The Test of Synergy in a Policy Induced Consolidation of Selected Nigerian Banks

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Abstract

The 2005 banking sector reforms in Nigeria induced by the Central Bank of Nigeria (CBN) have resulted in merger waves in the banking sector. In order to increase their capital base to the required N25 million, many banks in Nigeria have witnessed significant merger and acquisition activities. It is often argued that merger of companies creates synergy. This study was conducted to test whether there was synergy in a policy induced consolidation of banks in Nigeria. It also examined the impact of strategic similarities in bank mergers on post-merger financial performance. The study used secondary data collected over a period of 2001 and 2010 from the published annual reports and the merger schemes of the sampled banks. As dependent variable, we measured change of performance as the difference between the merged banks' five-year average return on equity (ROE) and the weighted average of the ROE of the merging banks four years before the merger. Regression analysis, using pooled panel fixed effects and random effects estimation methods were executed to analyze the data. The results indicated that not all banks that have undergone deals of mergers or acquisitions have shown significant improvements in performance. That is the merger did not create the expected synergy. We therefore recommended that the regulatory authorities should in future weigh carefully the effects of a particular reforms policy before imposing it on banks

Keywords: *Mergers, Acquisitions, Consolidation, Synergy, Return on Equity.*

1.0 Introduction

The Central Bank of Nigeria (CBN) (2004), announced to the nation a major reform programme that transformed the banking landscape of the country. The initial stage of the reforms was planned to achieve a broadened, secured and dependable banking sector. This is to guarantee the safety of depositors' funds, play active developmental roles in the Nigerian economy and become capable and competitive players both in the African and global financial systems, while the second stage would involve furthering the emergence of regional and specialized

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banks (Okagbue & Aliko, as cited in Aburime, 2006).

However, the principal objective of the 13-point reform agenda as announced by Soludo (2006), centred on the minimum shareholders' fund of N25 billion for Nigerian deposit money banks not later than December 31, 2005. The banks were expected to increase their capital base by injecting new funds where practicable, but were mostly urged to enter into joint arrangements with other seemingly small banks, thus taking the advantage of economies of scale to minimise operating costs and improve their competitiveness in the local and foreign markets. The merging process in the banking industry ended on December 31, 2005. The programme has resulted in the shrinkage of the number of banks from 89 to 25 through mergers /acquisitions involving 74 banks, which accounted for about 93 per cent of the industry's total deposit liabilities while 15 out of the 89 banks were not able to make it (Atufe & Cookey, 2006). The policy induced consolidation set in motion in 2004 has greatly changed the face of Nigerian banking sector. With enhanced capital base, Nigerian banks were expected to have more funds to do business due to recapitalization which was expected to result into better performance. It is against this backdrop that this study examined the performance of selected Nigerian banks in the pre and post-merger and acquisition periods (2001-2010) with a view to identifying whether there was synergy in a policy- induced consolidation of banks in Nigeria. It also examined the impact of strategic similarities in bank mergers on post-merger financial performance.

Apart from the introduction, the paper was further divided into four other sections. Section two is the review of literature. Section three is on data and methodology of the study. The results and findings are presented in section four while the last section provides the conclusion.

2.0 Literature Review

Mergers and consolidation are two terms that are sometimes used interchangeably to describe business combination both in the banking industry as well as in other sectors of the economy. However, some authors have tried to bring out significant differences between the two terms. Block and Hirt (1992) explained that a business combination may take the form of either merger or consolidation. A merger is defined as a combination of two or more companies in which the resulting firm maintains the identity of the acquiring company while in consolidation, two or more companies are combined to form an entirely new entity. In the opinion of Gjirja (2004), a merger is a combination of two corporations in which only one corporation survives and the merged corporation goes out of existence, while a consolidation is a business combination whereby 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. Gjirja (2004), however, maintained that despite the departure between the two terms, mergers and consolidation are often substitutes for each other but the term consolidation applies when the firms involved are of the same size and market power, while merger is the more appropriate term when the firms involved vary significantly by size. Merger and acquisitions in the banking industry, though relatively new to the Nigerian financial landscape, has been a global phenomenon (Alao, 2010). While mergers and acquisitions have been a recurrent issue in the financial service sector in the recent years, the banking sector has emerged as the playground for most of these transactions. (Rose & Hudgins, 2008).

Consolidation in the banking industry in the United State (US), which dated back to the 1980s and 1990s, was an epochal and ongoing event. During this period, more mergers occurred in the banking industry than in any other industry. What accounted for this new wave was the liberalization of state geographic restrictions on branching and branch holding company acquisitions in which the new state laws allowed banks and bank holding companies to cross state lines. In 1994, the US congress passed the Riegel-Neal Interstate Banking Act which permitted holding companies to reach for bank acquisition nationwide and the Gramm-Leach – Bliley Act of 1999 which opened wide arena for bank-non-bank financial service combinations thereby removing the last barriers between commercial banking, investment banking, merchant banking and insurance activities. The consequence of this was the shrinkage of the number of banks while larger banks spanning over wider geographic areas have become prevalent (Hempel, Simonson & Coleman, 1994; Gupta & Chevalier, 2004; Rose & Hudgins, 2008).

