The Effects of Mergers and Acquisitions on the Performance of Nigerian Banks

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ABSTRACT
The central theme of this study is mergers and acquisitions of Nigerian banks. The study is aimed at examining whether the banks cost of equity capital is independent on value of shareholders’ funds. The objective is to investigate, if profit before interest/tax is independent of banks assets, value of shareholders’ funds/bank loans, advances, value of deposits received by the bank and period of bank mergers and acquisitions and to examine whether there is significant relationship between deposits, loans, advances and profit before tax. The population of this study is all the Banks in Nigeria that went through the process of mergers and acquisitions. Simple random sampling technique was used to select five (5) Banks that succeeded the process, Skye Bank PLC, United Bank for Africa PLC, Union Bank PLC, First City Monument Bank PLC and Sterling Bank PLC. Secondary data was employed. The data were analyzed using panel regression technique and we found that mergers and acquisitions affect banks performance but does not affect bank’s cost of equity capital. Findings are that as a result of the recapitalization of the banks, the banks now have greater ability to mobilize fund and grant more loans especially to the real sector of the economy to enhance economic growth and development. In conclusion, the study discovered that mergers and acquisitions affect the banks and their overall performance. Recommendations were made based on the conclusion arrived at from the research work.

Keywords: Mergers, Acquisitions, Performance, Nigeria Banks.

INTRODUCTION
Over two decades, because of globalization, liberalization, industrial developments and extremely competitive business environment, mergers and acquisitions have become popular all over the world. Mergers, Acquisitions and other types of strategic alliances are on the agenda of many industrial groups intending to have an edge over competitors. Mergers and Acquisitions especially in the banking industry is now a global phenomenon. There have been over 7,000 cases of bank mergers in the United States of American since 1980, while the trend occurred in the United Kingdom and other European countries. Specifically, in 1997-1998, 203 banks merger and acquisitions took place in the Euro area. France resulted in a new bank with a capital base of US $688 billion in 1998, while the merger of two banks in Germany in the same year created the second largest bank in Germany with a capital base of US $541 billion (Ikpefan, 2012). According to Soludo (2006), in Nigeria, the banking sector has undergone the consolidation exercise, which was only aimed at re-capitalizing the banks and increasing banks capital base but has had little or no significant impact because there are still weak banks as a result of huge non-performing loans.

The financial deregulation in Nigeria that started in 1987 subsequent to the adoption of the now abandoned Structural Adjustment Programme (SAP) in 1986 generated a high and healthy degree of competition in the banking sector. This was because the financial deregulation provided incentives for the expansion of banks in terms of individual size and number of banks in operations. However, the increased competition in the financial sector in general and the banking sub-sector in particular, amidst political instabilities and financial inconsistencies on the part of the financial regulators, led to rapid decline in profitability of the traditional banking activities (Ikpefan, 2012).
Aregbeyen and Olufemi (2011), opined that to survive and maintain adequate profit level in the political and policy instability in the Nigerian economy, banks allowed excessive risks and this resulted in frequent bank failures and related financial shocks in the economy. In its effort to prevent bank failures, on July 6, 2004, the Central Bank of Nigeria (CBN) announced a major reform program that would transform the banking landscape of Nigeria. The main thrust of the reform program was the prescription of a minimum shareholders’ fund of N25 billion for all Nigerian banks in 2005. The banks were also encouraged to enter into merger/acquisition arrangements with other relatively smaller banks thus taking the advantage of economies of scale to reduce cost of doing business and enhance their competitiveness locally and internationally (CBN, 2005).

A merger is a situation where two or more companies combine together to form a larger business organization while acquisition on the other hand involves the purchase of controlling shares in another company. The target company becomes either a division or subsidiary of the acquiring company. The importance of the adequate capital in banking cannot be overemphasized. Thus, increasing the capital base of banks is aimed at increasing customers’ confidence in the banking sector. It is also expected to lead to increase in profitability and higher returns for the shareholders. The years 2001-2004 are referred to as pre-consolidation period and 2005-2014 as post-consolidation period for the purpose of this study.

Statement of Problems

Due to the devaluation of Nigerian currency and skyrocketing inflation rate, many banks could not stand or sustain harsh economic situation which gives rise to mergers and acquisitions. The increasing rate of customers demand and ever increasing technological advancement of which banks can hardly stand alone but to merge so as to remain competitive in the market environment. There has been the problem of inefficiency of the capital market on its operators to give way for mergers and acquisition activity. Insolvency is necessitated by negative capital adequacy ratio and shareholders’ funds that had been completely eroded by operating losses, late publication and misrepresentation of annual reports and accounts.

This research is guided by the main objective which is to examine whether the banks cost of equity capital is independent on value of shareholders’ funds. The specific objectives are to investigate, if profit before interest/tax is independent of bank assets value of shareholders’ funds/ bank loans/advances, value of deposits received by the bank and period of bank mergers and acquisitions and to examine whether there is significant relationship between deposits, loan/advance and profit before tax.

