



## Post-Merger and Acquisition and the Profitability of Deposit Money Bank in Nigeria (A Study of Zenith Bank Nigeria Plc)

Gbegi Orsaa Daniel Ph.D<sup>1</sup>, Ibrahim Abubakar A.<sup>2</sup> and Ibrahim Titus<sup>3</sup>

<sup>1</sup>Department of Accounting and Finance, University of Agriculture, Makurdi  
gbegidan@gmail.com

<sup>2</sup>Department of Accounting, Gombe State University  
Ibrahimbole1@gmail.com

<sup>3</sup>Department of Accounting, Gombe State University  
Ibrahimitus5@gmail.com

### ABSTRACT

Following the inability of some Nigerian deposits money banks to meet up liquidity and 10% minimum capital adequacy rate, some of these banks were bought by other banks and others transferred to the asset management corporation of Nigeria (AMCON). Indications revealed that many celebrated banks in Nigeria were declaring false profit. Against this background, this study investigated the post-mergers and acquisitions and the profitability of deposit money banks in Nigeria with particular interest in zenith bank Nigeria plc. The research made use of secondary data, obtained from the annual reports and accounts of zenith bank, covering a period of 2006-2015. Return on assets, return on equity, liquidity and capital adequacy ratios of banks were computed. OLS regression was performed. Expo-facto research design was performed. Results from this study showed that on average, post-merger and acquisition have positively and significantly affected the profitability of zenith bank. The study therefore, recommends that subsequent reform of the banking industry should be geared toward maintaining adequate level of liquidity and capital adequacy rate which will in the long run enhance profitability of the banks.

**Keywords:** *Acquisitions, Profitability and Post mergers*

### 1.0 INTRODUCTION

The 2004/2005 Nigerian banking sector's reform which was copied from global banking Mergers & Acquisitions has affected the size of the Nigerian banks from 89 to 25 in 2005, to 24 in 2007, to 22 in 2011 and to 21 in 2015. The reform followed the directive by the Central Bank of Nigeria (CBN) to consolidate Nigerian banks which required each bank to have a minimum paid-up capital of 25 billion naira. The reform aims at achieving

objectives of creating a sound and more secure banking system that depositor can trust through mergers and acquisitions.

Many researches have appraised the effect of 2004 consolidation in the Nigerian banking industry. The majority of findings showed that consolidation resulted to enhanced performance of deposit money banks in Nigeria. Those findings ought to be confirmed because after the consolidation,

problems seem to have persisted and banks were identified to have been merging and acquiring one another. For instance;

In 2007, Stanbic bank merged with IBTC bank. In 2011, Access Bank acquired Intercontinental Bank plc, Ecobank acquired Oceanic Bank, while First city monument bank plc (FCMB) acquired Fin bank plc, Keystone bank was formed and not long after, it took over Platinum Habib Bank (PHB), spring and Afribank were taken by AMCON. In 2014, Skyebankplc acquired Mainstreet bank ltd. And in the same year, Heritage bank plc acquired Enterprise bank plc. As of October 2014, keystone is on sale (kayode 2014). In 2016, naira metrics takes a look at major deals that allows stronger banks to swallow weaker ones that could shake up the sector and put the industry on a stronger footing going forward, if they were approved. Stanbic IBTC bank buys Skye bank, Guarantee trust bank buys Diamond bank, United Bank for Africa buys Union bank and Ecobank buys Wema bank (Ezekiel, 2016). These waves of mergers and acquisitions taking place in the Nigerian banking industry raised an important question of whether mergers and acquisitions enhance banking sector's performance in Nigeria.

A firm or industry performed when its profit, assets size and or its investment grows higher than normal (Malik, 2006). Company's profitability and how efficient it is at generating profits is an important consideration for shareholders. Profits are used to fund business development and pay dividends to shareholders, Profitability ratios measure a company's performance and provide an indication of its ability to generate profits. A profitable banking sector is better able to withstand negative shocks and contribute to the stability of the financial system. To measure the profitability of deposits money banks there are variety of ratios used of which Return on Asset (ROA), Return on Equity (ROE) and Net Interest Margin (NIM) are the major ones (Murthy & Sree, 2003; Alexandru, 2008).

Golin (2001) points out that ROA emerged as the key ratio for the evaluation of bank profitability and has become the most common measure of bank profitability in the empirical literature. Profitability is however determined by capital adequacy, assets size, management efficiency, earnings and liquidity. Capital adequacy ratio

shows the internal strength of the bank to withstand losses during crisis (Dang, 2011). Liquidity is the ability which an asset has to turn into cash very quickly and without capital loss (Fitzgerald, 1984).

