COMPARATIVE ANALYSIS OF PRE- AND POST- MERGERS AND ACQUISITIONS RESULTS OF NIGERIAN BANKS

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Abstract

The banking reform that commenced on the 1st of January, 2006 had been a major wave towards a diversified, strong and reliable banking sector in Nigeria. This paper examined the mega banks by evaluating their results three before and three years after the consolidation exercise in Nigeria (2003-2009). This study further examined the impact of consolidation on performance and considers if there had been considerable improvement on their capital base, bank revenue, total assets, and cost of operation. We analyzed six ratios of a sample of fifteen (15) mega banks. Descriptive analysis of these performance ratios was carried out. We found that, on average, merger and acquisition have not improved the results of merged banks in post consolidation era.

Keywords: Mergers, acquisition, shareholders wealth, capital base, market share, bank revenue

Introduction

Merger is the global business term used achieving the business growth and survival. Merger is different from acquisition. Merger is the combination of two businesses that leads toward a new business, but acquisition is the takeover or purchase of one business by other business. Merger is also helpful for businesses in terms of solvency. Because when a business’ liabilities exceed the assets then mostly businesses adopt this process to abstain from insolvency. The process of mergers & acquisition in the banking sector also extended hand to strengthen the solvency of the banking system (Malik, 2006).

From banking system review it was also seen that merger of banks is adapted to increase the return on capital, that further lead towards increment in equity. The recent trend of mergers and acquisitions of local banks by the foreign banks is also intended to extend their outreach to maximize return on their capital (Malik, 2006). Mergers and consolidation of the banking system further supported this increasing equity base (Malik, 2006). The chances of uncertainty in operations increase due to new technologies, e- banking and more over mainly from merger. No doubt that new technology and e- banking are the basic factors of operational risks, but banking mergers are causing operational risk in a situation when there was no more idea about new banking workings and operations while diversification is there.

Arshad (2012) opined that banks attained the performance improvement after merger on the basis of decrease in cost of production and increase in production level. Scope of economies or changes in product mix are another potential way in which mergers might help improve bank performance (Berger and Humphrey, 1994). Another source of cost efficiency behind merger was that efficient banks acquires the inefficient banks and run their managing rules over the inefficient. In this case all talents of superior management are spread over there with the help of different resources. Thus efficient business gets required results. Cost efficiency could be considerably improved by a merger in which a relatively efficient bank acquires a relatively inefficient bank and spread its superior management talent over more resources (Akhavein, Berger, & Humphrey, 1996).

Merger enhances the value of business. On account of which owners’ good will increases with the increment in profit through economies of scale and cost reduction etc (Arshad, 2012). Motives behind merger are to increase revenue by enhancing market share, cost reduction, economies of scale and economies of scope. As the size of bank increases, efficiency also improves. In addition to economies of scale and diversification benefits, there are two other economic motives of M&A; Horizontal integration and vertical integration (Gaughan, 2011). To employees, merger provides a different and new culture
to work. Employees can work in an advanced culture with some desired change.

Business consolidation through Mergers and Acquisitions has become a global phenomenon to achieve economies of scale and higher productivity. The need for financial institutions to merge becomes even more imperative in the face of the onslaught of greater competition arising from globalization and the pressure under the World Trade Organization (WTO) for countries to open up their financial market to further entry of foreign banks. For this reason, many countries are moving toward consolidating their banking systems and Nigeria cannot be an exemption.

Two primary factors affecting the need of banks to remain competitive are technology and deregulation. Whilst, technology has blurred the lines of specialization among financial intermediaries, deregulation has significantly changed the way banks do business and where they do business. Technological improvement also means more change and the breakdown of traditional barriers, such as geography and product varieties. The two forces of technology and deregulation working together have resulted in what is referred to as the Global Economy. Also, the mixing together of technology and deregulation has produced rapid change that increasingly blur accepted boundaries of time, geography, language, industries, enterprises, economies and regulations. As result many merging partners today are creating financial supermarket, where customers can have one – stop financial services.

In addition to market consideration, regulatory factors have accounted for some banks consolidation in different parts of the world. For example, the consolidation that took place in Lebanon, Malaysia, Kenya and South Africa were mainly policy – induced.

**Merger and acquisition & Nigerian banking sector**

The Nigerian banking sector has undergone remarkable changes over the years, in terms of the number of institutions, ownership structure as well as the depth and breadth of operations. These changes have been influenced largely by the challenges posed by the deregulation of the sector, globalization of operations, technological innovations and the adoption of supervisory and prudential requirements that conform to international standards. The deregulation of the sector which began during the period 1986 to 1990 was followed by flood of new banks. The existence of many banks coupled with non-compliance with market regulations by majority of the players, poor management, poor credit policy, insider dealings /abuses and economic recession led to high incidence of distress in the banking industry in the 1990s (CBN Briefs, 2005).