Research Hypothesis:

The three hypotheses to be tested are in their null forms:

- \( H_0: \) Banks cost of equity capital is independent on value of shareholders’ fund.
- \( H_0: \) Profit before interest/tax is independent of bank assets, value of shareholders’ funds/ bank loans/advances, value of deposits received by the bank and period of bank mergers and acquisitions.
- \( H_0: \) Profit before interest/tax is independent of bank loans/Advances, value of deposits received by the banks.

LITERATURE REVIEW

Mergers and Acquisitions

Owokalade (2006) describes merger as a form of business combination whereby two or more companies join together to one; being voluntarily liquidated by having its interest taken over by the other and its shareholders becoming shareholders in the other enlarged company. For example, in the 1999 merger of Glaxo Wellcome and Smithkline Beecham, both firms ceased to exist when they merged, and a new company, Glaxo Smithkline, was created. An acquisition on the other hand is the purchase of one organization by another. A merger is just one type of acquisition. (Alao, 2010, Dubey, 2007). Such actions can be hostile or friendly and the acquirer maintains control over the acquired firm. Mergers and acquisitions differ from a consolidation, which is a business combination where two or more companies join to form an entirely new company. All of the combining companies are dissolved and only the new entity continues to operate (Okonkwo, 2004). The two companies combine their operations and gains strength in terms of improved performance, increased capital and
enhanced profits. This kind substantially reduces the number of competitors in the segment and gives a higher edge over competition (Geln, 2011; Okonkwo, 2004).

Acquisition on the other hand, takes place where a company takes over the controlling shareholding interest of another company. Usually, at the end of the process, there exist two separate entities or companies. The target company becomes either a division or a subsidiary of the acquiring company (Pandey, 1999:885). While consolidation involves merger and acquisition of banks convergence involves the consolidation of banking and other types of financial services like securities and insurance.

Anecdotal evidence indicates that the commonest form of merger and acquisitions found in the financial services industry involves domestic firms competing in the same segment (for instance, bank to bank). The second most common type of merger and acquisition transactions involves domestic firms in different segments (e.g. bank-insurance firms). According to Mangold and Lippok (2008), cross-border merger and acquisition are less frequent, particularly those involving firms in different industry segments.

Mergers and Acquisitions Research Paradigms

There are different study of mergers and acquisitions. Several researchers have given different perspectives of mergers and acquisitions. These mergers and acquisitions paradigms include: economic and finance; strategy; organizational behaviour and human resource management perspectives (Denis and McConnel, 2003; Fianagan and O’Shaughnessy, 2003; Ramaswamy and Waeglelein, 2002; Marks and Mirvin, 2001; Buono, 2003; Millward and Kyriakidou, 2004).

The economic and finance paradigm is primarily interested in the efficiency impact of mergers and acquisitions on the economy through economies of scale and market power with emphasis on market for corporate control. One of the key arguments of the market for corporate control paradigm is that economic value created through acquisition activities is decided by market characteristics including its competitiveness (Denis and McConnel, 2003). Researchers using the strategy paradigm see mergers and acquisitions as a means of corporate growth and diversification, primarily emphasizing factors that are management controlled such as diversification strategies as a crucial factor in determining post-acquisition performance (Marks and Mirvin, 2001). Organizational behaviour researchers are interested in post integration process emphasizing both cultural clash and conflict resolution (Buono, 2003). The primary interests in human resource management perspective are the psychological effects of mergers and acquisitions on individuals such as feelings of tension, alienation and uncertainty.

Concept of Nigerian Banks

In Nigeria, the banking industry has gone through different stages and phases ranging from ‘changeovers’, ‘takeovers’ and ‘buysouts’ since 1892 and these are with their peculiarities.

a) First Stage: The Embryonic Phase the African Banking Corporation with its headquarter in South Africa pioneered the Nigerian banking system in 1892 followed by the British Bank for West Africa (now First Bank of Nigeria Plc) in 1894 while Barclays Bank D.C.O. (now Union Bank of Nigeria Plc) and the British and French Bank (now United Bank for Africa Plc) were established in 1925 and 1949 respectively (Danjuma, 1993; Ebhodaghe, 1990; Ibru, 2006).

The story of indigenous banking in Nigerian began with the establishment of the National Bank of Nigeria Limited in February 1933 and the Agbonmagbe Bank Limited (now Wema Bank Plc) in 1945 as well as the African Development Bank Limited, which later became African Continental Bank Plc in 1948. The establishment of these indigenous banks ushered in the era that saw the constant monopoly erstwhile enjoyed by the foreign owned banks challenged (CBN, 2008; Ebhodaghe, 1990).

b) Second Stage: The Expansion Phase the chain in Banking Scheme in 1977, Peoples’ Bank in 1989, and Community Banks (now Microfinance Banks) in 1990 to encourage community development associations, cooperative societies, farmers’ groups, patriotic unions, trade groups, and other local organizations, especially in rural areas to imibe formal banking methods. Between 1985 and 1991, banks sprout from 40 to 120 (Agbaje, 2008; Bichi, 1996; Ebhodaghe, 1990, 1995; Mordi 2004) due to the liberalization of the banking sector.

