# RELATIONSHIP OF CASH FLOW RATIOS AND FINANCIAL PERFORMANCE OF LISTED BANKS IN EMERGING ECONOMIES – NIGERIA EXAMPLE

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**ABSTRACT:** The study examines the relationship between cash flow and performance in the Banking sector of Nigeria. The study involved a survey of four (4) Banks quoted in the Nigeria Stock Exchange. Data were obtained from the annual report and accounts of selected Banks. The data were subjected to statistical analysis using correlation technique. The result of the study revealed that operating cash flow has a significant and strong positive relation with performance in the Banking sector in Nigeria, it was also reified that investing cash flow and financing cash flow have negative and weak relationship. The study recommends that regulatory authorities such as CBN, SEC, CAC and NDIC should be securitizing their financial statement and also external auditors of the quoted Banks in the Banking sector to use cash flow ratio in evaluating performance which will help investors make good decisions.

**KEYWORDS**: Cash Flow, Operating, Investing, Financing, External Auditor, and Banks.

### INTRODUCTION

The economic well being of any organisation; whether in production or in services depends on careful monitoring and management of the flow of funds within and outside of that organisation from time to time. With the introduction of cash flow statement as an integral part of a firm's annual reports to replace funds flow statement, it introduces a new dimension to the information available to the stake holders especially investors and analysts who make use of these financial statements.

Cash is the most important factor that can affects the profitability and survival of an organization. Cash flow according to Helen (2002) is one of the most common financial reports to assess the steps and decisions taken by management in the running of the organisation. Cash flow is a concept in accounting and finance used to describe the inflow and outflow of cash within an organization, inflow represent cash receipts while outflow relate to cash expenditure.

Cash flow information assists its financial statement users in obtaining the relevant information concerning the source and use of virtually the entire financial system over a given period of time. According to Nwayanmu (2005), a high inflow of cash, when compared with sufficient cash balance for investment purpose. In the views of Libby (2001), Cash flow permits a company to expand its operations, replace needed assets, take advantages of market opportunities, and pay dividend to its owners. Both managers and analysts need to understand the various source and business activity. Also according to Fabozzi and Markomits (2006) suppliers are interested in the firm's liquidity because their rights are generally in a short term and in this case the company's ability to pay is best reflected by the liquidity indicators. According to Bragg (2002), investors in bonds, who ordinarily lend to the firm on medium or long term for rumination, are rather interested in the company's ability to generate cash flow for medium and long-term leverage of debt service.

This paper analyzes the use of cash flows ratios as a measure of performance in emerging economics by assessing the cash flow ratios relate with the financial performance indices. An emerging economy is seen as one that has been or is in the process of globalizing (Pereiro, 2002). What this means is that such as economy should have or is in the process of opening its borders for the purpose of permitting investment and international trade. Nigeria posses the characteristics of an emerging economy following its performance and ranking at the world political and economic arena.

Banks in Nigeria play a crucial role in propelling the entire economy of any nation by channelling surplus funds to the deficit unit of which there is dire need for repositioning to achieve efficient financial performance through reform process geared towards fore-telling bank collapse (Okpanachi et al 2013). In Nigeria the reform process of the banking sector is part and parcel of the government strategic agenda aimed at repositioning and integrating the Nigeria banking sector into the Africa regional and global financial system. To make the Nigeria banking sector sound according to Akpan (2007), the sector has undergone remarkable changes over the years in terms of the number of institutions, structure, as well as dept and breathes of operations. The income statement and balance sheet cannot sufficiently evaluate the financial performance of a firm as the cash flow statement has proved to be. It is on this note that this paper aims at examining cash flow ratio as a measure of performance of listed banks in emerging economics with a focus on Nigeria.

## **Objectives of the study**

The main objective of the study is to evaluate cash flow as a measure of performance of listed banks in emerging economies.

- 1. Assess the relationship between cash flow from operations and profit after tax of banks in Nigeria.
- 2. Determine the relationship between cash flow from investing activities and profit after tax of banks in Nigeria.
- 3. Ascertain the relationship between cash flow from financing activities and profit after tax of banks in Nigeria.

## **Statement of hypotheses**

The study therefore hypothesizes as follows:

**HO**<sub>1</sub>There is no significant relationship between cash flow from operating activities and profit after tax of Banks in Nigeria

HO<sub>2</sub> There is no significant relationship between cash flow from investing activities and profit after tax of Banks in Nigeria.

