



## EFFECT OF CASHFLOW MANAGEMENT ON FINANCIAL PERFORMANCE: EVIDENCE FROM THE PHARMACEUTICAL INDUSTRY IN NIGERIA

Chibuiké Camillus Ugo<sup>1</sup> and Celestine Anayo Egbuhuzor<sup>2</sup>

<sup>1</sup>University of Port Harcourt, Rivers State, Nigeria. Email: [Camillusugo123@gmail.com](mailto:Camillusugo123@gmail.com)

<sup>2</sup>University of Port Harcourt, Rivers State, Nigeria. Email: [egbuhuzorcelestine@yahoo.com](mailto:egbuhuzorcelestine@yahoo.com)

### Cite this article:

Chibuiké C.U., Celestine A.E. (2022), Effect of Cashflow Management on Financial Performance: Evidence from the Pharmaceutical Industry in Nigeria. African Journal of Accounting and Financial Research 5(1), 1-13. DOI: 10.52589/AJAFR-SHMLD3AQ.

### Manuscript History

Received: 15 Jan 2022

Accepted: 31 Jan 2022

Published: 10 Feb 2022

**Copyright** © 2022 The Author(s). This is an Open Access article distributed under the terms of Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0), which permits anyone to share, use, reproduce and redistribute in any medium, provided the original author and source are credited.

**ABSTRACT:** *Cashflow management is vital to the sustenance of the firm's liquidity and proper cash flow management help the firm to actualize its set out objectives. Therefore, this study examined the effect of cash flow management on financial performance: Evidence from the pharmaceutical industry in Nigeria. The ex post facto research design was adopted for the study with a population of ten (10) listed pharmaceutical companies in Nigeria as listed by the Nigerian Exchange Group in 2021. Data were retrieved from the annual reports of the selected listed pharmaceutical companies for the period 2011 to 2020. Multiple regression analysis and the Pairwise Granger Causality tests were used to analyze the data gathered with the aid of EViews10 statistical software. The study revealed a positive and insignificant effect of operating activities on liquidity. Also, it revealed a positive and insignificant effect of investing activities on liquidity. And finally, it revealed a negative but significant effect of financing activities on the liquidity of listed pharmaceutical companies in Nigeria. Therefore, it was recommended that listed pharmaceutical companies in Nigeria should be encouraged to build a reasonable cash flow control strategy that will bring efficiency to the firm, thereby enhancing the firm financial performance. Also, pharmaceutical companies should re-evaluate their cash flow management strategies in order to enable them to generate enough cash sufficient to meet their investing activities.*

**KEYWORDS:** Cashflow Management, Financial Performance, Liquidity, Firm Size.



## INTRODUCTION

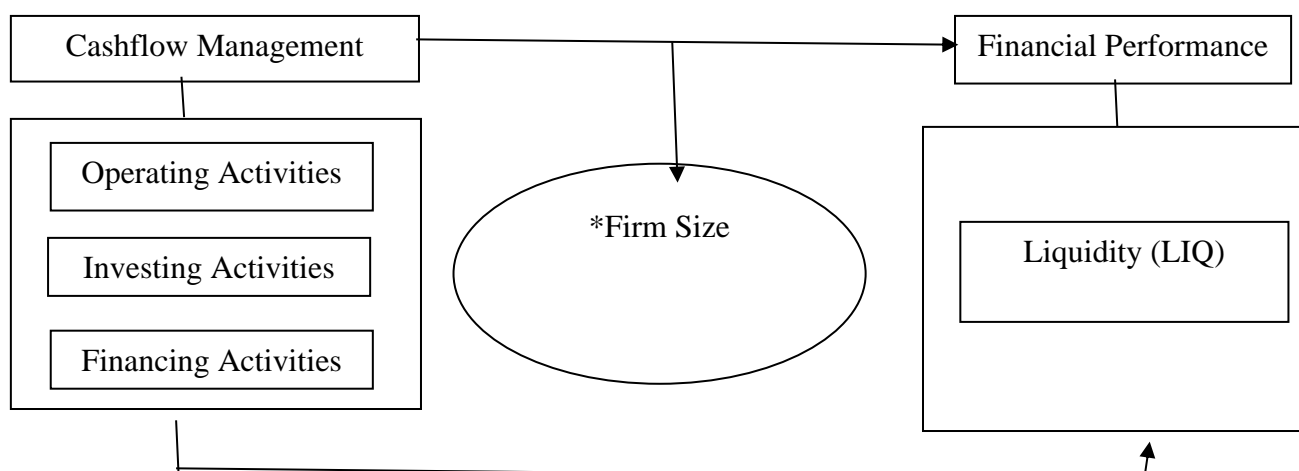
Financial performance is an essential measure to access the well-being of a company. This measures the ability of the company to utilize its resources efficiently and effectively to achieve the desired result. This assertion is in line with the view of Kenton (2021) sees “financial performance as a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues”. The financial performance of a company can be accessed through various indicators like profitability ratios and liquidity ratios.