Like in the US, the European banking sector also witnessed a massive wave of merger and acquisition activities between 1993 and 2000 involving leading banks, insurance companies, securities firms and other service providers, though for different reasons. The merger wave seemed to have been triggered by deregulation of financial services in the European Union (EU) and the launch of Euro. In 1997, the process of merger culminated with the merger between the Swiss banks UBS and SBC, which has led to the creating of one of the largest banks in the world. (Gupta & Chevalier, 2004; Rose & Hudgins, 2008; Siam, 2009). However, both Gupta and Chevalier (2004) and Rose and Hudgins (2008) agreed that financial services mergers in Europe had slowed from time to time due to a slowing economy, cultural differences and regulation through which European governments were attempting to shield their home banks from acquisitions by foreigners. However, Altunbas and Ibanez (2004) believed that the process of banking integration seemed far from completed and is expected to continue reshaping the European financial landscape in the years to come.

The continent of Asia was not left out in the new wave of mergers and acquisition as Asia followed Europe with an increasing incidence of mergers involving mainly banks, insurers, and security firm. These corporate combinations were being pieced together in an effort to shore up credit quality problems, fend off the ravages of deflation and sluggish economies, and compete with powerful US and European banks expanding across the Asian landscape (Dymski, 2002; Viverita, 2008; Rose & Hudgins, 2008).

In the developing countries of the Middle East and some parts of African regions, until now, it has been quite rare to find research into bank mergers and acquisitions. This may be due to the protective regulations in these areas, which have limited the growth of the banking sector, and due to large public sector interference. Nevertheless, with increased liberalizations and economic reforms in some countries in the regions, more and more banks are engaging in expansionary activities including mergers and acquisitions (Badreldin & Kalhoefer, 2009).

The practice of business combination by way of merger or acquisition became evident in Nigeria first in 1982. Akamiokhor (1989) noted that only thirteen merger proposals had actually been handled by the Securities and Exchange Commission (SEC) between that year end and 1988. The first successful merger handled by the SEC was that between two public companies: A.G. Leventis and Company (Nigeria) Limited and Leventis Stores Limited which was effected in 1983. In the history of merger and acquisition in Nigeria, however, the celebrated merger case so far was the one between Lever Brothers Nigeria Limited (now Unilever Plc),(a public company), and Lipton Nigeria Limited,(a private company) in 1984.This showed that before the wave of banks consolidation of 2005, the merger game has been at its infancy in Nigeria, hence, the scope of Nigeria experience is therefore limited when compared to the level of such transactions in developed economies of Europe and America.

Apart from the liquidation of failed banks by the Nigerian Deposit Insurance Corporation (NDIC), and the recapitalization of banks in 2001, merging of banks in order to shore up capital has been rare in Nigeria until 2005 when the policy of bank consolidation was rolled out by the CBN. And since the completion of the exercise in 2005, some research works have been carried out with different results and viewpoints. For instance, Adegbaju and Olokoyo (2008), examined recapitalization and bank performance and found out that recapitalization of banks did not transform into good performance. They argued that bank recapitalization and conducive economic environment must go hand in hand in order for the banks to make good profits and deepen the financial structure of the economy.

Kolo (2007), on the other hand concluded that acquisitions and mergers not only brought about significant influence on shareholders wealth from the announcement of a merger, but also resulted in change management in the form of right-sizing, re-engineering, re-focusing, business re-inventions and made the banks to be multi-cultural, multi-market, multi-management and, in some cases, multi-national.

Viewing banks consolidation from the perspectives of its effects on the financial system, Ningi and Dutse (2008) explained that the consolidation of the banking system has transformed Nigeria's financial institutions and market participants. They opined that increase in competition by strong and big banks could facilitate the monetary policy transmission and support private sector growth. Emeni and Okafor (2008) focused on the effects banks mergers and acquisitions had on small business lending in Nigeria and confirmed that there is a positive relationship between small business lending and bank deposits such that the higher the bank deposits, the higher the proportion of the deposits that will be earmarked for small business investors.

While a great deal of earlier empirical studies examining bank consolidation in Nigeria and elsewhere focused on banks' post-consolidation efficiency (Odeleye, 2014), effects of consolidation on ROCE and ROE (Sheidu & Yusuf, 2015; Omah, Okolie & Durowoju, 2013), whether or not consolidation could avert financial distress (Yauri, Musa & Kaoje, 2012) and market efficiency and announcement effects of mergers and acquisitions on the stock prices (Dilshald, 2013) among other things, this research work examined the less explored area of the synergistic effects of bank consolidation.

3.0. Data and Methodology

Past studies investigating the effects of bank merger and acquisitions on performance tended to follow two main kinds of empirical methods. The first group compared pre – and post-merger and acquisition performance using financial and accounting data, while the second group used an event-study type methodology. In the latter case, the fluctuation in the prices of specific financial instruments around the time of the the announcement of the merger were analysed. (Badreldin & Kalhoefer, 2009; Altunbas & Ibanez, 2004). However, previous studies that have analyzed the stock performance of unsuccessful takeovers to determine if the equity increases in takeovers were from real economic gains or capital market inefficiencies could not distinguish between the real economic gains and the market inefficiency explanations. Also, stock price studies could not provide evidence on the sources of any merger-related gains (Healy, Palepu & Ruback, 1990).

The entity performance approach which investigates the merged companies before and after the merger and examines the changes in the analytical ratios development such as profitability, liquidity and leverage based on accounting data has been utilized frequently in bank merger studies Gjirja (2004). Consequently, this study also used the operating performance methodology in order to evaluate the synergistic effect of merger and acquisitions in the Nigerian banking sector.