HO<sub>3</sub>There is no significant relationship between cash flow from financing activities and profit after tax of Banks in Nigeria.

#### LITERATURE REVIEW

# **Conceptual Framework**

Cash flow – it is the net amount of cash and cash- equivalents moving into and out of a business. Positive cash flow from operations indicates that a company's liquid assets are increasing enabling it to be settle debt, relevant in its business, return money to shareholders, pay expenses and provide a buffer against future financial challenges. Negative cash flow indicates that a company's liquid assets are decreasing.

# Types of cash flow

- 1) Cash flow from Operations: These are generated from the organization's normal activities. This cash flow is generally routine and recurring. They are particularly important because most organizations must be capable of generating positive cash flow from operation over a long run to remain viable.
- 2) Cash flow related to investing: This reflect how an organization's cash is used to provide securities. Example include making capital expenditures, acquire property and equipment and to expand.
- 3) Cash flow related to financing: This are amount received by borrowing or from issuing stock as well as payment made to retire debt, repurchase stock and provide dividends to owners, example increasing its financing through debt and equity.

**Cash**- is defined as cash on hand and demand deport cash equivalents are short term highly liquid investments that are readily convertible to known amount of cash (1 AS 7 per 6).

**Bank:** These are financial institutions that creates credit by lending money to a borrower, thereby creating a corresponding deport into banks balance sheet.

**Emerging Economy:** According to Pereiro (2002) it is an Economy in the purpose of opening its borders for purpose of permitting investment and international trade.

**Performance:** – Schwarz (1999) defined performance as a manner or success in work execution. Performance is associated with above average performance is those who performed will often gain power. The measure of a firms performance is usually ratio fashioned from financial statement.

**Cash Flow Ratio:** This ratio measures the company's ability to generate resources to meet its current liabilities.

### THEORETICAL FRAME WORK

This study is anchored on the frame work that cash flows that are used as a measure of performance, depends in the financing policy, investment policy and accounting policy adopted by a firm. The theory that present a clear direction and firm behaviour about cash flow in the Agency theory.

According to the agency theory, agency conflicts arise from the possible divergence of interest between shareholders (principles) and managers (agent) of firms. The primary duty of

managers is to manage the firm in such a way that it generates returns to shareholders, thereby increasing the profit figures and cash flow (Elliot and Eliot 2002). According to Boodhoo (2009) the contribution of agency cost theory is that leverage is expected to lower agency costs, reduce inefficiency and thereby lead to improvement in performance, (Akintoye 2008).

From the foregoing, this study considers the agency theory as the cornerstone of utilizing the resource related to the relationship between cash flow and performance of Banks in Nigeria.

### **REVIEW OF EMPIRICAL STUDIES**

A study by Armen Staphanyan (2013) assessed major US Airlines via cash flow Ratio. The result of this analysis shows that airlines companies have liquidity problems. The U.S Airlines have difficulties in generating cash to fully degree of relationship between liquidity management and profitability.

Prowal and Tainis (2013) provided empirical evidence on "Cash flow ratios in predicting investments soundness". They believed that for successful operation of a company, the company should generate enough cash to meet daily operation pay taxes and dividend. The study test significance of cash flow ratios in evaluating performance of a company and uses them to differentiate a sound from risky firms for investment.

Nyabwarga, Ogera, and Nyakurdi (2013) carried out Empirical Analysis of the liquidity, solvency and financial Health of Small and Medium sized Enterprises in Kisii Municipality, Kenya. The purpose of this study was to carry out a financial diagnosis of small and medium enterprises (SMES) financial performance by focusing in their liquidity, solvency and profitability positions using ratio analysis. The findings of the study showed that liquidity position of SMES, their solvency and financial health were low. Also the result of the study shows that there is a significant impact of current ratio, quick ratio and debt to total assets on return on assets (ROA). The study recommended that liquidity, solvency and financial health of SMEs should be an integral part of their policy frame work.

Sulayman (2014) did a work on liquidity analysis using cash flow ratio as compared to Traditional Ratio in the pharmaceutical sector in Jordan, the study shows that a number of companies that had good traditional ratios while their cash flow ratios were weak but the cash flow ratios showed a better liquidity position. The study conclude that cash flow ratio provide more information than traditional ratios in increasing liquidity position of the company.

