |             |          |

**Source:** E-views 9.0 Software

**Decision Rule:** Reject  $H_0$  if P-Value is less than a-value of 0.05.

**Decision:** The above table reveals a P-Value of 0.0156 which is less than a-value of 0.05;  $H_0$  is therefore rejected in respect to profit after tax in the industry. This implies that operational cash flow significantly affect profit after tax of firms in Nigeria manufacturing industry.



### Hypotheses Two

**H<sub>0</sub>:** Investing cash flow does not significantly affect profit after tax of food and beverages companies in Nigeria.

**H<sub>1</sub>:** Investing cash flow significantly affects profit after tax of food and beverages companies in Nigeria.

Table 10:

| Variable           | Coefficient | Std. Error            | t-Statistic | Prob.    |
|--------------------|-------------|-----------------------|-------------|----------|
| INVCF              | 0.090992    | 0.073047              | 1.245672    | 0.2289   |
| C                  | 6014112.    | 1289312.              | 4.664589    | 0.0002   |
| R-squared          | 0.079364    | Mean dependent var    |             | 7153474. |
| Adjusted R-squared | 0.028217    | S.D. dependent var    |             | 4122392. |
| S.E. of regression | 4063815.    | Akaike info criterion |             | 33.36778 |
| Sum squared resid  | 2.97E+14    | Schwarz criterion     |             | 33.46736 |
| Log likelihood     | -331.6778   | Hannan-Quinn criter.  |             | 33.38722 |
| F-statistic        | 1.551698    | Durbin-Watson stat    |             | 0.355063 |
| Prob(F-statistic)  | 0.228856    |                       |             |          |

Source: Eviews 9.0 Software

**Decision Rule:** Reject H<sub>0</sub> if P-Value is less than a-value of 0.05.

**Decision:** It reveals a P-Value of 0.2289 which is higher than a-value of 0.05; H<sub>0</sub> is therefore accepted in respect to profit after tax in the industry. This implies that investing cash flow does not significantly affect profit after tax of firms in Nigeria manufacturing industry.

### Hypotheses Three

**H<sub>0</sub>:** Financing cash flow does not significantly affect profit after tax of food and beverages companies in Nigeria.

**H<sub>1</sub>:** Financing cash flow significantly affects profit after tax of food and beverages companies in Nigeria.

Table 11:

| Variable           | Coefficient | Std. Error            | t-Statistic | Prob.    |
|--------------------|-------------|-----------------------|-------------|----------|
| FCF                | 0.160626    | 0.099157              | 1.619918    | 0.1226   |
| C                  | 5511755.    | 1345321.              | 4.096982    | 0.0007   |
| R-squared          | 0.127236    | Mean dependent var    |             | 7153474. |
| Adjusted R-squared | 0.078749    | S.D. dependent var    |             | 4122392. |
| S.E. of regression | 3956747.    | Akaike info criterion |             | 33.31438 |
| Sum squared resid  | 2.82E+14    | Schwarz criterion     |             | 33.41396 |
| Log likelihood     | -331.1438   | Hannan-Quinn criter.  |             | 33.33382 |
| F-statistic        | 2.624135    | Durbin-Watson stat    |             | 0.626500 |
| Prob(F-statistic)  | 0.122637    |                       |             |          |

**Source: Eviews 9.0 Software**

**Decision Rule:** Reject  $H_0$  if P-Value is less than a-value of 0.05.

**Decision:** It reveals a P-Value of 0.1226 which is higher than a-value of 0.05;  $H_0$  is therefore accepted in respect to profit after tax in the industry. This implies that investing cash flow does not significantly affect profit after tax of firms in Nigeria manufacturing industry.

## DISCUSSION

**Hypotheses one:** This hypothesis states that operational cash flow significantly affect profit after tax of food and beverages companies in Nigeria. From the result of the regression analysis, it reveals that operational cash flow affects profit after tax positively and significantly in the tune of 0.0156. It also reveals that about 24% of changes in profit after tax can be explained by operational cash flow as shown by 0.243885 adjusted R-squared figure. This implies that operational cash flow can be used to predict profit after tax in the industry.

**Hypotheses two:** This hypothesis states that investing cash flow does not significantly affect profit after tax of food and beverages companies in Nigeria.

The regression analysis result reveals that investing cash flow is influenced profit after tax positively in an insignificant amount of 0.2289. The table also depicts that about 3% of changes in profit after tax could be explained by investing cash flow. The remaining 97% will be explained by other factors not explained in the study.

**Hypotheses three:** This hypothesis states that financing cash flow does not significantly affect profit after tax of food and beverages companies in Nigeria. Financing cash flow affects profit after tax positively and insignificantly in the tune of 0.1226 as can be seen. The adjusted R-squared revealed that only about 8% of changes in return on asset can be explained by financing cash flow in the industry.

Operating cash flow positively and significantly affect profit after tax of food and beverages companies in Nigeria. it reveals that operational cash flow affects profit after tax positively and significantly in the tune of 0.0156. It also reveals that about 24% of changes in profit after tax can be explained by operational cash flow as shown by 0.243885 adjusted R-squared figure. This implies that operational cash flow can be used to predict profit after tax in the industry.

Investing cash flow positively but insignificantly affects profit after tax of food and beverages companies in Nigeria. It also reveals that investing cash flow influenced profit after tax positively in an insignificant amount of 0.2289. It also depicts that about 3% of changes in profit after tax could be explained by investing cash flow. The remaining 97% will be explained by other factors not explained in the study.

Financing cash flow positively and insignificantly affects profit after tax of firms in Nigeria Food and Beverages manufacturing industry. Financing cash flow affects profit after tax positively and insignificantly in the tune of 0.1226 as can be seen.

The adjusted R-squared revealed that only about 8% of changes in return on asset can be explained by financing cash flow in the industry.

### CONCLUSION

The main objective of every firm is to create wealth for its shareholders through dividend payout. Dividend is an end product of profitability. In other words, the primary objective of a firm is to increase its performance financially. Managements of firms are interested only in positive performance figures which will enable the company achieve its primary objective of wealth creation for its shareholders. Financial performance is affected by internal and external factors such as company's policies, government policy and price regulations. The internal policy includes also cash flows management because of its importance to financial performance of firms. Hence this study evaluated empirically, the effect of cash flow on financial performance, using profit after tax as a performance indicator, and the three cash flows; operational, investing and financing cash flows as the independent variables. After conducting multiple regression as the underlying analytical tool for test of Hypotheses, it was revealed that operational cash flow positively and significantly affect profit after tax, meanwhile investing cash flow has positive but insignificantly effects profit after tax of food and beverages companies in Nigeria. Furthermore, the analysis revealed that financing cash flow positively and insignificantly affects profit after tax of food and beverages companies in Nigeria. The adjusted R-squared suggested that only but 19% of changes in profit after tax can be explained by these cash flows.

### RECOMMENDATIONS

Food and beverages companies in Nigeria should devise a means of improving their operating cash flows as it has a positive and significant effect on financial performance. They should look for operations that will generate more cash inflows.

This is because any negative changes in this operational cash flow will have great effect on the company's performance.

Investing cash flow also has a positive effect on financial performance; hence food and beverages companies in Nigeria should invest very wisely so as to increase their profitability.

As it concerns financing cash flow, the study recommends that the management should strategically plan on how to increase the cash flow from financing activities because of the positivity of its effect on financial performance.

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