4.0 Population, Sample Size and Sampling Technique

At the conclusion of the bank consolidation exercise on 31st December, 2005, only 25 banks remained out of the 74 banks that began the exercise. The population for the study comprised all the 25 remaining banks after the exercise. The sample consisted of two bank groups namely the UBA group comprising United Bank for Africa and Standard Trust Bank on the one hand, and the First Bank group comprising First Bank of Nigeria, FBN Merchant Bank and Merchant Banking Corporation (MBC) on the other hand. The samples were purposively selected to test the strategic similarities on performances between the consolidation of commercial banks and merchant banks on one hand and the old generation and new generation banks on the other hand. The merger of the UBA group involved an old generation bank and a new generation bank, which are all retail banks while that of First Bank group involved a commercial bank, and two merchant banks; a consolidation of retail and wholesale banks.

UBA Plc is one of Africa's best and most resilient banking Groups with operations in 19 African countries and offices in three global financial centres: London, Paris and New York. UBA has more than eight million customers and 700 business offices globally. The bank has been operating since 1949, referred to then as the British and French Bank Ltd (Wikipedia, 2016). UBA was the first Nigerian bank to be listed on the Nigerian Stock Exchange by way of IPO in 1970. In 2005, UBA merged with Standard Trust Bank Plc in advance of the reform-induced banking consolidation, the first successful merger in the Nigerian banking industry creating the current UBA Plc (Annual Report and Accounts, 2006).

First Bank of Nigeria is a Nigerian multinational bank and financial services headquartered in Lagos, Nigeria. It is the biggest bank in Nigeria by total deposits and gross earnings and operates a network of over 750 business locations across Africa, and the rest of the world. It majors in retail banking and has the largest client base in Nigeria. First Bank was founded in 1894 and is Nigeria's oldest bank with an active customer base of over 10 million and over 7000 staff (Wikipedia, 2016).

Standard Trust Bank (STB) Plc was incorporated as Crystal Bank of Africa Limited, on March 15, 1990 and commenced business as a commercial bank on June 4, 1990. On July 30, 1997, the bank was restructured following a change in ownership and management and its name was changed to Standard Trust Bank Limited. The bank became a public limited liability company on July 19, 2002 and successfully undertook an Initial Public Offer ("IPO") and listing of its entire issued share capital on the Nigerian Stock Exchange in March, 2004. The STB Plc story is generally regarded as one of the most successful turnaround stories in corporate Nigeria (Scheme of Merger, 2005).

MBC International Bank Plc was incorporated as Merchant Banking Corporation Nigeria Limited in 1982 by a group of distinguished Nigerians and Banque Paribas of France (now BNP Paribas). Today, the bank is a public company wholly owned and managed by Nigerian citizens. In 2000, the bank converted to a universal bank and was renamed MBC International Bank Plc. This new status opened up a variety of business opportunities in Retail and Consumer Banking, in addition to the bank's core business of Corporate and Investment Banking (Scheme of Merger, 2005).

FBN (Merchant Bankers) known for short, as FBNMB is a subsidiary of First Bank. It was incorporated on 28th October, 1983, but began banking business in 1990 with an initial authorised share capital of N25 Million. FBNMB was established to, among other things, take advantage of opportunities in the area of investment and wholesale banking, financial advisory services, syndicated funding and similar banking activities. Prior to the time of merger, FBNMB had a paid up share of N1.51 Billion as well as shareholders' funds of N2.83 Billion.

4.4 Model Specification

The empirical model tested by this study is specified below:

ROE = β0 + β1LIQ + β2COST + β3CAR + β4LTA + β5CRISK + β6DEA + β7OBS + β8LOAD + β9TECH + µI

Where:

ROE = Return on equity (post-merger) – weighted average return on equity (pre-merger)

LIQ = Liquidity

COST = Cost-income ratio

CAR = Capital-assets ratio

LTA = Loan - total assets

CRISK = Credit risk

DEA = Diversity earnings

OBS = Off-balance sheet

LOAD = Loan-deposits

TECH = Other expenses in services and technology

RESIZE = Relative size

µI = Error term

4.5 Measurement of Variables

Broadly building on the approaches by Altunbas and Ibanez (2004) and Awdeh and EL-Moussawi, (2011) for the banking sector, the study adopts a series of financial indicators to measure the synergistic effects of mergers in the Nigerian banking industry. These indicators comprised: asset and liability composition; capital structure; liquidity, risk exposure; profitability; financial innovation and efficiency as below:

Table 8.1 Definitions of Variables

DEFINITION	SYMBOL	FORMULA
Performance Change	Δ ROE	Return on equity (post-merger) - weighted
		Return on equity (pre-merger
Liquidity	LA/TD	Liquid asset/Total deposit
Cost-income ratio	COST/INC	Total Cost/Total revenues
Capital-assets ratio	CA/TA	Capital/Total assets
Loan-total assets	LOAN/TA	Net Loans/Total assets
Credit risk	BADL/INT_INC	Loan loss provision/Net interest revenues
Diversity earnings	OOR/TA	Other operational revenue/Total assets
Off-balance sheet	OBS/TA	Off balance sheet items/ Total assets
Loan to Deposits	LOANS/DEP	Customer loans/ customer deposits
Other expenses in services	TECH	Other Expenses/Total assets and Technology
Bidder performance	PREROE _ B	Return on equity of the bidder (pre-merger)
Relative size	RESIZE	Total asset of target/ Total asset of bidder

4.6 A Priori Expectation

Regarding the financial ratios, the following was exploited. As dependent variable, we measured change of performance as the difference between the consolidated banks' five years' average return on equity (ROE) after the consolidation and the weighted average of the ROE of the merging banks four years prior to the consolidation.

