

EMPIRICAL INVESTIGATION OF THE FINANCIAL PERFORMANCE OF DEPOSIT MONEY BANKS BEFORE AND AFTER BANKING SECTOR REFORMS IN NIGERIA

Abiodun Temitope OJE

Department of Accounting and Finance, College of Management Sciences, University of Agriculture, Makurdi,
Nigeria

Samson Adetunji, Oladele

E-mail: adetunji.oladele@yahoo.com

ABSTRACT

This study investigated the empirical investigation of the financial performance of deposit money banks before and after banking sector reforms in Nigeria. The principal objective of the study determined the impact of banking sector reforms on banks financial performance in Nigeria between the period of 1997 to 2013 which was divided into two periods of before and after banking reform. For the purpose of this study secondary data were utilized, that is annual reports, other published materials and Nigerian stock exchange fact book. In an attempt to test the significance of pre and post banking sector reform on financial performance in Nigeria, the study used parametric statistic (the test of equality of means) and result of hypotheses one, two, three and four showed that there is significant difference in return on asset (ROA), return on equity (ROE), earnings per share (EPS) and liquidity position on the banks between pre and post banking sector reform period, which mean that post banking reform is better than pre banking reform. The implication of these results is that the post banking sector reform yielded more returns than the pre banking sector reform. The study concluded that an effective banking sector reform is a regulatory imperative for a sustainable banking industry in Nigeria. Therefore, post banking sector reforms had significant impact on financial performance of Nigerian deposit money banks. It is therefore recommended among others that, management of banks should focus on maintaining sizeable amounts of reserves which can be ploughed back into the business, improving the quality of their credit portfolios, diversifying product and services, beefing up the capital in line with regulatory authorities and best practices.

Key Words: Financial Performance, Banking, Reforms, Nigeria

1. INTRODUCTION

A healthy and strong economy depends on a sound, stable, robust, and modern financial system (Okpara, 2011). This explains why the Nigerian banking sector has undergone several episodes of reform aimed at repositioning it, and reintegrating same into the regional and global financial systems (Akpan, 2007).

Banking reforms have been an ongoing phenomenon in the world right from 1980s, but has been more intensified in recent time because of the impact of globalization which is precipitated by continuous integration of the world market and economies. Banking reforms involve several elements that are unique to each country based on historical, economic and institutional imperatives.

In Nigeria, the reforms in the banking sector were precipitated by banking crisis arising from highly undercapitalization deposit taking banks; weakness in regulatory and supervisory framework; weak management practices and the tolerance of deficiencies in the corporate governance behaviour of banks (Uchendu, 2005).

Banking sector reforms and recapitalization have resulted from deliberate policy response to correct perceived or impending banking sector crises and subsequent failures. A banking crisis can be triggered by weakness in banking system characterized by persistent illiquidity, insolvency, undercapitalization, high level of non-performing loans and weak corporate governance among others. Similarly, highly open economies like Nigeria,

with weak financial infrastructure, can be vulnerable to banking crises emanating from other countries through infectivity (Ajilore, 2003).

Banking crisis usually starts with inability of the bank to meet its financial obligations to its shareholders. This, in most cases, precipitates runs on banks, the banks and their customers engage in massive credit recalls and withdrawals which sometimes necessitate Central Bank liquidity support to the affected banks. Some terminal intervention mechanisms may occur in the form of consolidation (mergers and acquisitions), recapitalization, use of bridge banks establishment of asset management companies to assume control and recovery of bank assets, and outright liquidation of non redeemable banks (Okpara, 2011).

Bank consolidation, which is at the core of most banking system reform programmes, occurs, some of the time, independent of any banking crisis. Irrespective of the cause, bank consolidation is implemented to strengthen the banking system, embrace globalization, improve healthy competition, exploit economies of scale, adopt advanced technologies, raise efficiency and improve profitability. Ultimately, the goal is to strengthen the intermediation role of banks and to ensure that they are able to perform their developmental role of enhancing economic growth, which subsequently leads to improved overall economic performance and societal welfare (Agboola, 2006).