## 1.2 Statement of the Problem

Several years after the completion of the industry-wide exercise, there are strong indications that many celebrated banks in Nigeria have been declaring false profit margins due to poor financial standing, occasioned by the changing economic fortune in Nigeria and world in general (odutola, 2015). Liquidity stress test was conducted by the Central Bank of Nigeria in June 2015 using the implied cash flow analysis and the maturity mismatch/rollover risk approaches to assess the resilience of the banking industry to liquidity and funding shocks which indicated that the capital position of 'three small banks' has fallen below regulatory capital requirement (Amuche, 2016). Following the inability of three more Nigerian deposits money banks to meet up 10% minimum capital adequacy rate, the CBN set a deadline of 2016 for them. If these banks do not meet up with the capitalization process on the expiration of the stipulated date will be either be bought by other banks, or transferred to the asset management corporation of Nigeria (AMCON), the implication in a long run is that depositors will be denied access to their accounts until the merger process of each of these banks is completed (Joshua 2015). This study will assess post-merger and acquisitions and the profitability of deposit money bank,

## 1.3 Research questions

The study intends to answer the following research questions:

- i. How does the Post Mergers and Acquisitions affect return on assets of zenith banks in Nigeria?*
- ii. To what extent does the Post Mergers and Acquisitions affect return on equity of zenith banks in Nigeria?*

## 1.4 objective of the study

The objectives of this study are:

- i. To examine the effect of Post-Mergers and Acquisitions on return on asset of zenith banks in Nigeria*
- ii. To assess the Post Mergers and Acquisitions on return on equity of zenith banks in Nigeria*

## 1.5 Hypotheses

*H<sub>01</sub>: Post-Mergers and Acquisitions has no significant effect returns on assets of zenith banks in Nigeria*

*H<sub>02</sub>: Post-Mergers and Acquisitions has no significant effect returns on equity of zenith banks in Nigeria*

## 2.0 REVIEW OF RELATED LITERATURE

### 2.1 Conceptual frame work

The Concept of Merger and Acquisition

Merger and acquisition are often used interchangeably to mean the same thing, and in a more common sense used in the dual form as “mergers and acquisitions” which is (abbreviated M&A). It has been defined in different ways and by different authors but all the same, the meaning is anchored toward the same thing. For instance; Osamwonyi (2003) defines merger as “the pooling together of the resource of two or more corporate Bodies, resulting in one surviving company while the other is absorbed and ceases to exist as a legal entity or remains a subsidiary if it survives”.Kurfi (2006), defines acquisition as “technically and act of acquiring effective control by one company over the asset and management of another company without necessarily combining the companies”.

### 2.2 Theoretical Framework

#### Signaling theory

Signaling theory explain the relationship between capital and profitability (Berger, 1995). Ommeren, (2011) states that under the signaling theory, bank management signals private information that the future prospects are good by increasing capital and a higher capital is a positive signal to the market value of a bank, a lower leverage indicates that banks perform better than their competitors who cannot raise their equity without further deteriorating the profitability. Signaling hypothesis therefore, support a positive relationship between capital and profitability.

#### The agency cost theory

The main theoretical explanation for the relationship between the ownership structure and profitability is based on the agency theory, first established by Jensen and Meckling in 1976. Agency conflicts can arise between acquired and acquiring firm, managers and employees, or between managers and Shareholders and can lead to

asset substitution and under investment. However, in case of merger or acquisition, agency costs may also arise between acquired and acquiring firm.

Bidder returns are generally higher when the manager of the acquiring firm is a large shareholder (Lewellen, Loderer, & Rosenfeld, 1985), and lower when management is not (Lang, Stulz & Walkling, 1991; Harford, 1999). This suggests that managers pay more attention to an acquisition when they themselves are financially concerned.

For the purpose of this study, this theory entailed that Post mergers and acquisitions brings about increase in efficiency on the part of management of the firms, which in turn would likely contribute to the profitability of the firms. Therefore, Agency cost theory is adapted as underpinning this study, that positive relationship exists between mergers and acquisitions and profitability of banks.

### 2.3 Empirical reviews

Odetayo, Sajuyigbe and Olowe (2013) examined the impact of post-merger on Nigerian banks profitability with reference to selected banks. The study used net profit, net assets and shareholders' fund as the variables. Multiple regression and the method of estimation and ordinary least square method were employed. The findings showed that post-merger has not significantly impacted on banks' profitability.