To measure strategic similarities of banks involved in mergers and acquisitions exercise, indicators relating to the strategic performance of the consolidated banks were obtained and calculated from individual banks' financial data.

First, the earnings diversification strategy refers to the emphasis on other sources of income apart from the conventional net interest revenues. These could be obtained from potential new revenues, diversification and access to financial innovation, possibilities of manufacturing new line of products and services. Maximization of non-interest revenue as a general strategy was evaluated using the ratio of other operational revenue to total assets (OOR/TA). The focus or exposure to off-balance sheet activities (OBS) was measured as the ratio of off-balance sheet activity to total assets (OBS/TA). At the outset, dissimilarities in non-interest income sources of revenues (OOR/TA) and in off-balance sheet activities exposure (OBS/TA) are both expected to enhance post-merger performance (ΔROE) as they could help spreading access to financial innovation and new sources of revenues.

Second, the strategy adopted as regards banks' asset quality profile, which refers to banks' credit risk stance, was measured as the ratio of the level of loan loss provisions and interest revenues. Banks' estimates of potential loan losses were included to measure the quality of assets via the ratio of loan loss provision to net interest revenues (LLP/IR). To consider the balance between loans and deposits, the ratio of total loans to total customer deposits (L/D) was considered. This ratio provided a proxy for the use of relatively low-cost deposits to the amount of loans. Also, banks' statement of financial position was measured by the ratio of net loans to total assets (NL/TA), which incorporated more of traditional and normally unhedged loan lending in terms of its weight on overall portfolio. In general, it can be argued that worsening post-merger performance may be expected when banks with very different asset quality and overall portfolio strategies merge. Since pursuing economies of scale and quickly integrating their cost base is an essential goal of a great deal of mergers, conflicts arising from managerial differences on important decisions, such as asset quality or the overall portfolio strategy structure, may be a hindrance to creating such synergies: the greater the difference among strategies, the lower the performance after merging is initially expected to be.

Third, a cost minimizing strategy which shows the emphasis to minimize cost by relating outflow to inflow was measured by the total cost-to- total income ratio (CIR). As a result of economies of scale and scope deriving from the combination of similar skills, a firm competing on the basis of low-cost and operating efficiency is expected to benefit from merging with another organization characterized by a set of similar competencies. Firms characterized by heterogeneous cost minimizing strategies, however, may show a drop in performance if they decide to merge. As a consequence, the cost to income ratio (CIR) is expected to be negatively correlated with overall performance (ROE).

Fourth, the capital adequacy levels, which show banks' strategy regarding their capital structure, were measured as the ratio of equity to total assets (CA/TA). From a prudential regulatory perspective, bank capital has become a focal point of bank regulation as the general trend is to introduce competition in banking and to check risk-taking with capital requirements and appropriate supervision.

Fifth, the liquidity risk strategy refers to banks' strategy towards managing liquidity risk measured by the ratio of liquid assets to customer and short-term funding (LIQ). As maintaining a generous liquidity ratio is expensive, different strategies according to which the merging banks can acquire better liquidity management would imply a better performance.

Finally, banks' strategy in terms of technology and innovation was measured as other costs (i.e. total costs excluding interest, staff and other overhead payments) as a proportion of total assets and were included to account for investment in technology and innovation (TECH). Dissimilarities in investments in technology among bidders and targets are expected to produce better performance as each of the merging partners may benefit from returns to scale and scope derived from the investments made by their merging counterpart.

A priori expectation of the study variables is presented below;

Variables	A Priori Expectation
LIQ	+
COST	-
CAR	+
LTA	-
CRISK	-
DEA	+
OBS	+
LOAD	-
TECH	-

4.7 Method of data Analysis

The financial features of targets and bidders were first identified considering the main characteristics regularly used by practitioners for analysing the financial performance of banks. Both descriptive and inferential statistics were used in analysing the data collected. To examine the pre- and post-merger performances of the merged banks, regression analysis using panel data, was used to test the synergistic effects resulting from the merger. Student-t inferential statistics was used in testing the differences in selected financial ratios while descriptive analysis such as mean, median and correlation analysis were also carried out.

5.0 Data presentation, Results and Findings.

Table 1 shows the descriptive statistics of study variables before merger. Performance indicator of merging banks measured as return on equity has a mean value of 30.74 with a minimum of 15.5 and a maximum of 55.14 for the sample period. The ratio of liquid asset to total deposits representing liquidity has a mean value of 88.51, a minimum of 46.98 and a maximum of 116.95. Cost to income ratio has a mean value of 99.79, minimum of 64.83 and a max of 170.32. Capital assets ratio was found to be 10.18 with a minimum and maximum of 4.82 and 17.27 respectively. Loan to total assets was found to be 27.31 with a minimum of 12.29 and 52.04 respectively. Credit risk measured as loan provision/ net interest revenue stood at 26.34 with a minimum of 0.03 and 174.99. Diversity earnings were 5.42 with a minimum of 2.84 and a maximum of 13.95. Off balance sheet value stood at 43.87, minimum of 4 and a maximum of 239.47. Loan to deposits was 38.86, a minimum of 17.36 and 69.57.