1.1 Statement of Problem

The fact that the banking sector has contributed in no small measure to the development of the national economy through its financial intermediation and other developmental roles is still undisputed. However, despite this seeming positive position, a clean bill of health could hardly be given to the banking sector as many of its constituent members (banks) were merely gasping for breath and in dire need of a life-line due to technical insolvency, illiquidity, inept management, weak capital base, poor corporate governance, poor assets quality, among other corporate malaise (Ajayi, 2005).

Loss of public confidence in the banking system occurs when a bank or some banks in the system experience illiquidity or insolvency resulting in a situation where depositors fear the loss of their deposits and a consequent break down of contractual obligations that results in running on the bank. While a bank is said to be illiquid when it could no longer meet its obligations as they mature for payment; it is said to be insolvent when the value of its realizable assets is less than the total value of its liabilities (a case of "negative net worth"). These could lead to bank problem as depositors lose confidence in the system and seek to avoid capital loss. The uncertainty generated as a result of loss of confidence in banking institutions, if left unchecked, often raises real interest rates, creates higher costs of transactions and disrupts the payment mechanism with the attendant economic consequence.

According to Afolabi (2004) banking sector reform were to ensure the safety of depositor's money, position banks to pay active developmental roles in the economy and become major players in the global financial markets.

However, the question is what are these gains that the new reform purports to build upon? Has the 2005 bank reform recorded any meaningful impact on bank financial performance especially in terms of return on assets, return on equity, earnings per share, liquidity positions of the banks and the real sector of the economy, in the first place?

Therefore, this research work used the various components of bank financial performance to ascertain if the 2005 bank reform has contributed to financial performance of the deposit money banks in Nigeria and also engendered public confidence on the Nigeria's banking system.

It is in view of the series of banking sector reforms in Nigeria with seemingly little or no meaningful impact on financial performance. It is upon this background that the researcher seeks to examine whether pre or post banking sector reforms have significant impact on financial performance of Nigerian deposit money banks proxies by return on assets, return on equity, earnings per share and liquidity position of the banks.

1.2 Objectives of the Study

The broad objective of this study was to examine the impact of banking sector reforms on financial performance of Nigerian deposit money banks. Specifically, it sought to:

- i. ascertain the impact of banking sector reform on return on assets of deposit money banks in pre and post reforms;

- ii. determine the impact of banking sector reform on return on equity of deposit money banks in pre and post reforms;
- iii. ascertain the impact of banking sector reform on earnings per share of deposit money banks in pre and post reforms; and
- iv. determine the impact of banking sector reform on liquidity position of deposit money banks in pre and post reforms.

1.3 Research Hypotheses

In line with the objectives of the research, the following hypotheses were stated in null forms:

HO₁: There is no significant difference in return on asset (ROA) of deposit money banks between pre and post banking sector reform period

HO₂: There is no significant difference in return on equity (ROE) of deposit money banks between pre and post banking sector reform period

HO₃: There is no significant difference in earnings per share (EPS) of deposit money banks between pre and post banking sector reform period

HO₄: There is no significant difference in liquidity position of the of deposit money banks between pre and post banking sector reform period.

2 METHODOLOGY

2.1 Introduction

This section discusses the research design, population, and sample size, source of data and method of analysis.

2.2 Research Design

The research employed the use of ex- post facto research design. Ex- post facto research design is a one in which data is collected consistently to explain and predict a given situation.

2.3 Population of the Study

The population of this research work comprises of all the 21 deposit money banks in Nigeria from 1997-2013 that are listed on the Nigerian Stock Exchange.

2.4 Sample Size

From the population of 21 deposit money banks listed on the Nigerian Stock Exchange (NSE) market, a sample of 10 quoted deposit money banks were selected using purposively sampling techniques for the analysis. These banks include: Diamond Bank, First Bank of Nigeria, Guarantee Trust Bank, United Bank of Africa, Eco Bank, Skye Bank, Stanbic IBTC Bank, Fidelity Bank, First City Monument Bank and Access Bank. These banks are chosen because they are quoted on Nigerian stock exchange and easy access of data availability from their financial statement.