Arshad (2012) employed quantitative and cross sectional study to analyze the post-merger performance of the chartered bank in Pakistan. The study was done using efficiency ratios, liquidity ratios and capital ratios and the findings showed that merger has not improved the performance of standard chartered bank.

Khurram (2014) investigated the impact of merger and acquisition on post-merger financial performance of companies in Pakistan. The study employed questionnaire, descriptive and paired; sample T-test in the analysis. The variables, Return on assets, return on equity and earnings per share were used and the result indicated that absolute performance on average was deteriorated.

Ikpefan (2012) studied the post consolidation effects of mergers and acquisitions on Nigerian deposit money banks. Bank's cost of equity and

return on equity were used as the variables to find out the challenges faced by banks during and after the exercise and whether mergers and acquisitions has in anyway affected the bank's performance. Panel data regression technique was employed and the result showed that mergers and acquisitions has affected bank's performance but does not affect bank's cost of equity capital.

Imeokparia (2014) studied post-consolidation effects of mergers and acquisitions on performance of deposit money banks in Nigeria. The objective was to explore the impact of post-consolidation effects of mergers and acquisitions on performance of deposit money banks in Nigeria for the period of 2008-2012, using dividend per share, earnings per share and return on equity. Simple regression analysis technique was used for the data analysis and was resulted in increase in capital base of banking industry in Nigeria.

Onaolapo and Ajala (2014) conducted a study on post-merger performance of selected Nigerian deposits money banks. Return on assets, return on equity, net interest margin, capital structures, assets profile, liquidity risks and credit risk were used to examine post-merger performance of Nigerian banking sector with the aim of determining the effect and the extent to which merger influenced bank performance. Multiple regression analysis were carried out and the result showed that there is a strong relationship between banks' performance and merger- asset profile, capital structure, operating efficiency, liquidity risk and credit risk.

Dimitrios, Nililaos and Efstathios (2009) carried out a study on the effect of bank mergers and acquisitions on the performance of companies-the Greek case of Ioniki-laiki bank and Pisteos bank. Profitability and gross profit ratios were used to investigate the merger in the short-term and to investigate the long-term effects of the merger exploring the relative position of the alpha bank within the industry. The result revealed that alpha bank is not only profitable but also competitive within the industry.

Badredira and Kalhoefer (2009) examined the effect of Merger and Acquisition on the performance of banks that have undergone mergers and acquisitions in Egypt from 2002-2007. The study used the variable, return on equity. The findings revealed that Merger and acquisition have

no clear effect on the profitability of banks in the Egyptian banking industry.

The studies by Arshad (2012) and Khurram (2014) were conducted outside Nigeria and the findings revealed that mergers and acquisitions have not improved the result of merged banks. There is therefore, the need to carry out the study in Nigeria in order to assess the effect and application of merger and acquisition on the profitability of Nigerian deposit money banks because under normal circumstances, the combined resources result in improved profitability. The reasons for the poor results might have been attributed to the lapses been observed in the method of conducting the studies. For example; Khurram (2014) uses questionnaire in collecting the data. *Using questionnaire might not show most relevant data on performance variables and the result of their studies may not be free from being bias.* Arshad (2012) employed cross sectional study. Time series might give more reliable results as the performance in each year of operation will be taken into account.

**3.0 Methodology**

This study employed expo-facto research design because it aimed at examining the relationship between post-merger and acquisition and the profitability of deposits money bank. The data were obtained from the annual reports and account of zenith bank plc from 2006-2015. Variables obtained are, Return on assets (ROA) and Return on equity (ROE) as dependent variables while capital adequacy and liquidity as independent variables. OLS regression technique of data analysis was performed.

**Table 1 variable and their measurements**

<u>Variables</u>	<u>Measurements</u>
Return on asset	Total income to total assets
Return on equity	Total equity to total assets
Capital adequacy	Total capital to total assets
Liquidity	Liquid cash to total assets

Source: Generated by theresearchers

**Model Specification**

For the purpose of this study the following linear regression equation was adopted with modification from the research by Ikpefan (2014)

$$ROA_{at} = \hat{a} + \hat{a}_1 CA_{at} + \hat{a}_2 LQD_{at} + e_{it} \dots \dots \dots (i)$$

Where:

$ROA_{at}$  = Return on asset (Profitability) of Bank a at time t (Total income to total asset)

$CA_{at}$  = Capital adequacy of bank a at time t (Total Capital to Total Asset)

$LQD_{at}$  = Liquidity of bank a at time t (Liquid cash to total assets)