Liquidity has for long been discussed and deliberated by management of companies and financial analysis alike. Liquidity is essential to the day to day running of the business as cash (finance) is considered the life wire to an organization. To some analysts, profitability is preferable to liquidity while to others, liquidity is the ultimate thing and should be sought for and maintained.

In Nigeria, the pharmaceutical industry has witnessed some setbacks. This is evident in its inability to cope with the challenges which the Covid-19 poses. A lot of funds is needed to tackle this virus. Currently, the Pharmaceutical Society of Nigeria (PSN), raised an alarm over the creeping distress threatening the industry as a result of the abuse of the Drug Revolving Fund, DRF, by tertiary medical institutions (vanguard news, 2021). The DRF mechanism was established in 1988 sequel to the Bamako Initiative sponsored by the World Health Organization, WHO, and the United Nations International Children’s Emergency Fund, UNICEF, as a means of keeping drugs constantly available and affordable in government medical institutions to reduce the “out of stock” syndrome, especially in developing countries like Nigeria. But this fund has been abused. A situation like this gives rise to the question of the effectiveness of the cash flow management of firms in this industry.

Cashflow management is vital to the sustenance of a firm’s liquidity. Pharmaceutical companies require large capital outlay to effectively carry out their operations. A situation where the available capital is not properly managed will be detrimental to the financial health of the company. Proper cash flow management systems in business help the managers to: Control spending with respect to the specified budget, minimize borrowing and maximise the opportunity cost of its company’s resources (Bari et al., 2019). Cash flow management as defined by Ward (2020) is the “process of monitoring, analyzing, and optimizing the net amount of cash receipts minus cash expenses. Net cash flow is an important measure of financial health for any business”. Cash flow management entails frequent cash flow analysis so as to solve cash flow problems like illiquidity. Pharmaceutical companies in other to maintain a healthy financial system need effective cash flow management. This event has given rise to this study on cash flow management and financial performance of listed Pharmaceutical companies in Nigeria.

### Operational Framework



**Figure 1: Operational Framework of Cashflow Management and Financial Performance**

Sources: Alslehat & Al-Nimer (2017); Nangih et al. (2020); Tariverdi et al. (2014).

The following research hypotheses were stated in a null form;

H<sub>01</sub> There is no significant effect of operating activities on the liquidity of listed pharmaceutical companies in Nigeria.

H<sub>02</sub> There is no significant effect of Investing activities on the liquidity of listed pharmaceutical companies in Nigeria.

H<sub>03</sub> There is no significant effect of financing activities on the liquidity of listed pharmaceutical companies in Nigeria.

## LITERATURE REVIEW

### Concept of Cashflow Management

Cash flow management as defined by Ward (2020) is the “process of monitoring, analyzing, and optimizing the net amount of cash receipts minus cash expenses. Net cash flow is an important measure of financial health for any business”. Cash flow management entails frequent cash flow analysis so as to solve cash flow problems like illiquidity. This involves forecasting, mobilizing and managing the cash flow, maintaining banking relations and investing surplus cash (Steiss & Nwagwu, nd).

In the view of Nyabwanga et al. (2012), efficient cash flow management entails the determination of the optimal cash to hold by considering the trade-off between the opportunity costs of holding too much and the trading cost of holding too little. In this study, cash flow



management of pharmaceutical companies is measured by operating activities, investing activities and financing activities.