c) Third Stage: The Consolidation/Reform Stage the phase started on January 1, 2006 when the Nigerian eighty nine (89) banks shrunk to twenty five (25). The consolidation exercise then required banks to raise their minimum capital base from N2 billion to N25 billion, with December
31, 2005 as deadline (See table 2). This increase representing about 1,150% was to amongst other things encourage the consolidation of the banking sector to produce mega-banks from the then existing 89 banks as most of them were just fringe players and financially unsound (Soludo, 2008). Other financial institutions included government-owned specialized development banks: the Nigerian Industrial Development Bank, the Nigerian Bank for Commerce and Industry, and the Nigerian Agricultural Bank, as well as the Federal Savings Banks and the Federal Mortgage Bank. Also active in Nigeria were numerous insurance companies, pension funds, and finance as well as leasing companies.

d) Fourth Stage: This research is clamoring and calling for the fourth stage of only three banks; one of which will be indigenous while the rest two should come through Foreign Bank Penetration, FBP from the United States and Europe respectively.

Concept of Performance
Merger and acquisition or any other form of consolidation may influence bank interest rates, competition and transmission mechanism of monetary policy in so far as the increase in size and the opportunity for reorganization involved may either provide gains in efficiency that bear on marginal costs or give rise to increase in market power, or both together. Gains in efficiency would be obtained in moving on to greater scale of activity (if there are economies of scale).

Since the essence of any reforms is to bring greater efficiency not only in the operation but also their contributory role to the overall economy, then it is important to also raise the issues whether the recent mergers and acquisitions have really impacted positively on both credit allocation and saving mobilization through reduced cost of borrowing and increased returns on savings.

Whether or not bank mergers actually achieve these expected performance gains still remain critically an empirical question. If consolidation does, in fact lead to gains, then shareholder wealth can be increased. On the other hand, if consolidating entities do not lead to the promised positive effects, then mergers may lead to a less profitable and valuable banking industry. Mergers and Acquisitions are commonplace in developing countries of the world but are just becoming prominent in Nigeria especially in the banking industry.

Umoren (2007) posits that merger and acquisition is simply another way of saying survival of the fittest that is to say a bigger, more efficient, better-capitalized, more skilled industry. It is primarily driven by business motives and/or market forces and regulatory interventions. The issues therefore, which this study intend to address are whether merger and acquisition will bring about efficient and reliable capital base for the bank that fully embraced mergers and to what extent can bank merger boost the confidence of the customers, the investors, the shareholders and ability to finance the real sector of the economy.

Mergers and Acquisition Activities in Banking Industry: The Nigerian Explanation
The Nigerian Banking industry has gone through a lot of transformations as regards mergers and acquisitions. Prior to the mergers and acquisitions wave of 2004 and 2005, the acquisition of African Banking Corporation in 1894 by The British Bank for West for African (now First Bank of Nigeria Plc) and Union Bank of Nigeria’s acquisition of Citi Trust Merchant Bank for ₦167.75 million in 1995 were the major bank merger and acquisitions in Nigeria between July 6, 2004 and December 31, 2005, the number of banks in Nigeria reduced from 89 – 25 courtesy of mergers and acquisitions and forced withdrawal of banking license from institutions that were unable to achieve the new paid-up capital of ₦25 billion. The wave of mergers and acquisitions that began 2004 has not abated as the merger between IBTC Chartered Bank Plc and Stanbic Bank of Nigeria Limited after the December 31, 2005 deadline has further reduced the number of bank 25-24 while those banks that were unable to recapitalize which were earmarked for liquidation by the banking regulatory authorities have virtually been acquired by successfully recapitalized banks.

Issues and Challenges in Merger and Acquisition
The first experience of Merger and Acquisition wave in Nigeria took place during the banking consolidation programme of 2004/2005. The transactions were largely assisted by the Regulatory Authorities through the provision of technical support in form of advice. While the development is expected to resolve the problems of the intervened banks, there are obvious issues and challenges that should be addressed both by the Regulatory Authorities and operators in order to derive maximum
benefits from the outcome of the transactions. Some these issues and challenges are highlighted below.

The issue that arises in this regard is how quickly the merging entities are able to integrate into a formidable entity that can produce scope and scale economies in the payments system. It is however, worthy of note to indicate that since all affected banks are products of Merger and Acquisition of the recent consolidation programme, they will bring their experience to bear in this regard. The Regulatory Authorities should, however, pay close attention to the integration process with a view to quickly detecting problems when they occur and proffering remedies to such problems.

**Theoretical framework**

**Bank Concentration Theories**

Concentration refers to the degree of control of economic activity by large firms Sathye, (2002). Increase in concentration levels could be due to considerable size enlargement of the dominant firm(s) and or considerable size reduction of the non-dominant firm(s). Conversely, reduction in concentration levels could be due to considerable size reduction of the dominant firm(s) and or considerable size enlargement of the non-dominant firm(s) Athanasoglou et al., (2000).