$\hat{a}$  = the constant  $\hat{a}$

= the coefficient

$e_{it}$  = Random error term where i is cross sectional and t time identifier

This model was used to analyse hypothesis one, that post-mergers and acquisitions has no significant effect on ***the return on assets (profitability) of deposit money banks in Nigeria.***

$$ROE_{at} = \hat{a} + \hat{a}_1 CA_{at} + \hat{a}_2 LQD_{at} + e_{it} \dots \dots \dots (ii)$$

Where:

$ROE_{at}$  = Return on equity (Profitability) of Bank a at time t (Net Income after Taxes to Total Equity Capital)

$CA_{at}$  = Capital adequacy of bank a at time t (Total Capital to Total Asset)

$LQD_{at}$  = Liquidity of bank a at time t (Liquid cash to total assets)

$\hat{a}$  = the constant  $\hat{a}$

= the coefficient

$e_{it}$  = Random error term where i is cross sectional and t time identifier

This model was used to analyse hypothesis two that post-mergers and acquisitions has no significant effect on ***the return on equity (profitability) of deposit money banks in Nigeria.***

**4.0 Results and Discussions**

This section present the result, analysis and interpretation of the data collected for the purpose of testing the model used. Also, findings are discussed.

**Table 2** Regression Results of post-merger and acquisition and the Profitability of DMBs

Independent Variable	Dependent Variable: Return on Assets /return on equity	
	Coefficient estimates (and P>/t)	
	OLS Regression	OLS Regression
CAD	.1337689 ( 0.014)*	.1395058 (0.018)*
LQD	.0596178 (0.05)**	.0396521(0.200)**
Constant	.0721939	.051475
R2	0.66	0.57
ADJ R2	0.56	0.47
Prob. F	0.020	.04

Significance at 1% (\*) and 5% (\*\*)

**Source:** Author's computation using STATA on the data obtained from annual reports and Accounts of sky bank (2015).

From the above table 2, the prob. F-value is 2% and 4% for the profitability (ROA & ROE respectively) this implies that post-merger and acquisition suitably influenced the profitability of zenith bank. The R-square is 66% and 57% means that 66% and 57% of the fluctuations of profitability of zenith bank is explained by post-merger and acquisition (capital adequacy & liquidity) and the rest can be explain by other variables which are not mentioned in this model. The remaining 34% and 43% are error term or disturbances or other independent variable that are not mentioned.

The p values of CAD (capital adequacy) are 0.014 and 0.018 for ROA and ROE respectively and the sign of the coefficient are positive. This implies that capital adequacy has positively and significantly influenced the profitability of zenith bank Nigeria. It also implies that an increase in capital adequacy other independent variables remain constant increases the profitability of zenith bank positively and significantly. This finding is consistent with the findings of Anderibom & Obute (2015), Enya, Stephen & Ikenna (2014) and Onalapo & Ajala (2013) who found that bank capital positively influenced banks performances. However, the p value of LQD (liquidity ratio) are 0.05 and 0.2 for ROA and ROE respectively and the sign of the coefficient are positive. This means that liquidity has positively and significantly influenced the return on asset and has positively and insignificantly influence on the return on equity of zenith bank Nigeria. It also implies that an increase in liquidity, other independent variables remain constant increases the return on asset positively and significantly and insignificantly influence the return on equity of zenith bank. This is in line with the findings of Idowu & Ochuko (2015) and Ikpefan (2014). Expectedly, the findings of this study followed the argument of the agency theory that Post mergers and acquisitions brings about increase in efficiency on the part of management of the firms, which in turn would likely contribute positively to the profitability of the firms.

## 5.0 Conclusions and Recommendations

The study assessed post-merger and acquisition and the profitability of deposit money banks. The study was conducted using Return on assets and return on equity of the banks as proxies of profitability. Based on the results obtained from statistical analyses of the study data, it was concluded that post-merger and acquisition have significantly and positively impacted on the profitability of deposit money banks. This finding does not differ much from those of some prior studies carried out on the merger and acquisition and the profitability of bank. Post-merger and acquisition have met the popular expectations of enhancing the profitability of banks.

The study therefore, recommends that the regulators of banking sectors should in the subsequent reform efforts be made to maintain adequate level of liquidity and capital bases which will subsequently enhance the profitability of banks.

Furthermore, the study on post-merger and acquisition and the profitability of banks needs to be carried out in Nigeria again because some factors which might have affected the bank's capital, liquidity and its profitability occurred in Nigeria; the implementation of treasury single account (TSA) and the devaluation of naira.