Furthermore, Central Bank of Nigeria’s surveillance on banks revealed deterioration in banks’ overall performance, based on Capital, Assets, Quality Management, Equity and Liquidity (CAMEL) parameters. Banks’ performance rating in 2004 showed that 10 banks were rated as sound, while 51, 16, and 10 banks were rated as satisfactory, marginal and unsound, respectively. Against this background, the CBN in July 2004 rolled out a 13- point reform agenda aimed at consolidating the banking sector and preventing the occurrence of banking distress.

Two major elements of this reforms package were the requirement, that the minimum capitalization for banks should be N25billion with effect from 31st December 2005 and consolidation of banks through mergers and acquisitions (CBN Briefs, 2005).

The objective of this study is to determine whether merger and acquisition process of 2005 in Nigeria banking industry improve the merged banks results.

**Theoretical framework**

This study is anchored on the following theories:

**The theory of efficiency**

According to the value increasing school, mergers occur, broadly, because mergers generate ‘synergies’ between the acquirer and the target, and synergies, in turn, increases the value of the firm (Hiitt, Harrison, & Ireland 2001). The theory of efficiency suggests that mergers will only occur when they are expected to generate enough realizable synergies to make the deal beneficial to both parties; it is the symmetric expectations of gains which results in a ‘friendly’ merger being proposed and accepted. If the gain in value to the target was not positive, it is suggested, the target firm’s owners would not sell or submit to the acquisition, and if the gains were negative to the bidders’ owners, the bidder would not complete the deal. Hence, if we observe a merger deal, efficiency theory predicts value creation with positive returns to both the acquirer and the target. Banerjee and Eckard (1998) and Klein (2001) evidence this suggestion. Following Chatterjee (1986), we must, however, distinguish between ‘operative synergies’ – or ‘efficiency gains’ achieved through economies of scale and scope – and ‘allocative synergies’ – or ‘collusive synergies’ resultant from increased market power and an improved ability to extract consumer surplus – when
commenting on value creation in mergers and acquisitions.

**Market power theory**

Most of the recent literature concludes that operating synergies are the more significant source of gain (Devos, Kadapakkam, & Krishnamurthy, 2008; Houston, James, & Ryngaert, 2001; Mukherjee, Kiymaz, & Baker, 2004), although it does also suggest that market power theory remains a valid merger motive. Increased ‘allocative’ synergies is said to offer the firm positive and significant private benefits (Feinberg, 1985) because, ceteris paribus, firms with greater market power charge higher prices and earn greater margins through the appropriation of consumer surplus. Indeed, a number of studies find increased profits and decreased sales after many mergers (Prager, 1992; Chatterjee, 1986; Kim and Singal, 1993); From a dynamic point of view too, market power is said to allow for the deterrence of potential future entrants (Gugler et al., 2003), which can again afford the firm a significant premium, and so offer another long-term source of gain.

**The theory of corporate control**

In an efficient merger, the theory of corporate control provides a third justification, beyond simply synergistic gains, for why mergers must create value. It suggests that there is always another firm or management team willing to acquire an underperforming firm, to remove those managers who have failed to capitalise on the opportunities to create synergies, and thus to improve the performance of its assets (Weston, Mitchell, & Mulherin, 2004). Managers who offer the highest value to the owners, it suggests, will take over the firm until they themselves are replaced by another team that discovers an even higher value for its assets. Hence, inefficient managers will supply the ‘market for corporate control’ (Manne, 1965), and managers that do not maximise profits will not survive, even if the competitive forces on their product and input markets fails to eliminate them. ‘Hostile’ takeovers should, as a result, be observed amongst poorly performing firms, and amongst those whose internal corporate governance mechanisms have failed to discipline their managers.

**The theory of managerial hubris**

The theory of managerial hubris (Roll, 1986) suggests that managers may have good intentions in increasing their firm’s value but, being over-confident; they over-estimate their abilities to create synergies. Over-confidence increases the probability of overpaying (Hayward and Hambrick, 1997; Malmendier and Tate, 2008), and may leave the winning bidder in the situation of a winner’s-curse, which dramatically increases the chances of failure (Dong, Hirschleifer, Richardson, & Teoh, 2006). Empirically speaking, Berkovitch and Narayanan (1993) find strong evidence of hubris in US takeovers, and Goergen and Renneboog (2004) find the same in a European context. The latter estimate that about one third of the large takeovers in the 1990s suffered from some form of hubris. Malmendier and Tate (2005) show that overly optimistic managers, who voluntarily retain in-the-money stock options in their own firms, more frequently engage in less profitable diversifying mergers, and Rau and Vermaelen (1998) find that hubris is more likely to be seen amongst low book-to-market ratio firms – that is, amongst the so-called ‘glamour firms’ – than amongst high book-to-market ratio ‘value firms’.