2.5 Definition of Variables

Return on Assets

Return on assets is a standard measure of bank performance obtained by dividing net profits after tax by total assets. The numerator can be either before- or after tax profits. It gives management and shareholders a sense of how well the available resources are being utilized.

$$\text{ROA} = \frac{\text{Net Profit after Tax}}{\text{Total Assets}}$$

Return on Equity

This measure how much shareholder earn for investment. The ratio indicates how profitable a bank is by comparing its net income to average shareholders' equity. The higher the percentage, the more efficient equity holders fund is been utilized.

$$\text{ROE} = \frac{\text{Net Profit after Tax}}{\text{Average Share Holder Equity}}$$

Earnings per share (Book Value of Share)

This measures the amount of earnings attributed to one share of the bank on an after tax basis. Basic earnings per share is calculated by dividing the net profit attributed to equity holders of the bank by the weighted average number of ordinary shares issued during the year. The calculation is shown as:

Earnings per Share are given by:

$$\text{EPS} = \frac{\text{Net profit after tax}}{\text{Number of Shares}}$$

Short Term Liquidity Ratio

In this work, liquidity ratio is defined as the total loans and advances to total current liabilities of banks. The best and most effective measure of a bank's liquidity is the loan-to-deposit ratio. Loan-to-deposit ratio is defined as the ratio of total loans and advances to total current liabilities. It measures the percentage of total current liabilities that has been given out as loans to fund users. Hunter and Helen (2002) expressed that loans are the most illiquid assets and as such, a rise in the percentage of current liabilities that goes to loans indicates that the bank is heading towards illiquidity while a reverse signals an improvement in bank's liquidity position. The formula for this is shown thus:

$$\text{Loan-to-deposit ratio} = \frac{\text{Total Loans and Advances}}{\text{Total Current liabilities}}$$

2.6 Sources and Method of Data Collection

For the purpose of this study, only secondary data was used, that is, annual reports, Nigerian Stock Exchange fact books and the annual financial statements of the sampled banks.

2.7 Technique of Data Analysis

In an attempt to test the effect of pre and post banking sector reform on financial performance of deposit money banks in Nigeria, the study used T-test (the test of equality of means). Test of Equality of mean helps to compare mean of a variable to see if there is any significant difference between the mean of a period compared with another period of the same variable. If 5% (0.05) significant level is higher than probability value (p- value) it means that they are significant, meaning that there is difference between the two means compared. But where it is less than p- value, it means they are not significant.

To test for a significant difference for the 2005 banking reform in the banking industry, the contributions of the return on assets, return on equity, earnings per share and liquidity position to the total performance of the Nigerian banking industry were evaluated for pre and post financial performances for the Nigerian banking industry using the parametric statistical pooled variance t test model to test for a significant difference.

The tests of hypotheses were in line with the approach adopted by Adegbaaju and Olokoyo, (2013), and Anthonia, (2014) in their works on the significance and effect of bank consolidation and bank performance. This research covered the period of 1997 to 2013 which was divided into two periods of before and after the 2005 banking reforms (1997 – 2004) and after the 2005 banking sector reform (2006 – 2013). This also enabled a comparison of the two periods given our variables and to ascertain if a statistical significant difference exists after the 2005 banking reforms using the pooled variance t-test.

3. Results AND Discussion

This section presents and discusses the results generated from the T- test model specified in chapter three. It covers the analysis of secondary data collected from the financial statements of the sampled deposit money

banks. The hypotheses formulated are tested in this section in order to compare pre and post banking sector reform on the performance of deposit money banks in Nigeria.

3.1 Data Analysis

This research employed Test of equality of means helps to compare the mean of a variable to see if there is any significant difference between the mean of a period compared with another period of the same variable. The results of T- test are presented in Table 1 and 2 below:

Year	ROA	ROE	EPS	LIQ
1997	6.12	1.43	21.16	4.95
1998	3.32	2.25	35.7	4.30
1999	2.18	1.75	58.45	1.29
2000	2.69	0.96	51.74	1.26
2001	3.24	1.77	49.45	1.01
2002	3.22	6.85	12.94	1.31
2003	3.65	4.79	20.47	1.24
2004	4.73	2.88	21.94	0.18

Source: Authors Computation from Nigerian Stock Exchange Fact Book (2015)