## References

- Anderibom, A. S., & Obute, C. O. (2015). The Effects of Mergers and Acquisitions on the Performance of Commercial Banks in Nigeria. *International Journal of Education and Research*, 3(4), 93-112.
- Arshad, A. (2012). Post merger performance analysis of standard chartered bank Pakistan. *Interdisciplinary Journal of Contemporary Research in Business*, 4(6), 164-173.
- Athanasoglou, P. P., Brissimis, S. N., & Delis, M. D. (2005). Bank-Specific, Industry-Specific and Macroeconomic Determinants of Bank Profitability. Bank of Greece Working Paper 25. From [http://www.bankofgreece.gr/BogEkdoseis/Paper200525.pdf\\_ENREF\\_20](http://www.bankofgreece.gr/BogEkdoseis/Paper200525.pdf_ENREF_20)
- Badredira, A., & Kalhoefer, C. (2009). The effect of mergers and acquisitions on bank performance in Egypt. In G. U. i. Cairo (Ed.), *Faculty of Management Technology*. Working Paper Series No.18.
- Berger, A. (1995). The relationship between capital and earnings in banking. *Journal of Money, Credit and Banking*, 27, 432-456.
- Dang, U. (2011). The CAMEL Rating System in Banking Supervision: a Case Study of Arcada University of Applied Sciences. *International Business 1(1)*, 20-34.
- Dimitrios, M., Nikolaos, T., & Efstathios, D. (2009). The Effect of Mergers and Acquisitions on the Performance of Companies – The Greek Case of Ioniki-Laiki Bank and Pisteos Bank *European Research Studies*, XII(2).
- Enyi, P. E. (n d). *Banks Consolidation In Nigeria: A Synergistic Harvest*. Department of Accountancy. Ebonyi state University. Abakaliki.
- Ezekiel, N. (2016). Possible mergers and takeovers that can save troubled Nigerian banks. *Financial watch*.
- Fitzgerald, D. (1984). *Banker A & A: Element of Banking*. Financial Training Publication Ltd, London.
- Ikpefan, O. A. (2012). Bank Capitalization And Performance In Nigerian Banking Industry (1986-2006): Empirical Evidence. *European Journal of Accounting Auditing and Finance Research*, 1(4), 12-34.
- Imeokparia, L. (2014). Post Merger and Acquisition and Performance of Deposit Money Banks in Nigeria. *IOSR Journal of Business and Management (IOSR-JBM)*, 16(5), 18-25.
- Jensen, M., C, & Meckling, W. H. (1976). theory of the firm: managerial behavior, agency costs and ownership structure. *journal of financial economics*, 3(4), 305-360. doi: 10.1016/0304-405X(76)90026-X
- Joshua, A. (2015). *Why Commercial Banks Could Merge in 2016-CBN, Post Nigeria*. blackboy technology.
- Kurfi, A. K. (2006). *Principles Of Finance Management (First ed.)*. Benchmark Publishers Limited. Kano, Nigeria.
- Lang, L., Stulz, R., Walkling, R., & . (1991). A test

- of the free cash flow hypothesis: the case of bidder returns. *Journal of Financial Economics*, 60, 29(2), 315-335.
- Mamatzakis, E., & Remoundos, P. (2003). Determinants of greek commercial banks, 1989-2000. *spoudai*, 53(1), 84-94.
- Odetayo, T. A., Sajuyigbe, A. S., & Olowe, S. O. (2013). Empirical Analysis of the Impact of Post-Merger on Nigerian Banks Profitability *Research Journal of Finance and Accounting*, 4(17).
- Ommeren, S. V. (2011). *An Examination of the Determinants of Banks' Profitability in the European Banking Sector*. MSc. thesis. Department of Accounting and Finance. Erasmus School of Economics Erasmus University, Rocerdam.
- Onaolapo, A. A., & Ajala, O. A. (2014). Effects of merger and acquisition on the performance of selected Commercial Banks in Nigeria. *International Journal of Business and Social Research*, 2(7).
- Osamwonyi, O. (2003). Mergers and Acquisitions: The Anatomy and the Nigerian Case” *Accounting: The Nigerian Perspective*.
- Soludo, C. C. (2004). Consolidating the Nigerian Banking Industry to Meet the Development Challenges of the 21st Century.
- Tesfaye, B. L. (2014). The Determinants of Ethiopian Commercial Banks Performance *European Journal of Business and Management*, 6(14).
- Tomola, M. O. (2013). Determinants Of Banks' Profitability In A Developing Economy: Evidence From Nigeria. *Organizations And Markets In Emergi Ng Economies*, 4(2(2)).
- Vincent, O. O., & Gemechu, B. K. (2013b). Determinants of Financial Performance of Commercial Banks in Kenya. *International Journal of Economics and Financial Issues*, 3(1), 237-252.