**Pro-Concentration Theories**

Proponents of banking sector concentration argue that economies of scale drive bank mergers and acquisitions (increasing concentration), so that increased concentration goes hand-in-hand with efficiency improvements Demirguc-Kunt and Levine, (2000).

To buttress this point, Boyd and Runkle (1993) examined 122 U.S. bank holding companies and found an inverse relationship between size and the volatility of asset returns. However, these findings are based on situations in which the consolidations were voluntary, unlike the case with the concluded banks consolidation exercise in Nigeria. Some theoretical arguments and country comparisons suggest that a less concentrated banking sector with many small banks is more prone to financial crises than a concentrated banking sector with a few large banks. This is partly because reduced concentration in a banking market results in increased competition among banks and vice-versa. Proponents of this ‘concentration-stability’ view argue that larger banks con diversity better so that banking systems characterized by a few large banks will be tend to be less fragile than banking systems with many small banks.

**Empirical Review**

The studies on the banks mergers and acquisitions and banks performance provided mixed evidence and many failed to show a clear relationship between mergers and acquisitions and performance. Many researchers (Joshua, 2010; Olagunj and Obademi, 2012, Elumilade, 2010; Onikoyi, 2010 and Omah, Okolie and Durowoju, 2013; Cabral et al. 2002; Carletti et al (2002) agreed that banking organizations significantly improved their profit efficiency ranking after mergers and they agreed that mergers and acquisitions has helped Nigerian banks to wax stronger. The studies of Carletti et al. (2002) and Szapary (2001) provided the foundation for a research on the linkage between banks mergers and acquisitions and profitability. Joshua, (2010) discovered that the post-merger and acquisitions period was more financially efficient than the pre-merger and acquisitions period. Olagunj and Obademi, (2012) also found that there is significant relationship between pre and post mergers and acquisitions capital base of commercial banks level of profitability. Walter and Uche (2005) posited that mergers and acquisitions made Nigerian banks more efficient. They used descriptive statistical tools like simple percentage to present their data analysis. Elumilade, (2010) also agreed that mergers and acquisitions had improved competitiveness and efficiency of the borrowing and lending operations of Nigeria banking industry. Evidence as provided by Caprion (1993) Calomiris and Karenski (1996), and De-Nicolo (2003) suggested that mergers and acquisitions in the financial system could impact positively on the efficiency of most banks. Akpan (2007), using chi square to test his stated hypothesis found that the policy of consolidation and capitalization has ensured customers’ confidence in the Nigerian banking industry in term of high profit.

However, Owolabi and Ogunlalu, (2013) have contrary view, they discovered that it is not all the time that consolidation transforms into good financial performance of bank and it is not only capital that makes for good performance of banks. DeLong and Deyoung, (2007) and Amel et al., (2004) also found that mergers and acquisitions have not had a positive influence on banks performance in term
of efficiency. While Beitel et al. (2003) found no gain effect due to mergers and acquisition in banking industry, as cited by Odetayo et al (2013). Banks that are unable to show financial stability through their balance sheets are likely to perish in an increasingly competitive industry as amplified by Shiratori (2002); Okazaki and Sawada (2003) as cited in Somoye 2008. Shih (2003) points out the possibility that credit risk could increase in the event of a sound bank merging with an unsound one. Also, most empirical literature suggests that bank consolidations do not significantly improve the performance and efficiency of the participant banks (Berger et al 1999). They concluded that if a voluntary consolidation does not enhance the performance of the participating banks, any performance enhancing effect of the consolidation promoted by the government policy is more questionable (Somoye, 2008).

METHODOLOGY
The study made use of the descriptive analysis which includes time series and cross-sectional data analysis. Exploratory research design is adopted for this study which includes literature review, sourcing of relevant information from professional journals, magazines, annual reports and accounts, government and professional publications, textbooks and others.

Model Specification
The models for this study is stated below

Model One

\[ Y = \beta_0 + \beta_1 x + \mu \] equation ....................................... (i)

Where;

\( Y \) = Bank’s cost of equity capital (Dependent Variable)

\( X \) = Mergers and Acquisitions

\( \beta \) = Coefficient of mergers and acquisitions

\( \mu \) = Error term

Explicitly, equation (i) can be defined as;

Bank’s cost of equity capital (Bcoc) = f (mergers)+ c eqn. ……………(ii)

Representing eqn. (ii) with the variables of the construct, the equation below is formulated with inclusion of a control variable dummy. The dummy variable was included because it would aid in the understanding of the effect of M & A in explaining the level of performance obtainable. Furthermore, the inclusion of the control would enhance a better predictability and analysis of the relationship existing between the two constructs (M & As and cost of equity capital). Therefore, Bcoc = f (SHF, DMERGER). The relationship between Return on Equity and Shareholders’ funds can be written in linear form as:

\[ \text{ROE} = \beta_0 + \beta_1 \text{SHF} + \beta_2 \text{DMERGER} + \mu \] equation……………… (iii)