### **Concept of Financial Performance**

The concept of financial performance has over the decade been discussed in accounting and finance literature alike. Authors have expressed their views on this concept. Kenton (2021) asserts that financial performance is a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. It has also been the primary concern of business practitioners in all types of organizations since financial performance has implications for an organization's health and ultimately its survival. In the view of Verma (2021), financial performance is the process of measuring the results of a firm's policies and operations in monetary terms. It is used to measure a firm's overall financial health over a given period of time and used to compare similar firms across the same industry. In this study financial performance of pharmaceutical companies is measured by liquidity (current ratio).

### **Theoretical framework**

The theoretical framework of this study is anchored on the free cash flow theory. The proponent of the free cash flow theory is Jensen (1986). This theory is of the view that dangerously high debt levels will increase value, despite the threat of financial distress, when a firm's operating cash flow significantly exceeds its profitable investment opportunities. The free cash flow theory is designed for mature firms that are prone to overinvest (Jensen, 1986). The free cash flow model implies that for an over-investor, an increase in leverage should lead to a reduction in unprofitable investment spending. Additional leverage does not significantly affect the overall level of internal funds, but rather tightens the control and improves the efficiency of investments (Harbula, 2001). This theory presents debt primarily as a measure of control, and not as a source of funds, as debt acts to restrict managers' ability to pursue unprofitable projects that do not increase investor wealth.

### **Empirical Review**

Alslehat and Al-Nimer (2017) examined the relationship between cash flow management and the financial performance of Jordanian insurance companies. Twenty-three Jordanian insurance companies were used as the population for the period 2009-2013. The study revealed that the net cash flows from the operation activities influence the return on assets. While the net cash from investing activities was found to have a significant impact on the financial performance.

Yeko (2019) examined the relationship between cash flow management and financial performance of Tororo cement, eastern Uganda. The study adopted a survey and case study design with a sample population of 50 people as respondents were chosen from Tororo cement of companies. The study revealed that accounts payables management affect organizational performance in Tororo cement and that the organization experiences cash deficits in its operations hinder financial performance.

Eton et al. (2019) examined the relationship between cash management and financial performance of business firms in Northern Uganda. A cross-sectional study design was adopted and data was collected by the use of structured and closed-ended questionnaires. The study revealed that cash management has an insignificant effect on financial performance.



Ali and Mukhongo (2016) empirically examined the effects of cash flow management on the financial performance of the small and medium enterprises in Mogadishu Somalia. A descriptive research design was adopted in this study with a population is 360 individuals who were Owners/managers of selected small and medium enterprises in Mogadishu-Somalia. Linear Regression analysis was used in data analysis. The study revealed that cash control, cash planning and liquidity management were significant effects on the financial performance of small media enterprises in Mogadishu.

Tariverdi et al. (2014) examined the four-part model of cash flow statement on the operational performance of listed companies in the Tehran Stock Exchange for the period 2007 to 2011. The ex post facto research design was utilized while the Pearson correlation was used in data analysis. The study revealed a positive association between cash flows from investments' returns on return on assets and return on equity. It also revealed a negative association between cash flows from interest paid for financing on return on assets and return on equity while there was no association between cash flows of financing and cash flows from investment on return on assets and return on equity.

Liman and Mohammed (2018) examined the impact between operating cash flow and corporate financial performance of listed conglomerate companies in Nigeria over a period of 10 years (2005 to 2014). The data were analyzed using descriptive statistics, correlation analysis as well as regressions techniques to determine the variation in financial performance due to the variation in operating cash flow. A panel data regression technique was employed since the data has both time series and cross-sectional characteristics. The result revealed a positive and insignificant impact between Cash Flow from Operating Activities (CFO) and financial performance proxied by ROA while the impact is positive and significant when financial performance was proxied by ROE of the listed conglomerate companies in Nigeria.

Ebimobowei et al. (2021) investigated the effect of cash flow accounting on the corporate financial performance of listed consumer goods companies in Nigeria for the period 2015 to 2019. The ex-post facto and correlational research design was utilized for the study. A population of twenty-six and a sample size of twenty-three firms were used in the study while descriptive, correlational and panel ordinary least squares were used for data analysis. The study revealed 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 while investing activities and financial leverage revealed a negative and significant relationship.