The results indicated that, cost to income ratio of the banks was highest; implying that banks total cost was higher than total revenue, signifying high level of inefficiency in the Nigeria banking sector prior to regulation. Diversity earnings and capital assets ratios were among the lowest during the period. The banking sector was also characterized by high volatility /instability in their loan loss provision. This was indicated by high standard deviation of credit risk in the sample period.

Table 1

Descriptive statistics of variables used in this study before merger

Variable	Mean	Std. Dev	Min	Max
ROE	30.7405	11.12504	15.5	55.14
LIQ	88.5145	17.65771	46.98	116.95
COST	99.79	31.72726	64.83	170.32
CAR	10.1795	3.501921	4.82	17.27
LTA	27.3135	9.108671	12.29	52.04
CRISK	26.34	40.23045	0.03	174.99
DEA	5.4191	3.317712	2.84	13.95
OBS	43. 873	64. 2465	4	239.47
LOAD	38.864	12.59529	17.36	69.57
TECH	9.889	3.256128	5.58	16.07

Source: Author's analysis, 2012

Table 2 shows the descriptive statistics of study variables after merger. Differences were observed in the descriptive value of the variables before and after merger. However, the descriptive statistics did not necessarily establish a causal relationship between the variables. The standard deviation which measures the level of variation or degree of dispersion of the variables from their mean revealed that the least stable (most volatile) of the variables from their mean is loan to deposit ratio (16.64), followed by liquidity (15.86) and cost to income ratio (15.79)

Table 2

Descriptive statistics of variables used in this study after merger

Variable	Mean	Std. Dev	Min	Max
ROE	19.9125	11.0894	6.02	36.44
LIQ	67.64	15.86347	46.6	88.12
COST	66.385	15.79401	42.08	82.04
CAR	12.81	5.372071	5.49	23.28
LTA	28.0775	8.179593	12.43	39.18
CRISK	14.09625	10.60757	3.48	32.3
DEA	2.97625	1.220889	0.49	4.34
OBS	31.305	9.790291	18.86	44.53
LOAD	41.78625	16.63827	14.41	65.61
TECH	4.85	2.071701	1.79	7.11

Source: Author's analysis, 2012

Table 3(Appendix 1) shows the correlation between study variables. The results showed that some variables exhibited high degree of correlation indicating a possibility of multicollinearity. Liquidity and loan to total asset have a negative but high correlation coefficient of -0.80. Similarly, loan to total asset is highly correlated (0.91) with loan to total asset. Also, off-balance sheet and diversity earnings have correlation coefficient of 0.85, an indication of possible colinearity. Other expenses in services and off-balance sheet exhibited a correlation coefficient of 0.65, loan to deposits and capital assets have correlation value of 0.60, other expenses and capital assets (0.61) while other expenses and diversity earning are also correlated with 0.65 value. Other variables exhibited moderate degree of association.

Table 4 (Appendix 2) shows the correlation between study variables after merger. The results also showed that some variables exhibited high degree of correlation. Cost-income ratio is highly correlated with relative size (0.8544) although a positive relationship implying direct relationship is implied. Cost-income ratio is also highly correlated with other expenses in services and technology (0.9511) at positive level. Capital-assets ratio is positive but highly correlated with Loan-deposits (0.88). Loan-total assets and Loan-deposits are also positive but exhibited correlation value of 0.81. Other variables employed in the study displayed considerable variations among banking firms. However, the descriptive statistics and correlation analysis indicated the association between the variables but they did not necessarily establish a causal relationship even with high coefficients.

5.1 Results of t-test of differences in selected financial ratios

Table 5 (Appendix 3) shows the results of t-test of differences in selected financial ratios during pre-merger and post-merger. The return on equity (ROE) of sampled commercial banks averaged 30.74 for all the banks before merging and 19.91 after merging of banks. The high ROE for banks before merging was higher than that for banks after merger and the difference is statistically significant at conventional levels of significance. This means that ROE did influence decision of banks to merge. Similarly, liquidity of banks before merger was found to be 88.51 and significantly higher than liquidity value after merger at conventional level of significance.

However, cost-income ratio was higher before merger than after merger and the difference is statistically significant. On the contrary, capital asset ratio after merger was higher than before merger took place, however, the difference is not statistically significant. Loan to total assets was also found to be higher after merger but statistically not significant. Credit risk of banks before merger was higher (26.34) than after merger (14.09) without any statistical significant difference at any conventional level.

Diversity earnings of banks before merger (5.42) were higher and significant than after merger (2.98) at conventional level of significance. Other expenses in services of banks were also observed to be higher before merger (9.889) than after merger (4.85) and the difference is statistically significant at conventional level of significance. The findings highlighted the financial conditions of banks before and after merger.

5.2 Testing of Hypothesis: "There is no significant difference in the pre-merger performances of banks and their post-merger performances"

The test result has shown that there was a significant difference in bank level of performance before and after merger. Therefore, hypothesis 1 should be rejected. These differences in performance are noted below:

(a) The average Return on Equity (ROE) of 30.74 during pre-merger and 19.91 after merger of banks showed a significant difference in favour of the pre-merger period. This might be due to period available for post-merger assessment.