**Theory of managerial discretion**

Jensen’s (1986) theory of managerial discretion claims that it is not over-confidence that drives unproductive acquisitions, but rather the presence of excess liquidity, or free cash flow. Firms whose internal funds are in excess of the investments required to fund positive net present value projects, it is suggested, are more likely to make quick strategic decisions, and are more likely to engage in large-scale strategic actions with less analysis than their cash-strapped peers. High levels of liquidity increase managerial discretion, making it increasingly possible for managers to choose poor acquisitions when they run out of good ones (Martynova and Renneboog, 2008). Indeed, several empirical studies demonstrate that the abnormal share price reaction to takeover announcements by cash-rich bidders is negative and decreasing in the amount of free cash flow held by the bidder (Harford, 1999). Moreover, it is suggested that the other stakeholders in the firm will be more likely to give management the benefit of the doubt in such situations, and to approve acquisition plans on the basis of fuzzy and subjective concepts such as managerial ‘instincts’, ‘gut feelings’ and ‘intuition’, based on high past and current cash flows (Rau and Vermaelen, 1998). Thus, like the hubris theory, the theory of free cash flow suggests that otherwise well-intentioned managers make bad decisions, not out of malice, but simply because the quality of their decisions are less challenged than they would be in the absence of excess liquidity.

**The agency cost theory**

Of course, as the of managerial discretion increases in free cash flow, or in high market valuations (as in the case of ‘glamour firms’ above), or in other proxies, so, too, does the opportunity for self-interested managers to pursue self-serving acquisitions (Jensen, 2005).
It is generally agreed that managerial self-interest does play a role in M&A; research has shown that bidder returns are, for example, generally higher when the manager of the acquiring firm is a large shareholder (Lewellen, Loderer, & Rosenfeld, 1985), and lower when management is not (Lang, Stulz, & Walkling, 1991; Harford, 1999). This suggests that managers pay more attention to an acquisition when they themselves are financially concerned. Further, it supports the notion of ‘agency cost’ and the ‘managerial theories’ of the firm’ (Berle and Means, 1932; Marris, 1963), which broadly suggest that managers pursue self-serving acquisitions, and it is this fact that leads to value-destruction.

The theory of managerial entrenchment

The theory of managerial entrenchment (Shleifer and Vishny, 1989), for example, claims that unsuccessful mergers occur because managers primarily make investments that minimise the risk of replacement. It suggests that managers pursue projects not in an effort to maximize enterprise value, but in an effort to entrench themselves by increasing their individual value to the firm. Entrenching managers will, accordingly, make manager-specific investments that make it more costly for shareholders to replace them, and value will be reduced because free resources are invested in manager-specific assets rather than in a shareholder value-maximising alternative. Amihud and Lev (1981) empirically support this notion, and suggest that managers pursue diversifying mergers in order to decrease earnings volatility which, in turn, enhances corporate survival and protects their positions. Of course, entrenchment is not only pursued for job security itself, but also because entrenched managers may be able to extract more wealth, power, reputation and fame.

The empire theory

While entrenchment theory primarily explains the process of how managers position themselves to achieve the above objectives, the theory of empire-building and other related, well-tested theories provide both the motivations and evidence behind these objectives (Marris, 1963; 1964; Ravenscraft and Scherer, 1987; Rhoades, 1983; Black, 1989).

According to empire theory, managers are explicitly motivated to invest in the growth of their firm’s revenues (sales) or asset base, subject to a minimum profit requirement (Marris, 1963).

Data and methodology

Research design

This quantitative and cross sectional study was conducted for hypothesis testing.

Population of the study

For the purpose of this research, the population of the study was twenty five (25) consolidated banks as at 1st January, 2006 in the Nigerian Banking Industry (CBN Annual Report, 2006).

Sampling method

Stratified Sampling technique was adopted for this study in other to derive sample size from the population. Nigerian Banking Industry was grouped into ‘deposit money banks’ and ‘non deposit money banks’. The deposit money banks were further grouped into two strata. One group was “merged and acquired banks” and second group was “nationalized and liquidated banks”.

Sample size

Both qualitative and quantitative methods of determine sampling size was applied for this study.

Qualitative method

The sample size for this study was arrived at based on the following criteria.

1- Each sample unit is part of merged and acquired banks.
2- Each sample unit is listed on Nigerian Stock Exchange Market
3- Each sample unit has up to date published annual report.
4- Each sample unit is not nationalised or recently liquidated.

Based on the above, fifteen (15) merged and acquired banks met the requirements and therefore were chosen for this study. This represents 75% of twenty (20) deposit money banks that merged during consolidation exercise of 2005 and still in existence as at 2012.