Nangih et al. (2020) investigated the relationship between cash flow management and the financial performance of quoted oil and gas firms in Nigeria. The judgmental research design was utilized while data were obtained from the annual reports of five selected listed firms for the period 2013-2018. The data thus collected were analyzed with correlation and multiple regression techniques. The study revealed that cash flows from operating and investing cash flows had a negative and insignificant relationship with profitability while cash flow from financing activities had a positive and significant influence on firm performance in the oil and gas sector.

Egwu et al. (2021) investigated the exploration of cash flow management for enterprise's business performance in Nigeria. The survey research design was utilized for the study. Data gathered were analyzed using the descriptive method and regression analysis. The study



revealed that cash flow management influences the fulfilment of financial obligations and that cash flow management strategies influence the performance of enterprises in Abuja. The study concluded that cash flow is critical to the success of enterprises.

## METHODOLOGY

This study used the ex-post facto research design with a population of ten (10) listed pharmaceutical companies in Nigeria as listed by the Nigerian Exchange Group in 2021. The entire population was used as the sample size of the study using the census approach. Data were retrieved from the annual reports of the selected listed pharmaceutical companies for the period 2011 to 2020. Multiple regression analysis was used to test the formulated hypotheses and the Pairwise Granger Causality tests were used to ascertain the causal relationship between the variables employed, all computed with the aid of EViews10 statistical software.

### Model specification

#### Panel Regression Model

$$FP = f(OPA + INVA + FINA + FMZ + \mu) \dots \dots \dots (3.1)$$

$$LIQ = f(f(OPA + INVA + FINA + FMZ + \mu)) \dots \dots \dots (3.2)$$

Therefore, the model is

$$LIQ_{it} = \alpha_0 + \alpha_1 OPA_{it} + \alpha_2 INVA_{it} + \alpha_3 FINA_{it} + \alpha_4 FMZ_{it} + \varepsilon_{it} \dots \dots \dots (3.3)$$

### Operational Definition of variables

**Liquidity:** This is operationalized by the Current Ratio which is the amount of cash a bank can quickly use to settle its debt. It is expressed as;

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liability}}$$

**Operating Activities:** It is measured as a natural logarithm of the total value of the operating activities in a cash flow statement in the annual report.

**Investing Activities:** It is measured as a natural logarithm of the total value of the investing activities in a cash flow statement in the annual report.

**Financing Activities:** It is measured as a natural logarithm of the total value of the financing activities in a cash flow statement in the annual report.

**Firm Size:** It is measured as the natural logarithm of total assets.



## RESULTS/FINDINGS

**Table 1: Descriptive Statistics**

	OPA	INVA	FINA	LIQ
Mean	12.33899	11.59820	11.20416	1.477003
Median	12.70572	11.78958	12.05061	1.170024
Maximum	16.09667	16.22489	14.96290	9.329788
Minimum	0.000000	0.000000	0.000000	0.128192
Std. Dev.	2.493680	2.686356	3.482117	1.257494
Skewness	-2.242461	-2.139926	-2.035452	3.403920
Kurtosis	10.49599	9.903626	7.127773	20.54912
Jarque-Bera	254.3478	219.9240	112.0359	1181.061
Probability	0.000000	0.000000	0.000000	0.000000
Sum	987.1190	927.8559	896.3332	118.1602
Sum Sq. Dev.	491.2569	570.1042	957.8859	124.9219
Observations	80	80	80	80

Source: Output from EViews 10

From the table above, operating activities, investing activities, financing activities, and liquidity has an average mean of 12.33, 11.59, 11.20 and 1.48 respectively. It also revealed a standard deviation of 2.49, 2.69, 3.48 and 1.26 for operating activities, investing activities, financing activities, and liquidity respectively. In the test of normality, operating activities has a negative skewness of -2.24, leptokurtic of 10.49 which is higher than the normal distribution of 3 and a Jarque-Bera probability of 0.000000, which shows that the distribution is statistically significant. Investing activities has a negative skewness of -2.13, leptokurtic of 9.90 which is higher than the normal distribution of 3 and a Jarque-Bera probability of 0.000000, which shows that the distribution is statistically significant. Also, financing activities shows a negative skewness of -2.04 with a leptokurtic distribution of 7.13 and a probability of a normal distribution that is statistically significant. Furthermore, firm size shows a positive skewness of 3.40 and leptokurtic distribution of 20.55 which is higher than the normal distribution of 3 and a Jarque-Bera probability of 0.000000, which shows that the distribution is statistically significant.