(b) Ratio of total cost to total revenue: During pre-merger period, banks had significantly higher cost-income ratio than after merger which is 99.79 on average before merger as against 66.39 after merger.

5.3 Determinants of performance of banks before merger

Table 6 (Appendix 4) shows the results of panel regression analysis of performance of banks before merger. The fixed effect and random effect model were estimated. However, the outcome of the Hausman's specification test that there is correlation between the firm- and/or time specific effect and the explanatory variables was not accepted. This implies that P-value and Prob. Chi2 are less than 0.05. Thus, fixed effect was used to explain the influence of explanatory variables on performance.

Loan–deposits has a negative but insignificant effect on performance of banks before merger. On the contrary, diversity earning is positive and significantly related to performance of merging banks. The results indicated that a unit change in diversity of earnings of banks directly affected the performance of banks by 4.43 units. Credit risk was found to be negative but significantly related to performance of merging banks. The negative sign indicates an inverse relationship with performance of banks. Also, capital-assets ratio is negative but significantly related to performance of merging banks implying an inverse relationship between the two variables. Variable such as liquidity is also negative but statistically not significant.

5.4 Determinants of performance of banks after merger

Table 7(Appendix 5) shows the results of panel regression analysis of performance of banks after merger. The fixed effect and random effect model were estimated. However, the outcome of the Hausman's specification test that there is no correlation between the firm- and/or time specific effect and the explanatory variables was accepted. This implies that P-value and Prob. Chi2 are greater than 0.05. Thus, random effect was used to explain the influence of explanatory variables on performance.

Loan-deposits and credit risk were found to be negative but significantly related to performance after merger, implying an inverse relationship with performance of 'new' banks at the current sample period. On the contrary, relative size is positive and significantly related to performance of banks, implying a direct relationship between the variables. Other variables, such as diversity earnings and liquidity, fitted into the model after collinearity check are not significantly related to performance of banks.

6.1 Conclusion and Policy Recommendation

This study examined the test of synergy in policy- induced bank reforms in Nigeria using both the descriptive and inferential statistics. The results were mixed. ROE which is a general measure of banks' profitability showed a significant decline post- merger while both cost-income and credit-risk ratios showed significant improvement. The panel results also showed that there was a significant difference in bank performance before and after merger. The null hypothesis generated for the study was consequently rejected, as there were significant differences in the above important ratios.

While it is ordinarily envisaged that the reforms in the banking sector, especially the policy-induced reform in Nigeria would normally lead to improvement in performance of banks after consolidation. However, those banks that have undergone mergers and acquisitions as revealed by this study were not found to be as profitable as expected or suggested by studies conducted in other parts of the advanced economy especially as found in the US or the EU study literatures.

Through the analysis, there was no sufficient evidence to conclude that mergers and acquisitions induced by the CBN reform policy had clear effects on the profitability of the banks sampled under this study. Only minor positive changes to risk provision reflecting improved credit risk positions and cost cutting through lower cost-income ratio and other expenses in services and technology were found. With a post-merger decrease in ROE, it showed that the banks under examination in this study have been operationally inefficient as all the cost-cutting and increased income did not translate to maximization of profitability and the value of shareholders' investment. In other words, value of shareholders' investment has reduced after consolidation, the results thereby support the value-deceasing theories. Consequently, these findings suggested that the process of induced consolidation and banking reforms in Nigeria have not completely achieved their desired results of creating synergy and improvement in the banking sector. It is therefore recommended that the regulatory authorities should in future weigh carefully the effects of a particular reforms policy before imposing it on banks.

Apart from creating synergistic benefits, the motive of bank recapitalization in Nigeria, among other things, according to the Central Bank of Nigeria (2004), is to stem the tide of bank failure and create strong, big and resilient banks capable of competing with banks in other advanced economies. However, Yauri, Musa, & Kaoje (2012) concluded that bank capital regulation might not be able to forestall banks' financial distress in future. It is, therefore, suggested that more research works be conducted along this area in future. Also, empirical results on consolidation of Nigerian banks differed depending on the researchers' areas of focus, banks examined and the variables used in the analysis. For instance, while Olayinka and Farouk (2014) believed that bank consolidation reform impacted positively on other variables analyzed except Return on Equity (ROE), Sheidu and Yusuf (2015) concluded that there was an improvement in Return on Capital Employed (ROCE) consequent on consolidation. It can therefore be inferred that banks mergers and acquisitions in Nigeria seem to be inconclusive as banks that already consolidated might still reconsolidate in future as needs arise or in response to policy directives. This also, therefore, presents further areas of studies to researchers in future.

Bibliography

Adegbaju, A.A. & Olokoyo, F.O. (2008). Recapitalization and banks' performance: A case study of Nigerian Banks. African Economic and Business Review 6(1) 252-268.

Akamiokhor, G.A. (1989). Mergers and acquisitions: The Nigeria experience. The Nigerian Banker. Journal of the Nigerian Institute of Bankers. ISSN 0189-6679. 25-28.