Where,

\( \text{ROE} \) = Return on Equity (Profit after Tax/Total Equity)

\( \text{SHF} \) = Value of shareholders’ funds

\( \text{DMERGER} \) = Variable to capture the period of bank mergers and acquisitions

\( \beta_1 + \beta_2 \) are the unknown parameters. Our apriori expectation is stated below:

\( \beta_1 > 0, \beta_2 > 0 \)

Model Two
Considering the second hypothesis of this study, a second model will be constructed. Thus,

\[ \text{BPERF} (PBIT) = F (\text{ASST}, \text{SHF}, \text{LOA}, \text{DEP}, \text{DMERGER}). \] The relationship between Profit before Interest and Tax (PBIT), Bank Asset, bank Loan, Bank Deposit and Shareholders’ funds can be written in linear form

\[ \text{PBIT} = \beta_0 + \beta_1 \text{ASST} + \beta_2 \text{SHF} + \beta_3 \text{LOA} + \beta_4 \text{DEP} + \beta_5 \text{DMERGER} + \mu \] equation........ (iv)

Where;

\( \text{BPERF} = \text{PBIT} \) (Profit before interest and tax)

\( \text{ASST} = \text{Bank Assets} \)

\( \text{SHF} = \text{Value of shareholders’ funds} \)

\( \text{LOA} = \text{Bank loans and advances} \)

\( \text{DEP} = \text{Value of deposits received by the bank.} \)

\( \text{DMERGER} = \text{Variable to capture the period of bank mergers and acquisitions} \)
\[\beta_0, \beta_1, \beta_2, \beta_3, \beta_4 \text{ and } \beta_5 \text{ are the unknown parameters.}\]

On apriori, \(\beta_1 > 0, \beta_2 > 0, \beta_3 > 0, \beta_4 > 0, \beta_5 > 0\).

Our prior expectations about the relationship between M & As and bank performance is that M & As have no significant effect on the performance of banks also that there is no significant difference in banks mean cost of equity capital before mergers and the mean cost of equity after mergers.

**Model Three**

Considering the third hypothesis of this study, a third model will be constructed. Thus,

\[
PBT = \beta_0 + \beta_1 \text{ loan/Adv} + \text{Dep}
\]

\[
PBT = \text{Profit before tax}
\]

\[
ADV = \text{Loan/Advance}
\]

\[
\text{DEP} = \text{Deposit}
\]

Where \(\beta_1 > 0, \beta_2 > 0\)

**Analysis of Data**

In analyzing the data collected, the researcher will be using tables, regression analysis which is described by Akinbo, (2004) as concerned with the prediction of the value of dependent variable \(Y\) based on independent variables \(X_1, X_2, X_3 \ldots \ldots \ldots X_n\)

**DISCUSSION OF RESULTS**

This estimation was done using regression analysis. In the analysis, the period covered from 2001-2014 representing 2001-2005 as pre-merger and 2006-2014 as post-merger. The listed banks used are United Bank for Africa, Skye Bank Plc, Union Bank Plc, First City Monument Bank Plc and Sterling Bank Plc.

**Testing of Hypothesis I**

**Model 1**

Pre-Merger

**Regression**

<table>
<thead>
<tr>
<th>Variable Entered/Removed</th>
<th>Model 1 Variable Entered</th>
<th>Variable Removed</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>SHAREHOLDERS FUNDS</td>
<td>Enter</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. All requested variables entered
b. Dependent Variable: RETURN ON EQUITY

**Model Summary**

<table>
<thead>
<tr>
<th>model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.360a</td>
<td>.130</td>
<td>-.306</td>
<td>397.19813</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), SHAREHOLDERS FUNDS

**ANOVA**

<table>
<thead>
<tr>
<th>model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>46962.828</td>
<td>1</td>
<td>46962.828</td>
<td>.298</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>315532.713</td>
<td>2</td>
<td>157766.356</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>362495.540</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), SHAREHOLDERS FUNDS
b. Dependent Variable: RETURN ON EQUITY
Coefficients\textsuperscript{a}
\begin{tabular}{lcccc}
model & Unstandardized Coefficients & Standardized Coefficients & & \\
 & B & Std. Error & Beta & t & Sig. \\
\hline
1 (Constant) & 67.689 & 526.136 & .360 & 1.29 & .960 \\
SHAREHOLDERS & .006 & .011 & .360 & .546 & .656 \\
FUNDS & & & & & \\
\hline
\end{tabular}

a. Dependent Variable: RETURN ON EQUITY

Model 1
Post Merger
Regression

Variable Entered/Removed\textsuperscript{b}

\begin{tabular}{lcccc}
Model & Variable Entered & Variable Removed & Method & \\
1 & SHAREHOLDERS & FUNDS & Enter & \\
\hline
\end{tabular}

a. All requested variables entered
b. Dependent Variable: RETURN ON EQUITY

Model Summary

\begin{tabular}{lccccc}
model & R & R Square & Adjusted R Square & Std. Error of the Estimate & \\
1 & .383\textsuperscript{a} & .147 & -.024 & 641.77338 & \\
\hline
\end{tabular}

a. Predictors: (Constant), SHAREHOLDERS FUNDS

ANOVA

\begin{tabular}{lccccc}
model & Sum of Squares & df & Mean Square & F & Sig. \\
1 & Regression & 354881.316 & 1 & 354881.316 & .862 & .396\textsuperscript{a} \\
Residual & 2059365.372 & 5 & 411873.074 & & \\
Total & 2414246.689 & 6 & & & \\
\hline
\end{tabular}

a. Predictors: (Constant), SHAREHOLDERS FUNDS
b. Dependent Variable: RETURN ON EQUITY