Nwanyanwu (2015) Evaluated cash flow and organizational performance in Nigeria and hospitality and print media industries: Using a pilot study, 45 SMEs in those sectors were sampled. It was found that with advances in technology and quality of services delivery which create competitions, hospitality and print media organizations should develop strategies to enhance their cash inflow.

Kajananthan and Velnampy (2014) carried out a study on liquidity, solvency and profitability analysis using cash flow ratios and Traditional Ratio. Using communication sector in Siri Lanka, the study provided evidence of the importance of using the cash flow ratios as a means of testing the validity of the conclusions made from analysis of traditional liquidity ratios alone. The study shows that some Tele comm. Companies are good traditionally yet the cash flow ratios projected a different perspective. They conclude that cash flow ratio is a more holistic

Published by European Centre for Research Training and Development UK (www.eajournals.org) approach to the analysis of the liquidity position of companies and in during so becomes a means for making better decisions.

Maxwell Samuel Amuzu (2010) did a work on Cash flow as measure of performance of listed companies in emerging Economies the Ghana Example and finds out that Cash Flow analysis is a better measure of performance and competitiveness for firms that are competing in emerging markets.

Alictal (2013), studies the association between various earnings and cash flow measures of firm performance and stock return in Iran. They used the simple and multiple regressions to analyze the data for a period of time consecutive years from 2003 to 2011. The study revealed that company's performance and cash flow have a significant negative relationship; the study also indicates that cash flow has negative relationship.

Zhou et al (2012) examined the relationship between free cash flow and financial performance evidence from the listed Real estate's companies in China. They used principal component analysis and regression analysis on the data from 2006-2011 of all listed Real estate companies in China. The study revealed that the free cash flow of a company is negatively linear – correlated to its financial performance too much fee flow will lead the financial performance to decline. Chikashi (2013) carried out an investigation of comprehensive income and firm performance. The case of the electric appliance industry, of the Tokyo stock exchange. The resources use the data for the fiscal year 2009 to 2011 and employ the pooled regressions (Panel Data regression analysis). The study revealed that cash flow and firm performance have a significant negative relationship. In addition, comprehensive incomes published by the firms were superior to other carryings or cash flow variables used in predicting their future stock returns.

Adelegan (2003) carried out an empirical analysis of the relationship between cash flow and dividend changes in Nigeria. The research used the ordinary least square (OLS) method to analyze the data on a sample of 63 quoted firms in Nigeria over an under testing period time 1984-1997 the result reveal that the relationship between cash flow and firm performance is positively significant.

Brush et al (2000) examines the free cash flow hypothesis for sales growth and firm performance. They used the Durbin-Watzon tests on the data that covers the years 1988 to 1995. The result reveals that the firm performance and cash flow have a significant positive relationship. But different governance conditions affect sales growth and performance in different ways.

Khozhdel (2006) studied the relationship between free cash flow and operating earnings with stock return and growth of net market values of operating assets in Tehran stock exchange. The researcher tests the hypotheses via Pearson correlation and simple linear regression method. The study revealed that there is a positive meaningful relationship between operating earning with return on equity, return on assets and gearing of net market values in operating assets.

Watson (2005) examined the associated of various earning and cash flow measures of firm performance and stock returns. The researcher used simple multiple regressions to analyze the data. The study revealed that cash flow and firm performance have a significant relationship. Thus a company whose performance is acceptable according to management and shareholders opinion may not be acceptable in social aspect.

Bingilar et al (2014) did a study on cash flow and corporate performance. A study of selected food; and beverages companies in Nigeria, the data for the study involved 6 food and beverage companies. The data were subjected to multiple regression technique. The result of the study revealed that operating and financing cash flow here significant positive relationship with corporate performance in the food and beverage sector of Nigeria.

# **Gap in Literature**

Considering the empirical reviews, it can be seen that no works have been done on the relationship of cash flow ratios and financial performance of banks in Nigeria. This is the gap that this work comes to fill.