Out of twenty four (24) banks that merged in 2005, three (3) banks were nationalised; four (4) banks liquidated and acquired by new owners whilst two (2) banks were unlisted on the floor Nigerian Stock Exchange.

Data collection

Data for the study was collected from 15 merged banks’ web site, annual reports and The Nigerian Stock Exchange Fact book, 2011.
Data analysis

Merger in banking sector is becoming more important. In banks, merger is adopted to gain the market share and to get the economies of scale with cost efficiency. Mergers and acquisitions not only improve the bank profit but also improve the economy and society situation. To analyze the performance of 15 merged banks before and after merger, descriptive statistics were used to test the hypothesis.

Conceptual framework

Earning Per Share
The accounting measure of value adopted for this study is Earning Per Share (EPS). This is defined as net profit after tax divide by number of shareholders outstanding.

\[
EPS = \frac{Net\ Profit\ after\ Tax}{Number\ of\ Shareholders}
\]

EPS simply shows the profitability of the firm on a per share basis. However, it does not reflect how much it retained in the business and how much is paid as dividend. But as profitability index, it is valuable and widely used ratio (Pandey, 2005).

Capital base
The ratio of equity to total assets (CA) is considered one of the basic ratios for capital strength. It is expected that the higher this ratio, the lower the need for external funding and the higher the profitability of the bank. It shows the ability of bank to absorb losses and handle risk exposure. Equity to total assets ratio is expected to have positive relation with performance that well-capitalized banks face lower costs of going bankrupt which reduces their costs of funding and risks (Berger, 1995; Bourke, 1989; Hassan and Bashir, 2003).

Market share
Market share is considered as one of the determinants of profitability since the bigger the market, the larger the firm’s potential for profits. Bigger market share also means more power to the bank in controlling the prices and services it offers to customers (Heggested, 1977).

Heggested (1977) believed that the net effect of growth in the market on profitability could be negative or positive. Increase in demand would push prices higher and at the same time would affect bank costs. Heggested (1977) found a weak adverse relationship between market growth and profitability. Smirlock, (1985) strongly believed that instead of concentration, market share was more dominant in influencing bank’ profitability. He investigated 2700 unit banks and found that market share had a positive significant relationship with profitability and not concentration. Smirlock (1985) not only believed that market share influenced profitability but growth in the market created more opportunities for the bank, thus generating more profits. He also found that growth in the market had a positive significant relationship with profits.

For this study, total assets of the banks are used as a proxy for Market share. This is represented by natural logarithm of total assets (log A) (Smirlock, 1985).

Revenue efficiency
In literature, banks revenue efficiency is measured by return on asset (ROA) and return on equity (ROE). ROA is defined as net profit divided by total assets and is expressed in percent (Pilloff, 1996).

In this study, we use two measures of bank’s profitability: return on assets (ROA) and return on equity (ROE). ROA is a general measure for bank profitability reflects bank ability to achieve return on its sources of fund to generate profits. The second measure ROE is defined as net profit divided by shareholders’ equity and is expressed in percent.

Cost efficiency
Operating costs comprise of all expenses related to the use of physical and labour factors. Since these expenditures are management controllable, expenses management is also considered as an internal determinant of commercial bank profitability. Pilloff (1996), used Total Operating Efficiency ratio which he defined as Operating Expense divide by Operating Revenue as one of the operating indicators to measure cost efficiency of banks. The following ratios are adopted for this study.
Table 1: Operational definition of variables

<table>
<thead>
<tr>
<th>NO.</th>
<th>Variable</th>
<th>Notation</th>
<th>Measure</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>EPS</td>
<td>EPS</td>
<td>Net Profit after tax Number of Shareholders</td>
<td>Pandey, (2005).</td>
</tr>
<tr>
<td>2</td>
<td>Capital base (CA)</td>
<td>CA</td>
<td>Equity Total Assets</td>
<td>Berger, (1995)</td>
</tr>
<tr>
<td>3</td>
<td>Revenue Efficiency (ROE)</td>
<td>ROE</td>
<td>Net Profit after tax Total Equity</td>
<td>Pilloff (1996),</td>
</tr>
<tr>
<td>4</td>
<td>Revenue Efficiency (ROA)</td>
<td>ROA</td>
<td>Net Profit after tax Total Assets</td>
<td>Pilloff (1996),</td>
</tr>
<tr>
<td>5</td>
<td>Market share</td>
<td>Log A</td>
<td>Natural Logarithm of Total Asset</td>
<td>Smirlock, (1985)</td>
</tr>
<tr>
<td>6</td>
<td>Cost Efficiency</td>
<td>CE</td>
<td>Operating expenses Operating revenue</td>
<td>Pilloff (1996),</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Total Expenses Total Assets</td>
<td></td>
</tr>
</tbody>
</table>

Source: Researcher Derivative, 2012

**Comparative analysis of pre and post merger results**

For the purpose of this analysis, four years before 31st December 2005 (2002 to 2005) and four years from 1st January, 2006 (2006 to 2009) were taken. The Pre Merger Era for this analysis was 2002 to 2005 while the Post Merger Era was 2006 to 2009.