Coefficients\textsuperscript{a}

\begin{tabular}{lcccc}
model & Unstandardized Coefficients & Standardized Coefficients & & \\
 & B & Std. Error & Beta & t & Sig. \\
\hline
1 (Constant) & 1117.174 & 433.252 & -.383 & 2.579 & .050 \\
SHAREHOLDERS & -.007 & .007 & -.383 & -.928 & .396 \\
FUNDS & & & & & \\
\hline
\end{tabular}

a. Dependent Variable: RETURN ON EQUITY
To test this hypothesis, regression model was used with the dependent variable, Return on Equity and
the independent variable (Predictor Variable) been shareholders fund. The test was carried out at 5%
(\( \alpha = 0.05 \)) level of significance.

Also, three models were derived for this hypothesis in order to examine the contribution of
shareholders fund to Return on Equity during pre and post merger period.

During the pre-merger regime, the analysis shows weak positive relationship between shareholders
fund and Return on Equity accounted for by shareholders fund. The adjusted R Square is -0.306
having standard error of – the estimate of 397.19813. Moreover, the sum of squares regression and
residual are 46962.828 and 315532.713 respectively with mean square of 46962.828 and 157766.356.
The F-value is 0.298 with P-value of 0.640.

The model is:
Return on Equity = 67.689 + 0.006 shareholders fund.
The standard error for the slope is 526.136 and that of the shareholders fund is 0.011 with t-value of
0.546 and p-value of 0.640.
However, since the model p-value from the ANOVA table is greater than 0.05. It implies that the
model is not adequate in establishing the relationship between Return on Equity and shareholders
fund. This may be as a result of shortage in the number of years used or there is need to include more
variables.

But the result from the model means, a unit increase in shareholders fund will cause 0.006 unit
increases in Return on Equity. Also, if shareholders’ funds should remain constant, the Return on
Equity will be 67.689 (₦’000,000).

However, looking at the post merger regime, there is also a weak positive relationship between
shareholders fund and Return on Equity (0.383) with 14.7% change in return on equity caused by
shareholders fund. The adjusted R-square is -0.024 and standard error of the estimate of 641.77338.

The coefficient table gives the model to be:
Return on Equity = 117.174 – 0.007 sharehol
However, since the p-value is greater than 0.05, it implies that the model is not significant.

As a result of this analysis, it is discovered that the model derived is not adequate in relating the
variables under consideration. However it is observed that shareholders fund is contributing positively
to Return on Equity during the pre-merger while it is contributing negatively (causing decrease) to
Return on Equity during post-merger.

Therefore, since p-value for the analysis is greater than 0.05, the null hypothesis is accepted. We then
conclude that banks cost of equity capital is independent on value of shareholders’ funds.

Testing of Hypothesis II
Model 2
Pre Merger
Regression

<table>
<thead>
<tr>
<th>Model</th>
<th>Variable Entered</th>
<th>Variable Removed</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ASSETS, SHAREHOLDERS FUNDS</td>
<td></td>
<td>Enter</td>
</tr>
</tbody>
</table>

a. All requested variables entered

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>model</td>
<td>R</td>
</tr>
<tr>
<td>1</td>
<td>.999</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), ASSETS, SHAREHOLDERS FUNDS
### ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>361024.656</td>
<td>2</td>
<td>180512.328</td>
<td>170.601</td>
<td>.054a</td>
</tr>
<tr>
<td>Residual</td>
<td>1058.094</td>
<td>1</td>
<td>1058.094</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>362082.750</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), ASSETS, SHAREHOLDERS FUNDS  
b. Dependent Variable: PROFIT BEFORE TAX

### Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>-957.561</td>
<td>90.956</td>
<td>-10.528</td>
</tr>
<tr>
<td>SHAREHOLDERS</td>
<td>-.017</td>
<td>.003</td>
<td>-1.038</td>
</tr>
<tr>
<td>FUNDS ASSETS</td>
<td>.007</td>
<td>.001</td>
<td>1.932</td>
</tr>
</tbody>
</table>

a. Dependent Variable: PROFIT BEFORE TAX

### Model 2  
**Post Merger Regression**

#### Variable Entered/Removed

<table>
<thead>
<tr>
<th>Model</th>
<th>Variable Entered</th>
<th>Variable Removed</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ASSETS, SHAREHOLDERS FUNDS</td>
<td>Enter</td>
<td></td>
</tr>
</tbody>
</table>

a. All requested variables entered

#### Model Summary

<table>
<thead>
<tr>
<th>model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.647a</td>
<td>.418</td>
<td>.127</td>
<td>28752.7724</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), ASSETS, SHAREHOLDERS FUNDS

### ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>2.375E9</td>
<td>2</td>
<td>1.188E9</td>
<td>1.437</td>
<td>.339a</td>
</tr>
<tr>
<td>Residual</td>
<td>3.307E9</td>
<td>4</td>
<td>8.267E8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>5.682E9</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), ASSETS, SHAREHOLDERS FUNDS  
b. Dependent Variable: PROFIT BEFORE TAX
Hypothesis two is looking at the effects of Assets, shareholders fund on Profit before tax during pre and post merger period. Though, there is a very strong positive relationship between joint effect of assets, shareholders funds on Profit before tax ($R = 0.999$) with $99.7\%$ variation in Profit before tax caused by the joint effect of assets and shareholder funds. Also, the adjusted $R^2$ and standard error of the estimate are $0.991$ and $32.5284$ respectively.

The model is:

$$PBT = -957.561 – 0.017 \text{SHAREHOLDERS FUND} + 0.007 \text{ASSETS}.$$  

The standard errors of estimate for the variables are $0.003$ and $0.001$ with $t$-values of $-5.979$ and $11.121$. The $p$-value is $0.106$ and $0.057$ respectively. The ANOVA table shows that the model is not significant with $F$-value of $170.601$ and $P$-value of $0.054$.

Also for post merger, there is positive relationship between Assets, Shareholders fund and profit before tax with only $41.8\%$ change in profit before tax caused by the joint effects of assets and shareholders fund.

The model is:

$$PBT = 30217.549 + 0.198 \text{SHAREHOLDERS FUND} + 0.653 \text{ASSETS}.$$  

The standard errors are $0.338$ and $0.477$ with $T$-values of $0.585$ and $1.368$ respectively. The $P$-value is greater than $0.05$, that is: $0.590$ and $0.243$.

The ANOVA table further indicates that the model is not adequate with $F$-value of $1.437$ and $P$-value of $0.339$.

From the model for pre merger, it is discovered that a unit increase in shareholders fund and assets will cause $0.017$ unit decrease and $0.007$ unit increase in profit before tax respectively. Also, Asset and Shareholders’ funds are contributing more to profit before tax. But, during post merger regime, it is noticed that a unit increase in shareholders fund with assets being constants will cause $0.198$ unit increase in profit before tax. Also, if shareholders’ funds remain constant, a unit increase in Asset will cause $0.653$ unit increase in profit before tax. However, despite huge effect of shareholders fund and assets to profit before tax during the post merger regime, it still account for little increase in profit before tax during post merger regime. These results are not significant and we accept the null hypothesis that; Profit before tax/interest is independent of bank assets, value of shareholders’ funds.

Testing of Hypothesis III

Model 3

Pre Merger

Regression

<table>
<thead>
<tr>
<th>Variable Entered/Removed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

a. All requested variables entered
Model Summary

<table>
<thead>
<tr>
<th>model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.378</td>
<td>.143</td>
<td>-1.572</td>
<td>557.1970</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), DEPOSITS, LOANS AND ADVANCES

ANOVA

<table>
<thead>
<tr>
<th>model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>51614.306</td>
<td>2</td>
<td>25807.153</td>
<td>.083</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>310468.444</td>
<td>1</td>
<td>310468.444</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>362082.750</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant),
b. Dependent Variable: PROFIT BEFORE TAX

Coefficients

<table>
<thead>
<tr>
<th>model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>545.965</td>
<td>882.040</td>
<td>.619</td>
</tr>
<tr>
<td>DEPOSITS, LOANS</td>
<td>.001</td>
<td>.006</td>
<td>.207</td>
</tr>
<tr>
<td>AND ADVANCES</td>
<td>-.001</td>
<td>.005</td>
<td>-.261</td>
</tr>
</tbody>
</table>

a. Dependent Variable: PROFIT BEFORE TAX

Model 3
Post Merger Regression

Variable Entered/Removed

<table>
<thead>
<tr>
<th>Model</th>
<th>Variable Entered</th>
<th>Variable Removed</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DEPOSITS, LOAN</td>
<td></td>
<td>Enter</td>
</tr>
<tr>
<td></td>
<td>AND ADVANCEa</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. All requested variables entered

Model Summary

<table>
<thead>
<tr>
<th>model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.486</td>
<td>.236</td>
<td>-.146</td>
<td>32948.0367</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), DEPOSITS, LOANS AND ADVANCES

ANOVA

<table>
<thead>
<tr>
<th>model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>1.340E9</td>
<td>2</td>
<td>6.700E8</td>
<td>.617</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>4.342E9</td>
<td>4</td>
<td>1.086E9</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>5.682E9</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), DEPOSITS, LOANS AND ADVANCES
b. Dependent Variable: PROFIT BEFORE TAX
For the pre-merger, the hypothesis is testing the relationship that exists between Profit before tax and Deposits, loan and advance. It is discovered from the model summary table that there is a weak positive relationship between profit before tax, deposit, loans and advances with 14.3% change/variation in profit before tax caused by the joint effect of deposits, loan and advance. The adjusted R-square is -1.572 and the standard error of the estimate is 557.1970.