Alao, R.O. (2010). Mergers and acquisitions in the Nigerian banking industry: An advocate of three mega banks. European Journal of Social Sciences, 15(4), 554-563. Retrieved from http://www.eurojournals.com/ejss

Altunbas, Y & Ibanez, D.M. (2004). Mergers and acquisitions and bank performance in Europe. The role of strategic similarities. European Central Bank Working Paper Series,1-35. Retrieved from http://www.ecb.int/pub/pdf

Annual Reports and Accounts (2006). United Bank for Africa

Atufe, F & Cookey, P (2006, January 16). Casualties of consolidation. Financial Standard, p.7.

Awdeh, A & EL-Moussawi, C (2011). Analyzing the motives and outcomes of bank mergers. Middle Eastern Finance and Economics. Euro journals Publishing, Inc. Retrieved from https://www.researchgate.net/publication/257866017_Analyzing_the_Motives_and_the_Outcomes_of_Bank_Mergers: 11-18.

Badreldin, A & Kalhoefer C, (2009). The effects of mergers and acquisitions on bank performance in Egypt. Working paper series. 1-14. Faculty of Management Technology. Retrieved from http://mgt.guc.edu.e.g./w papers

Block S.B. & Hirt, G.A. (1992). Foundations of Financial Management (6th ed.) Richard Irwin, Inc. 588-594.

Central Bank of Nigeria (2004). Consolidating the Nigerian Banking Industry. Retrieved from www.cbn.gov.ng/OUT/SPEECHES/2004/Govadd.6Jul.pdf

Dilshad, M.N.(2013). Profitability Analysis of Merger and Acquisitions: An Event Study Approach. Business and Economic Research, 2(3), 89-125.

Dymski, G.A. (2002). The Global Merger Wave: Implications for Developing Countries. www.cfeps.org/events/pk2004/confpapers/dymski.pdf 1-27.

Emeni, F.K, & Okafor, C (2008). Effects of bank mergers and acquisitions on small business lending in Nigeria. African. Journal of Business Management, 2(9), 146-156.

Gjirja, M (2004). Assessing the efficiency effects of bank mergers in Sweden. A panel based stochastic frontier analysis. Retrieved from http://www.konkurrenssverket.se/upload/filer/forkskare 1-23.

Gupta, J & Chevalier, A (2004). Value effects of bank's mergers and acquisitions in Europe: The case of BNP-Paribas. http://mfs.rutgers.edu/MFCII/mfc index/files/MFC 1-28.

Healy, P.M., Palepu, K.G., & Ruback, R.S. (1990). Does corporate performance improve after merger? Working Paper 314-90.

Hempel, G.H., Simonson, D. G & Coleman, A.B. (1994). Bank Management, Text and Cases. John Wiley and Sons. Inc. 659-678.

Kolo, A.N. (2007). Impact of Nigeria's bank consolidation on shareholder's return. Retrieved from http://unpan1.un.org 1-26.

Ningi, S.I. & Dutse, A.Y. (2008). Impact of bank consolidation strategy on the Nigerian economy. African Economic and Business Review, 6(2). Retrieved from http://www.theabr.com 6(2) NingiFall2008.pdf 1-21.

Odeleye, T.A. (2014). Pre-consolidation and Post-consolidation of Nigerian Banking Sector: A Dynamic Comparison. International Journal of Economics and Financial Issues. 4(1), 27-34. Retrieved from citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.920.7039&rep=rep1&type=pdf

Okagbue, S.N. & Aliko, T.B. (2005). Banking sector reforms in Nigeria. International Legal News, 1(2), Retrieved from http://www.Imakenews.com/iln/e_ article000336415.cfm?x=b11,0,w. 1-13.

Olayinka, T.T & Farouk, M.A. (2014). The Impact of Consolidation on the Performance of Banks in Nigeria. Global. Advanced Research Journal of Management and Business Studies. 3(10), 479-485. Retrieved from http://garj.org/garjmbs/index.htm.

Omah, I; Okolie, J.U. & Durowoju, S.T.(2013). Mergers and Acquisitions: Effects on Shareholders Value Evidence from Nigeria. International Journal of Humanities and Social Science. 3(6). 151-159. Retrieved from www.ijhssnet.com/journals/Vol_3_No_6_Special_Issue_March_2013/15.pdf

Rose, P.S. & Hudgin S.C. (2008). Bank Management and Financial Services. (7th ed.) New York: McGraw-Hill/Irwin. 623-639.

Scheme of Merger (2005). First Bank of Nigeria, MBC International Bank Plc and FBN(Merchant Bankers) Limited

Scheme of Merger (2005). United Bank for Africa and Standard Trust Bank Plc

Siam, A. Z. (2009). The Effects of Bank Merger on Electronic Banking Services Competency. Journal of Social Sciences, 5(1), 76-79. Retrieved from http://www.scipub.org/fulltext/jss

Shehu, A.D. & Yusuf, H (2015). Bank Consolidation and Improvement of Shareholder Value: An Empirical Evaluation of Return on Capital Employed Following Bank Mergers in Nigeria. American International Journal of Contemporary Research. 5(5). 240-246. Retrieved from www.aijcrnet.com/journals/Vol_5_No_5_October_2015/28.pdf

Soludo, C. (2006, January 16). Consolidating the banking industry for development challenges. Financial Standard, p.14.