**Empirical results:**

EPS Comparison (2002-2009)

Table 2: Descriptive Statistics for EPS pre & post merger

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST MERGER</td>
<td>4</td>
<td>-11.78</td>
<td>113.56</td>
<td>69.1525</td>
<td>55.50336</td>
</tr>
<tr>
<td>PRE MERGER</td>
<td>4</td>
<td>81.40</td>
<td>114.27</td>
<td>96.4650</td>
<td>13.52168</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>4</td>
<td>81.40</td>
<td>114.27</td>
<td>96.4650</td>
<td>13.52168</td>
</tr>
</tbody>
</table>

Source: Researcher’s Analysis 2012
Interpretation

Test statistics summarised in table 2 and buttressed by graph in figure 1 revealed that there was significant difference between Pre and Post merger EPS of merged banks. Pre merger results were better than post merger. Minimum EPS in Pre era was 81.4 while Post era was -11.78. Maximum EPS in Pre era was 114.27 and that of Post era was 113.56. The Mean test revealed that Pre era was 96.46 while Post was 69.1525.

However, standard deviation of Post merger era (55.5) was better than Pre merger era (13.52). In conclusion, the shareholders wealth measured via EPS were better in the pre consolidation era than post consolidation era.

Capital base comparison (2002-2009)

Source: Banks Annual Reports 2002-2009
Table 3: Descriptive statistics for capital adequacy ratio

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST MERGER</td>
<td>4</td>
<td>12.75</td>
<td>18.15</td>
<td>14.8975</td>
<td>2.33320</td>
</tr>
<tr>
<td>PRE MERGER</td>
<td>4</td>
<td>12.43</td>
<td>21.45</td>
<td>15.2925</td>
<td>4.19036</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Researcher’s Analysis 2012

Interpretation

The test statistics from table 2 reveals that significant difference exists between Pre and Post capital adequacy ratios. Minimum capital adequacy ratio in pre merger era was 12.43 compared to 12.75 in post merger era. This test was slightly better in post merger era. However, other tests favoured Pre merger. For example, maximum capital adequacy ratio was 21.75 in pre merger while 18.15 post merger era. Mean statistics reveals 15.29 for pre merger and 14.89 post merger. Standard deviation of 4.19 was recorded for pre merger while 2.333 was recorded for post merger era.

The graph in figure 2 reveals that post merger ratio was high at the beginning of consolidation and later nose dive down ward. This could largely be explained by bad debts portfolio which eroded shareholders funds of the merged banks.
Market share comparison (2002-2009)

Table 4: Descriptive statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Merger</td>
<td>4</td>
<td>7.63</td>
<td>7.98</td>
<td>7.7800</td>
<td>.15033</td>
</tr>
<tr>
<td>Post Merger</td>
<td>4</td>
<td>8.34</td>
<td>8.79</td>
<td>8.6175</td>
<td>.20998</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Researcher’s Analysis 2012

Figure 3: Market share (log of Total assets) Pre & Post 2002 - 2009

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Interpretation

The test statistics from table 4 provides evidence that there is significant difference between Pre and Post Merger’s Market share (log of Total Assets). All the tests indices favoured Post Merger results. There is consistency in the results. The trend was positive and progressive in post merger era as revealed by the graph in figure 3.

Minimum log of Total Assets ratio in pre merger era was 7.63 compared to 8.34 in post merger era. Maximum log of Total Assets ratio was 7.98 in pre merger while 8.79 post merger era. Mean statistics reveals 7.78 for pre merger and 8.617 post merger. Standard deviation of 0.15033 was recorded for pre merger while 0.20988 was recorded for post merger era.

Overall, merged banks Total assets Portfolio was bigger and better in post merger era

Discussion

Overview of banks total assets

Assets are the resources either owned or managed by the banks and which it uses in generating returns for the shareholders (Stanbic IBTC, 2008). Usually, the bulk of a bank’s total assets consists of cash and short-term securities, loans and advances, treasury bills, and property and equipment. As at 2005, the total assets in the banking industry amounted to N2.8 trillion; this increased by 73.62% in 2006 to N4.9 trillion and further grew by 79.80% in 2007 to N8.813 trillion. In 2005, Union Bank led the list of top 10 banks with the highest total assets. The bank’s total assets stood at N550.98 billion. First Bank followed with N470 billion, while Zenith Bank which was third in the ranks had N329.71 billion.