The model derived is:

\[ \text{PBT} = 545.965 + 0.001 \text{LOAN/ADVANCE} – 0.001 \text{DEPOSIT}. \]

Though, none of the independent variable is significant with their P-value greater than 0.05. It implies that if loan/advance is made constant, a unit increase in deposit will cause 0.001 decreases in PBT while if deposit is made constant, loan/advance will cause 0.001 increases in PBT. Moreover, the ANOVA table shows the P-value of 0.926 with F-value of 0.083. This is an indication that the model is not adequate and not significant in relating the relationship between the variables under consideration. Hence, null hypothesis is accepted and we say that there is no significant relationship between deposits, loan/advance and profit before tax.

This hypothesis tends to test the relationship between profit before tax and the two independent variables, deposits, loans/advances after merger.

The analysis was carried out at 8% level of significance. The correlation coefficient (R = 0.486) shows weak positive relationship between profit before tax and joint effect of deposits and loans and advance. 23.6% change/variation in profit before tax is caused by the joint effect of deposits of loans and advance. The adjusted R-square is -0.146 with standard error of the estimate of 32948.036%

The model derived is:

\[ \text{PBT} = 144946.898 – 0.009 \text{LOAN/ADVANCE} – 0.915 \text{DEPOSITS}. \]

This result implies that a unit change in loan/advance with deposits constant will cause 0.009 decreases on profit before tax. Also, if loan/advance is kept constant, a unit change in the deposit will cause 0.915 unit decrease in PBT.

However, the standard error for the regression coefficients is 0.042 and 0.869 having T-values of negative -0.216 and -1.053. The two independent variables they are not significant with their P-values greater than 0.05; that is; 0.840 and 0.352. Also, looking at the ANOVA tables with sum of square regression and residual of 1.340E9 and 4.342E9 with mean squares of 6.700E8 and 1.086E9 respectively. The R-value is 0.617 and the P-value is 0.584 which is also greater than 0.000. This result implies that the model derived is not significant and not adequate in relating the dependent and the predictor variables together. Therefore, profit before interest/tax is independent of bank loans/advance, value of deposit received by the bank.

**Summary**

Mergers and acquisitions are global phenomenon that help organizations to be proactive and if properly planned and executed can give an organization a competitive edge over other firms in its line of business.

Mergers and acquisitions do not necessarily guarantee the success of a firm. The studies have shown mergers are not successful due to one reason or another. The Nigerian capitalization in 2005 that led to three banks being taken over by CBN in 2011 is a case in point.

There are a number of challenges faced by banks in the process of consolidation and for these challenges to be overcome there should be proper planning and sufficient time for the process.
As a result of the consolidation of the Nigerian banking industry, the banks have now been repositioned for the challenges posed by the economic development reform. For instance, the few banks left after the consolidation have recorded increase in profitability, asset base, shareholders’ funds as well as their deposit liability. Nigerian Banks now have a strong capital base as against what it was before consolidation when a large number of weak, small banks have to struggle for deposits and this has reduced the likelihood of bank distress and has restored the confidence of the public in the banks. As a result of the recapitalization of the banks, banks now have greater ability to mobilize funds and grant more loans especially to the real sector of the economy to enhance economic growth and development.

CONCLUSION
This study has reviewed the post-consolidation effect of mergers and acquisitions on Nigerian banks and from the study, it has been established that mergers and acquisitions affect the banks and their overall performance. It has also been noted that mergers and acquisitions require time and is not something that can be done in a hurry. The banks consolidation exercise of 2005 as supervised by the CBN has yielded benefits in terms of improved banking environment. Mergers and acquisitions have played a significant role in strengthening banks’ capital base as well as restoring confidence among the public and have consequently enhanced the development of the economy. However, it takes more than banks merging to ensure the soundness and stability of banks as recently confirmed by the five banks. The management of the banks should work towards sustaining and improving performance as well as the profitability of the bank.

RECOMMENDATIONS
Having carried out this research, the researcher would like to make the Hg recommendations:
1. Mergers should not be done out of desperation or necessity as was the case during the consolidation period but should be properly evaluated and carried out to ensure its success. The process and consideration should be weighed and it should be determined if that is the best option for the organization.
2. Banks should be innovative in the development and marketing of their products in order to increase their market share and performance and also enhance the competitiveness of the banking industry.
3. Mergers and acquisitions have associated risks that if not properly managed can lead to failure. Inability of managers to handle the complex task of integrating two firms with different processes, accounting methods, operating culture and mis-estimating of the value of the target firm by the buyer must be avoided. A strategically integrated acquisition programme should be put in place to ensure a successful merger and acquisition.

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