Viverita, (2008). The Effect of mergers on bank performance: Evidence from bank consolidation policy in Indonesia. International Review of Business Research Papers 4(4), 368-380 Retrieved from http://www.bizresearchpapers.com

Wikipedia (2016). First Bank of Nigeria. Retrieved from: https://en.wikipedia.org/wiki/First_Bank_of_Nigeria

Wikipedia (2016). United Bank for Africa. Retrieved from: https://en.wikipedia.org/wiki/United_Bank_for_Africa

Yauri, N.M.; Musa, J & Kaoje N.A.(2012). Bank Recapitalisation in Nigeria: Resuscitating Liquidity or Forestalling. Distress. International Journal of Business and Social Science. 3(10). 298-305. Retrieved from ijbssnet.com/Journals/Vol_3_No_10_Special_Issue_May_2012/31.

APPENDIX

Table 3 (Appendix 1)

Correlation matrix of study variable before merger

	ROE	LIQ	CIR	CAR	LTA	CR	DE	OS	LTD	OTHER	RESIZE
ROE	1										
LIQ	-0.06	1									
CIR	0.269	-0.5185	1								
CAR	-0.4151	-0.3196	-0.0133	1							
LTA	-0.0072	-0.8049	0.2409	0.4849	1						
CR	-0.3595	-0.1150	0.0923	0.0489	0.0901	1					
DE	-0.2476	0.1527	-0.2337	0.5228	0.0658	-0.3139	1				
OS	-0.2513	0.1863	-0.2927	0.4580	0.0492	-0.2911	0.8520	1			
LT	-0.1819	-0.5392	-0.0250	0.6010	0.9144	0.0215	0.3173	0.2917	1		
OTHER	-0.4473	-0.0179	-0.3494	0.6188	0.3644	0.3352	0.6466	0.6295	0.5909	1	
RESIZE	-0.0342	0.1583	-0.2921	-0.4683	-0.3392	-0.1954	-0.2147	-0.1828	-0.3776	-0.4314	1

Source: Author's analysis, 2012

Table 4 (Appendix 2)

Correlation matrix of study variable after merger

	ROE	LIQ	COST	CAR	LTA	CRISK	DEA	OBS	LOAD	TECH	RESIZE
ROE	1										
LIQ	-0.334	1									
COST	-0.100	-0.2998	1								
CAR	-0.4267	0.4344	0.2883	1							
LTA	-0.4371	-0.3757	0.4557	0.5505	1						
CRISK	-0.5693	-0.1955	0.1353	-0.3489	0.1097	1					
DEA	0.4990	-0.7094	-0.0984	-0.3965	-0.0403	0.0373	1				
OBS	-0.6440	0.0723	-0.2277	-0.5597	0.6793	0.0669	-0.1123	1			
LOAD	-0.4603	0.0716	0.6141	0.8804	0.8147	-0.1293	-0.3311	0.5246	1		
TECH	-0.0867	-0.4570	0.9577	0.1341	0.4595	0.3258	0.0988	-0.2275	0.5060	1	
RESIZE	0.2959	-0.1723	0.8544	0.3346	0.2702	-0.3365	-0.1202	-0.4069	0.5314	0.7377	1

Source: Author's analysis, 2012

Table 5 (Appendix 3)

Results of Performance in Financial Ratios during pre-merger and post merger

S/N	Financial Ratios	Pre-merger (Std. Error)	Post-merger (Std. Error)	Difference of means (t-value)
1.	Return on asset (ROA)	30.7405 (2.487635)	19.9125 (3.920697)	2.3320*
2.	Liquidity	88.5145 (3.948385)	67.64 (5.608583)	3.0434*
3.	Cost-Income ratio	99.79 (7.094431)	66.385 (5.584025)	3.7000*
4.	Capital asset ratio	10.1795 (0.7830532)	12.81 (1.899314)	-1.2804
5.	Loan to total assets	27.3135 (2.036761)	28.0775 (2.891923)	-0.2160
6.	Credit risk	26.34 (8.995802)	14.09625 (3.750342)	1.2563
7.	Diversity earnings	5.4191 (0.741863)	2.97625 (0.4316494)	2.8461*
8.	Off balance sheet	43.873 (14.36596)	31.305 (3.461391)	0.8505
9.	Loan to deposits	38.864 (2.816393)	41.78625 (5.882516)	-0.4481
10.	Other expenses	9.889 (0.7280923)	4.85 (0.7324567)	4.8791*
11	Resize			

*- Signifies that the means of the ratio significantly differ at 1% between merging classes

Source: Author's analysis, 2012

Table 6 (Appendix 4)

Results of Panel of Fixed effect and Random effect

S/N	Variables	Fixed effect	Random effect
1	Loan-deposits	-0.299 (-1.00)	-0.0895 (-0.35)
2	Diversity earnings	4.434 (2.02)*	-0.04562 (-0.48)
3	Credit risk	-0.232 (-2.22)*	-0.133 (-2.16)*
4	Relative size	0.00103 (1.99)**	-0.000 (-1.22)
5	Capital –assets ratio	-2.8407 (-2.83)*	-1.6888 (-1.74)***
6	Liquidity	-0.2270965 (-1.35)	-0.163 (-0.97)
7	Constant	31.906 (1.20)	74.082 (3.32)*
8	R2	0.5971	0.4769
9	F-statistics	3.44	-
10	Hausman	18.55 (0.005)	-

Source: Author's analysis, 2012

*, implies significant at 1%

**, implies significant at 5%

***, implies significant at 10%