In order of hierarchy, the top 10 banks with the highest total assets in 2005 were Union Bank, First Bank, Zenith Bank, UBA, ETI, GTBank, Intercontinental bank, Afribank, Oceanic Bank and Diamond Bank. Unsurprisingly, most of the old-generation’s banks were among the top 10 as they have been in the market for longer periods. In 2006, which is also the wake of the consolidation/recapitalisation era, most banks were able to significantly increase their total assets as a result of the several mergers and acquisitions that had taken place. Union Bank maintained the lead in 2006, with total assets of N667.7 billion, representing 21.20% over the 2005 figure. Zenith Bank, which grew its total assets by 87.84%, moved up the ladder to second position, thereby displacing First bank plc to third position. Oceanic Bank, with an impressive growth rate of about 328%, followed First Bank with total assets of N737 billion, while Intercontinental also moved up the scale with a total asset figure of N369.23 billion. By 2007, Oceanic Bank plc topped the list of total assets with a figure of N1.038 trillion, taking over the lead position from Union Bank, Zenith Bank and First Bank plc. However, Zenith Bank, which almost hit the N1 trillion mark, came second behind Oceanic Bank, with total assets of N972.8 billion. The top five as at the end of 2007 were Oceanic Bank, Zenith Bank, First bank, UBA and Intercontinental Bank plc (CBN, 2008).

Banks’ Revenue Comparison (2002-2009)
Table 5: Descriptive Statistics for ROE

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST MERGER</td>
<td>4</td>
<td>-20.99</td>
<td>23.31</td>
<td>7.1400</td>
<td>19.58312</td>
</tr>
<tr>
<td>PRE MERGER</td>
<td>4</td>
<td>2.78</td>
<td>21.14</td>
<td>14.3475</td>
<td>8.63921</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Researcher’s Analysis 2012

Interpretation

Test Statistics summarised in table 5 and buttressed by graph in figure 4 revealed the following: Minimum ROE in Pre era was 2.78 while Post era was -20.99. Maximum ROE in Pre era was 21.14 and that of Post era was 23.31. The Mean test revealed that Pre era was 14.3475 while Post was 7.1400.
However, standard deviation of Post merger era (19.58) was better than Pre merger era (8.639). In conclusion, ROE of the merged banks better in the pre consolidation era.

Discussion of finding

Investors prefer ROE to ROA because it shows how much is actually attributable to the shareholders after all other stakeholders have been settled. It measures how much is made on the equity invested in the business. Since the CBN’s recapitalisation exercise, a growing activity in the banking industry is capital-raising, either through initial public offerings, offers for subscription or rights issues. The impact of this activity on the ROE is that with the increase in the number of shareholdings, banks may not be able to deliver commensurate returns, such that the earnings per share are not eroded.

By 2006, the industry average ROE had fallen drastically to 8.67%. This occurred because the shareholders’ funds of all the banks increased (to a minimum of N25 billion as set by the CBN), with some rising by over 100%. Although the PAT increased, it was not sufficient to stop dilution of the ROE.

Table 6: Descriptive Statistics for ROA

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST MERGER</td>
<td>4</td>
<td>-1.48</td>
<td>1.96</td>
<td>.4817</td>
<td>1.54368</td>
</tr>
<tr>
<td>PRE MERGER</td>
<td>4</td>
<td>2.09</td>
<td>2.56</td>
<td>2.3950</td>
<td>.20857</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Researcher’s Analysis 2012

Figure 5: ROA Pre & Post 2002-2009

Source: Banks Annual Reports 2002-2009
Interpretation

The test statistics from table 6 provides evidence that there was significant difference between Pre and Post Merger’s ROA. All the tests indices favoured Pre Merger results except the standard deviation. The graph in figure 5 revealed that pre merger graph line was above the post merger graph line. The implication of this was that ROA of merged banks were high in pre consolidation era. After the merger and acquisition exercise the ROA ratios went down. This was buttressed by the following Test statistics:

Minimum ROA ratio in pre merger era was 2.09 compared to -1.48 in post merger era. Maximum ROA ratio was 2.56 in pre merger while 1.96 post merger era. Mean statistics reveals 2.395 for pre merger and 0.4817 post merger. Standard deviation of 0.20857 was recorded for pre merger while 1.5436 was recorded for post merger era.

Overall, merged banks ROA was better in pre merger era.

Discussion of finding

The return on assets (current and fixed assets) is the percentage of income generated from the resources that banks use in the operations of their business. Most banks’ ROA is low because banks are highly leveraged as they rely more on debts (in the form of deposits from customers) to finance total assets. Because these debts are interest bearing, banks usually have to part with some of their returns. This is why most banks usually have a low/one-digit ratio for their ROA. Ordinarily, a low ROA implies that the bank is not able to generate adequate earnings from its assets, while a high ROA indicates the bank is able to generate adequate returns from the assets of the business.