### **METHODOLOGY**

The study adopted the ex post facto research design because it made use of existing secondary data. The data were collected from Nigeria stock exchange for the period 2005 to 2013 and from the Annual report and Accounts of banks studied. Four listed banks in Nigeria were selected based on availability of data from the annual report and accounts and/or from the Nigeria Stock exchange. The banks are Zenith Bank Plc, Diamond Bank Plc, UBA Bank Plc and FCM Bank Plc

Research Variables of the study:

Performance is the explained variable.

It is measured by Profit after tax, three independent variables in the study

- 1) Operating cash flow: OPCF- This measures net cash flow from operation.
- 2) Investing cash flow: INCF- This is net cash flow from investing activities.
- 3) Financing cash flow: FCF- This measures the net cash flow from financing activity

The model specifications

$$PAT = \beta_0 + \beta_1 + OPCF + \beta_2 INVCF + FINCF + e$$
 (1)

Where

β- Estimated parameter
PAT- Profit after tax, index for performance
OPCF-Operating cash flow
INVCF-Investing cash flow
FINCF- Financing cash flow

#### RESUILTS AND DISCUSSION

#### Correlation.

		opcf	incf	ficf	pat
opcf	Pearson Correlation	1	531	.297	.733*
	Sig. (2-tailed)		.141	.437	.025
	N	9	9	9	9
incf	Pearson Correlation	531	1	.104	380
	Sig. (2-tailed)	.141		. <i>791</i>	.313
	N	9	9	9	9
ficf	Pearson Correlation	.297	.104	1	066
	Sig. (2-tailed)	.437	. <i>791</i>		.866
	N	9	9	9	9
pat	Pearson Correlation	.733*	380	066	1
	Sig. (2-tailed)	.025	.313	.866	
	N	9	9	9	9

<sup>\*.</sup> Correlation at the 0.05 level (2-tailed).

 $H0_1$  There is no significant relationship between operating cash flow and profit after tax in the Nigeria Banking sector.

From the result obtained in table 1 above operating cash flow is shown to has a significant correlation of 73% approximately at 5% level of significant. This portrays a strong connection and implies that the operating cash flow activity has a strong and positive association with profit after tax. The result also suggest that profit after tax increases with increasing level of operating activities as reviewed by operating activities cash flow. Hence we reject the null hypothesis which says that operating cash flow has no significant relationship with profit after tax.

**HO**<sub>2</sub> There is no significant relationship between investing cash flow and profit after tax in the Nigeria Banking sector.

Also in table 1 above the correlation result of investing cash flow and profit after tax shows a negative association of 38%, the result indicates a weak and negative association between the two variables. This position is not in agreement with initially conception and so may implies that the selected banks are yet to receive result from their investing activities. It may be that the investing activities are in long term activities that may be the reason we have negative association.

We therefore accept the null hypothesis we state that investing cash flow activities has no significant connection with profit after tax and therefore reject the alternative which says that investing cash flow has a correction with profit after tax.

**HO**<sub>3</sub> There is no significant relationship between financing cash flow and profit after tax in the Nigeria Banking sector.

There result suggests that the Bank financing activities shows a negative association of -68% with profit after tax. Between the result shows that financing cash flows have a weak relationship with profit after tax, which implies that the financing arrangements of the selected banks connect negatively with their profit after tax which means that this banks involves much in their financing activities. we there for accept the null hypothesis that financing cash flow has no significant in the banking sector and reject the alternative which say that financing cash flow has a significant in performance in banking sector.

### CONCLUSION AND RECOMMENDATIONS

The study established that significant and positive relationship exit between operating cash flow and performance of Banks in Nigeria. The result of the study supports the study done by Frank et al (2014). Also the research conclude that negative cash flow generated from investment activities and financing actives associated weak corporate governance are capable of decreasing the Banking sector performance. These findings agree with prior studies of Ali, et al (2013) and zhou et al (2012.

From the findings of the research the following recommendation were made. Banks should be encourage to set up a good cash flow system that will encourage investing public, it also suggest that regulatory authorities such as Central Bank of Nigeria, Corporate Affairs Commission, Securities and Exchange Commission, Nigeria Deposit Insurance Corporation to properly scrutinize the financial statement of the Banks to ensure that only cash backed profits are reported in order not to deceive investors and analysts. Investors and analysts should be encouraged to use cash flow ratios in evaluating the performance of Banks before forming opinion on the firm. This will help them make good decisions with respect to their investments. The study also suggests that they should be cash flow policy in Nigeria

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