### Test of Hypotheses

H<sub>01</sub> There is no significant effect of operating activities on the liquidity of listed Pharmaceutical companies in Nigeria.

H<sub>02</sub> There is no significant effect of Investing activities on the liquidity of listed Pharmaceutical companies in Nigeria.

H<sub>03</sub> There is no significant effect of financing activities on the liquidity of listed Pharmaceutical companies in Nigeria.



$$\text{Table 2: LIQ}_{it} = \alpha_0 + \alpha_1\text{OPA}_{it} + \alpha_2\text{INVA}_{it} + \alpha_3\text{FINA}_{it} + \alpha_4\text{FMZ}_{it} + \varepsilon_{it} \text{-----}(3.3)$$

Dependent Variable: LIQ

Method: Least Squares

Date: 12/11/21 Time: 20:52

Sample: 1 80

Included observations: 80

Variable	Coefficient	Std. Error	t-Statistic	Prob.
OPA	0.103754	0.084618	1.226143	0.2239
INVA	0.045629	0.076512	0.596361	0.5527
FINA	-0.154192	0.048633	-3.170480	0.0022
C	1.395162	0.697551	2.000087	0.0491
R-squared	0.117822	Mean dependent var	1.477003	
Adjusted R-squared	0.082999	S.D. dependent var	1.257494	
S.E. of regression	1.204178	Akaike info criterion	3.258178	
Sum squared resid	110.2034	Schwarz criterion	3.377280	
Log likelihood	-126.3271	Hannan-Quinn criter.	3.305929	
F-statistic	3.383462	Durbin-Watson stat	1.335069	
Prob(F-statistic)	0.022402			

Source: Output from EViews 10

**Interpretation of Table 2:** Table 2 above shows that the Model has excellent fit i.e. Prob(F-statistic) = 0.022402. The independent variables explained the variation in pharmaceutical financial performance by 18% approximately. Also, it reveals a positive and insignificant effect of operating activities on liquidity (0.103754; 0.2239). This implies that a 1% increase in operating activities will bring about a 0.10 % increase in liquidity. This led to the acceptance of (**Ho1**) that there is no significant effect of operating activities on the liquidity of listed pharmaceutical companies in Nigeria.

Also, it reveals a positive and insignificant effect of investing activities on liquidity (0.045629; 0.5527). This implies that a 1% increase in investing activities will bring about a 0.08 % increase in liquidity, all other variables held constant. This led to the acceptance of (**Ho2**) that there is no significant effect of investing activities on the liquidity of listed pharmaceutical companies in Nigeria.

Furthermore, it reveals a negative but significant effect of financing activities on liquidity (-0.154192; 0.0022). This implies that a 1% increase in financing activities will bring about a 0.15% decrease in liquidity, all other variables held constant. This led to the rejection of (**Ho3**) and the conclusion that there is a significant effect of financing activities on the liquidity of listed pharmaceutical companies in Nigeria.



**Table 3: Pairwise Granger Causality tests**

Pairwise Granger Causality Tests

Date: 12/12/21 Time: 12:07

Sample: 1 80

Lags: 2

Null Hypothesis:	Obs	F-Statistic	Prob.
INVA does not Granger Cause OPA	78	0.50340	0.6066
OPA does not Granger Cause INVA		1.00635	0.3706
FINA does not Granger Cause OPA	78	4.61283	0.0130
OPA does not Granger Cause FINA		0.72081	0.4898
LIQ does not Granger Cause OPA	78	0.31030	0.7342
OPA does not Granger Cause LIQ		0.20432	0.8157
FINA does not Granger Cause INVA	78	1.07047	0.3482
INVA does not Granger Cause FINA		0.30359	0.7391
LIQ does not Granger Cause INVA	78	0.07852	0.9246
INVA does not Granger Cause LIQ		1.77080	0.1774
LIQ does not Granger Cause FINA	78	9.51566	0.0002
FINA does not Granger Cause LIQ		2.65075	0.0774

Table 3 above shows directional relationship amongst the variables. First, it revealed a unidirectional relationship between financial activities (FINA) and operating activities (OPA). That is, the causality runs from FINA to OPA (F-Statistic=4.61283; P=0.0130) and not from OPA to FINA. Also, it revealed a unidirectional relationship between liquidity (LIQ) and financial activities (FINA). That is, the causality runs from LIQ to FINA (F-Statistic=9.51566; P=0.0002) and not from FINA to LIQ.