In 2005, the average ROA in the banking industry was 2.73%, ranges from 0.38% to 6.79%. Afribank plc had the lowest ROA in 2005, despite having high total assets (it ranked 8th from the top). Access Bank was also not able to reach the 1% mark. It had a ROA of 0.75%, which was just above the ROA recorded by Afribank. Oceanic Bank had the highest ROA (6.79%), while IBTC (now Stanbic IBTC) followed closely with 6.23%. During the period, the top five banks with the highest ROA were Oceanic Bank (6.79%), Stanbic IBTC (6.23%), Intercontinental (3.72%), Fidelity Bank (3.68%) and Diamond Bank (3.63%).

By 2006, the average ROA in the industry had declined to 1.90%, which is about 30.6% less than that of the previous year. The decline in the average rate was due to some banks, such as First Inland Bank and Wema Bank, recording negative ROAs. Banks such as Access Bank, Diamond Bank, FCMB, GTBank, IBTC, Intercontinental Bank, Oceanic Bank, Skye Bank, Union Bank and Zenith Bank recorded a decline in their respective ROA, though the decline was more significant in some than others. One assumption for the decline could be that most of the banks were trying to harmonise their operations as a result of the integration of several mergers and acquisitions, and as such, the banks were under pressure to deliver commensurate returns. Despite the decline, other banks such as Afribank, which had the lowest ROA in 2005, was able to increase its ROA. At the end of the year, the highest ROA of 8.93% was recorded by Fidelity Bank, while Ecobank, Bank PHB, UBA and IBTC followed suit with 6.11%, 4.64%, 4.63% and 3.52%, respectively. In 2007, the industry’s ROA recovered significantly to 2.54% from 1.90% in 2006. This implies that on average, banks were able to generate N1.90 for N100 of assets owned. The range during the period was from 1.20% to 9.43%. However, some banks, such as UBA and Fidelity, recorded a dip by 2007. Ecobank plc led the industry with 9.43%, while the lowest was recorded by Unity Bank. The top five by the end of the financial year in 2007 were IBTC, Fidelity Bank, GTBank, AfriBank plc and UBA (CBN, 2008).
Cost Savings Comparison (2002-2009)

Table 7 Descriptive Statistics cost savings

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST MERGER</td>
<td>4</td>
<td>7.73</td>
<td>14.57</td>
<td>10.12</td>
<td>3.14733</td>
</tr>
<tr>
<td>PRE MERGER</td>
<td>4</td>
<td>9.98</td>
<td>15.78</td>
<td>12.47</td>
<td>2.42382</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Researcher’s Analysis 2012

Interpretation

The test statistics from table 6 reveals that significant difference exists between Pre and Post Cost savings ratios. Minimum cost savings ratio in pre merger era was 9.98 compared to 7.73 in post merger era. Maximum cost savings ratio in pre merger era was 15.78 in pre merger while 14.57 post merger era. Mean statistics reveals 12.4725 for pre merger and 10.1225 in post merger. Standard deviation of 2.4725 was recorded for pre merger while 3.14733 was recorded for post merger era. From the analysis above, cost of banking operations in pre merger era were relatively high when compared with the post consolidation era. The implication of this is that merged banks are cost efficient in post consolidation.

Findings

EPS

Pre merger EPS results were better than post merger EPS. The Mean test of Pre merger EPS (96.46) was greater than Post merger EPS (69.15). EPS of most banks recorded negative results from 2008 to 2011. This result supported wealth destruction theories.

Capital base
Inspite of increase in the capital base of banks from N2billion to N25billion minimum, the capital adequacy ratios were better in Pre merger era than Post merger era. Statistics carried out revealed that Pre merger Mean of 15.29 was greater than Post merger Mean of 14.89.

**Market share**

Merged banks assets portfolio witnessed geometrical increase in Post merger era. The merged banks’ portfolios were diversified across geographical terrains and they had broad market share. Test Statistics carried out overwhelmingly supported Post Merger era results. For example Mean Statistics for Post merger of 8.617 was greater than Pre merger of 7.78. Standard deviation for Post merger was 0.20988 while Pre merger was 0.15033. Merged banks ventured into related and unrelated businesses in post merger era.

**ROE**

Pre merger ROE ratios were better results than Post merger era. Statistics carried out reveals that Mean of Post merger (7.14) was less than (14.3) for Pre merger. In post merger era the minimum ROE was as low as -20.99 while the lowest in pre merger was 2.78

**ROA**

Pre merger ROA ratios were better than Post merger era. Statistics carried out, all favoured Pre merger era. Mean was 2.395 in pre merger era while post merger era was 0.4817.