## DISCUSSION OF FINDINGS

The study revealed a positive and insignificant effect of operating activities on liquidity which led to the acceptance of **(Ho1)** that there is no significant effect of operating activities on the liquidity of listed pharmaceutical companies in Nigeria. This finding is in line with the finding of Nangih et al. (2020) that revealed that cash flows from operating and investing cash flows had a negative and insignificant relationship with profitability. This finding contradicts the finding of Egwu et al. (2021) that concluded that cash flow management influences the fulfilment of financial obligations and the performance of enterprises in Abuja. Also, it disagrees with the finding of Ali and Mukhongo (2016) that revealed significant effects of cash flow management on the financial performance of the small and medium enterprises in Mogadishu Somalia.

Also, the study revealed a positive and insignificant effect of investing activities on liquidity which led to the acceptance of **(Ho2)** that there is no significant effect of investing activities on the liquidity of listed pharmaceutical companies in Nigeria. This implies that pharmaceutical companies cash flow management strategies in terms of investing activities have not sufficiently enhanced financial performance measured by liquidity. This finding is in line with the finding of Eton et al. (2019) that revealed that cash management has an insignificant effect on financial performance. It contradicts the finding of Alslehat and Al-Nimer (2017) that revealed that net cash from investing activities has a significant impact on financial performance.

Furthermore, it reveals a negative but significant effect of financing activities on liquidity which led to the rejection of **(Ho3)** and the conclusion that there is a significant effect of financing activities on the liquidity of listed pharmaceutical companies in Nigeria. This implies that the financial activities of listed pharmaceutical companies have enhanced their financial performance measured by liquidity. This finding is in line with the finding of Nangih et al. (2020) that revealed that cash flow from financing activities had positive and significant influence on firm performance in the oil and gas sector. Also, Tariverdi et al. (2014) concluded that there is no association between cash flows of financing and cash flows from investment on the financial performance of firms. This finding is supported by the findings of Ebimobowei et al. (2021); Liman and Mohammed (2018) that concluded that there is a significant impact of cash flow management on the financial performance of firms. This study's finding contradicts the findings of Eton et al. (2019) that revealed that cash management has an insignificant effect on financial performance.

## CONCLUSION

Cashflow management is vital to the sustenance of a firm's liquidity. Pharmaceutical companies require large capital outlay to effectively carry out their operations and proper cash flow management systems help the managers to: Control spending with respect to the specified budget, minimize borrowing and maximise the opportunity cost of its company's resources. From this study, it was concluded that cash flow management measured by operating activities and investing activities has an insignificant effect on the financial performance of listed pharmaceutical companies in Nigeria whereas cash flow management measured by financing



activities has a significant effect on the financial performance of listed Pharmaceutical companies

## RECOMMENDATIONS

The following recommendations were made with respect to the above findings;

- I. Listed pharmaceutical companies in Nigeria should be encouraged to build a reasonable cash flow control strategy that will bring efficiency to the firm, thereby enhancing the firm financial performance.
- II. Pharmaceutical companies should re-evaluate their cash flow management strategies in order to enable them to generate enough cash sufficient to meet their investing activities.
- III. Net cash flow from financing activities should be maintained as it has proven to have a significant effect on the financial performance of pharmaceutical companies.

## REFERENCES

- Ali, A. T. A., & Mukhongo, A. L. (2016). Effects of cash flow management on the financial performance of the small and medium enterprise in Mogadishu Somalia (A case study of Bakara market). *Elixir Fin. Mgmt*, 94, 40538-40546.
- Alslehat, N., & Al-Nimer, M. (2017). An empirical study of the relationship between cash flow management and financial performance of the Jordanian insurance companies. *International Business Management*, 11(3), 776-782.
- Bari, M. A., Muturi, W., & Samantar, M. S. (2019). Effect of cash management on the financial performance of food and beverage retailers in the Puntland State of Somalia: A case of Garowe district. *International Journal of Contemporary Applied Researches*, 6(3), 130-153.
- Ebimobowei, A., Awuji, C. E., & Anuogwo, K. N. (2021). Cash flow accounting and corporate financial performance of listed consumer goods companies in Nigeria. *OSR Journal of Business and Management (IOSR-JBM)*, 23(3), 18-29.
- Egwu, E. M., Orugun, F., & Adedokun, A. (2021). Exploration of cash flow management for enterprise's business performance. *Asian Journal of Economics, Business and Accounting*, 21(10), 97-105.
- Eton, M., Uwonda, G., Mwosi, F., Ogwel, B. P., & Obote, D. (2019). Cash management and financial performance of business firms in Northern Uganda a case of Lira District. *The International Journal of Business Management and Technology*, 3(4), 115-125.
- Harbula, P. (2001). The free-cash-flow theory versus financial constraints: investments, corporate governance and soft budgeting problems. *Acta Oeconomica*, 51(4), 1-33.
- Jensen, M. (1986). Agency costs of free cash flow, corporate finance and takeovers. *American Economic Review* 76, 323-329.
- Kenton, W. (2021). Financial performance.  
<https://www.investopedia.com/terms/f/financialperformance.asp>



- Liman, M., & Mohammed, A. S. (2018). Operating cash flow and corporate financial performance of listed conglomerate companies in Nigeria. *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*, 23(2), 01-11.
- Nangih, E., Ofor, T. N., & Onuorah, J. K. J. (2020). Cash flow management and financial performance of quoted oil and gas firms in Nigeria. *Journal of Accounting and Financial Management*, 6(4), 1-11.
- Nyabwanga, R. N., Ojera, P., Lumumba, M., Odondo, A. J., & Otieno, S. (2012). Effect of working capital management practices on financial performance: A study of small-scale enterprises in Kisii South District, Kenya. *African Journal of Business Management*, 6(18), 5807-5817.
- Steiss, A. W., & Nwagwu, C. O. (nd). Financial planning and management in public organizations. <http://www-personal.umich.edu/~steiss/page12.html>
- Tariverdi, Y., Amanolahi, G. F., & Faal, F. (2014). The effect of components of a 4 part model of cash flow statement on the operational performance of firms enlisted in the Tehran Stock Exchange. *Indian Journal of Science Research*, 7(1), 240–250.
- Vanguard News -Saving the Pharma sector from distress. September 23, 2021.
- Verma, E. (2021). Financial performance: Understanding the concepts and their areas. <https://www.simplilearn.com/financial-performance-rar21-article>
- Ward, S. (2020). Cash flow management in business. <https://www.thebalancesmb.com/cash-flow-management-2947138>
- Yeko, M. (2019). Cash flow management and financial performance of Tororo cement, eastern Uganda. B.sc Project, Kampala International University.



## APPENDIX

### Listed Pharmaceutical and Health Care companies as listed in Nigeria Exchange Group

S/n o	Company	Ticker	Sector	Date Listed	Date of Incorporation
1	EKOCORP PLC.[BLS]	EKOCORP	HEALTHCARE	Invalid date	October 9th 1991
2	EVANS MEDICAL PLC.[DIP]	EVANSMED	HEALTHCARE	July 23rd 1979	April 23rd 1954
3	FIDSON HEALTHCARE PLC	FIDSON	HEALTHCARE	April 6th 2008	March 13th 1995
4	GLAXO SMITHKLINE CONSUMER NIG. PLC.[CG+]	GLAXOSMITH	HEALTHCARE	Invalid date	June 23rd 1971
5	MAY & BAKER NIGERIA PLC.	MAYBAKER	HEALTHCARE	November 10th 1994	April 9th 1944
6	MORISON INDUSTRIES PLC.	MORISON	HEALTHCARE	Invalid date	June 29th 1955
7	NEIMETH INTERNATIONAL PHARMACEUTICALS PLC[CG+]	NEIMETH	HEALTHCARE	September 21st 1979	August 13th 1957
8	NIGERIA-GERMAN CHEMICALS PLC.[DIP]	NIG-GERMAN	HEALTHCARE	Invalid date	January 10th 1964
9	PHARMA-DEKO PLC.	PHARMDEKO	HEALTHCARE	Invalid date	April 18th 1969
10	UNION DIAGNOSTIC & CLINICAL SERVICES PLC	UNIONDAC	HEALTHCARE	Invalid date	March 16th 1999