**Cost savings**

Cost to Total assets: The cost-to-total assets ratio shows the efficiency of banks, the higher the ratio, less efficient is the bank and the more profitability is reduced. One strategic way of increasing profitability is reducing costs, increasing earnings or a combination of both. Costs in a bank usually range from interest expenses to other operating expenses, while income is generated from revenues, such as interest on loans and advances, commissions, etc.

Our findings revealed that in the Post merger era banks were more efficient in terms of cost to total assets than Pre merger era. Statistics carried out reveals Pre merger ratios were higher than Post merger era. For example, the Mean for Pre merger was 12.4725 while Mean for Post merger era was 10.1225. The implication of this is that the lower the cost savings ratio the better for the banks and more wealth would be created for the shareholders.

**Table 8: Summary of Test Statistics for Hypothesis**

<table>
<thead>
<tr>
<th>RATIOS</th>
<th>POST MERGER MEAN</th>
<th>PRE MERGER MEAN</th>
<th>RESULT</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPS</td>
<td>69.1525</td>
<td>96.4650</td>
<td>Pre merger result better</td>
<td>Do not reject H0</td>
</tr>
<tr>
<td>CAPITAL ADEQUACY</td>
<td>14.8975</td>
<td>15.2925</td>
<td>Pre merger result better</td>
<td>Do not reject H0</td>
</tr>
<tr>
<td>ROE</td>
<td>7.1400</td>
<td>14.3475</td>
<td>Pre merger result better</td>
<td>Do not reject H0</td>
</tr>
<tr>
<td>ROA</td>
<td>0.4817</td>
<td>2.3950</td>
<td>Pre merger result better</td>
<td>Do not reject H0</td>
</tr>
<tr>
<td>MARKET SHARE</td>
<td>8.6175</td>
<td>7.7800</td>
<td>Post merger result</td>
<td>Reject H0, Accept H1</td>
</tr>
<tr>
<td>COST SAVINGS</td>
<td>10.1225</td>
<td>12.4725</td>
<td>Post merger result</td>
<td>Reject H0, Accept H1</td>
</tr>
</tbody>
</table>

Source: Researcher’s Analysis 2012

**Discussion**

The result of this study agreed with the study Arshad, (2012), the researcher analysed the post merger performance of the Standard Chartered bank. The Union bank was acquired by Standard chartered bank in December 2006. Before merger Union Bank was the eighth largest bank in Pakistan. Quantitative and cross sectional study ratio analysis was conducted to analyze the performance of Standard Chartered Bank. Then all ratios comparison were analyzed and found that out of 11, 7 ratios were in favour of Union bank before merger and only 4 were in favour of standard chartered bank after merger. Which shows that Union bank before merger was 64% and after merger it reached up to 36%. With this analysis
it was proved that merger does not improve the performance of the bank after merger.

In the study of Royal Bank of Scotland (RBS) proves to be failure in banking history. In this RBS study, author also adopted the same way of finding results by applying 20 financial ratios, to analyze the profitability of Royal Bank of Scotland. And concluded that merger does not improve the profitability (Kemal, 2011). In another study the empirical results also shows that there was not statistically significant gain in value or performance from merger activity (Pilloff & Santomero, 1996). Furthermore, in another study it was shown that target merged banks are smaller, less profitable, less cost efficient and riskier than non-merging banks in case of Germany (Andreas Behr, 2002). In another study it was found that Merger between unhappy and strong banks did not give up any significant efficiency gains to participated banks (Pardeep & Gian, 2010).

**Conclusion**

Generally, our findings support the hypothesis that, on average, Merger does not improve the results of merged banks in the short run.

This study indicates that Mergers and Acquisitions that took place in December, 2005 in Nigerian Banking Industry have significant effects on the results of the merged banks. The effects were both positive and negative. Shortly after the consolidation process in 2006 and 2007, merged banks posted good results and they were able to create wealth to shareholders via increase dividend payout, bonuses and increase in stock prices. However, from 2008 to 2011, it was wealth destruction. Many shareholders lost their capital as result of nationalisation of Banks like Springs Banks and Bank PHB. Others lost their shares as result of liquidation and absorption process, for example, Access Banks Plc absorbed Intercontinental Plc, Ecobank Plc absorbed Oceanic Banks etc.

**Recommendations**

Following our research findings, the following suggestions are recommended. The outcome of this study suggested a renew focus on elusive factors such as bank revenue efficiency, market share and cost efficiency in an attempt to grow profits, sustain bank’s value and create wealth to shareholders. Banks’ Management should also give proper attention to scope and scale of economies; eliminate redundancy, duplication, corrupt and inefficient staff. In addition, they should do all in their power to maximise wealth for their shareholders.

**References**