Year	ROA	ROE	EPS	LIQ
2006	5.88	38.93	36.04	0.48
2007	3.79	17.47	80.13	0.24
2008	3.56	8.13	84.69	1.62
2009	8.14	14.94	85.61	1.40
2010	6.68	8.70	87.46	5.09
2011	5.22	31.74	93.85	5.37
2012	4.86	38.26	95.07	5.30
2013	5.43	26.90	82.35	2.50

Source: Authors Computation from Nigerian Stock Exchange Fact Book (2015)

The tables 1 and 2 show the summary of the average results for the banks. The tables clearly highlight the pre and post banking sector reform situation for the various performance ratios of the selected banks for this study following the eight years pre and eight years post banking sector reform. These results show a trend analysis of both pre and post banking sector reform periods from 1997 to 2013. From above tables, the following observations are made:

Return on Assets (ROA): During the pre banking sector reform there are fluctuation in this ratio decreases from 6.12 % in 1997 to 2.18 % in 1999 but later picks up in 2000 to 2.69 %. In 2004 and 2003 it deepens from 4.73 % to 3.65 % respectively. However post banking sector reform begins with slight increase in 2006 to 5.88 % and later fell from 3.79 % to 3.56 % respectively in 2007 and 2008. There are slight increases in 2009 and gradually decreases to 6.68 % in 2010 to 4.86 % in 2012 but later bounces back to 5.43 % in 2013.

Return on Equity (ROE): This measures the rate of return to shareholders, was quite low before banking sector reform falling sharply from 1.43 in 1997 to 0.96 in 2000 and further to 2.25, 1.75, 1.77, 6.85, 4.79 and 2.88 from 1998 to 2004 2003 and 2004 respectively. However, post banking sector reform begins with an increase of 38.93 in 2006 which shows that the shareholders receive good returns in terms of dividend after post banking sector reform. This is not surprising as most banks raise their fund through equity share which now increase the equity capital and the profit after tax have improve substantially to compensate their shareholder.

Earnings per Share (EPS): The EPS rose sharply after the 2005 post banking sector reform exercise from 36.04 in 2006 to 95.07 in 2012, later drop to 82.35 in 2013. This shows that the banks earned more income on shares after the post banking sector reform than before the post banking sector reform, Although it is beginning to fall from the result obtained which implies that though banking sector reform encourage more yields on earning per share but it is not being managed well.

Liquidity Position of the Banks (LIQ): There was a gradual fall in the LIQ for pre and post banking sector reform result. But in 2006 immediately after the banking sector reform it was 0.48, it drop to 0.24 in 2007 and later pick up in 2010. The result obtained indicate that bank management are still trying to get their bearings

after the 2005 banking sector reform so we cannot conclude if they have been efficient after the banking sector reform but a test of equality of mean will help us reach a conclusion.

3.2 Test of Hypotheses

Table 3: T- Test Result of all Variables Analysis for Pre and Post Banking Sector Reform

Variables	Mean Pre	Mean Post	Std. Deviation Pre	Std. Deviation Post	T	Sig. (2-tailed)
ROA	3.6437	5.4450	1.24277	1.49584	2.768	.028
ROE	2.8350	26.8288	2.00313	12.01478	4.948	.002
EPS	33.9813	80.6500	17.28333	18.75667	5.656	.001
LIR	1.9425	2.7500	1.70562	2.18624	.650	.036

Hypothesis one: there is no significant difference in return on asset (ROA) between pre and post banking sector reform period.

The Table 3 showed that the ROA pre banking sector reform mean is lower at 3.6437 with standard deviation of 1.24277 than the post banking sector reform ROA mean at 5.4450 with standard deviation of 1.49584. The implication of this result is that the post banking sector reform assets yield more returns than the pre banking sector reform assets. However, table 3 shows that at 5% level of significance there is difference in the two means compared, meaning that it is statistically significant. This means that null hypothesis would be rejected and accepted the alternative hypothesis and concluded that there is significant difference in return on asset (ROA) between pre and post banking sector reform period.

Hypothesis two: there is no significant difference in return on equity (ROE) between pre and post banking sector reform period.

On Return of equity from Table 3 above, the pre banking sector reform mean was 2.8350 with 2.00313 % standard deviation while the post banking sector reform mean showed 26.8288 % with a standard deviation of 12.01478 %.

The implication of this result is that the post banking sector reform equity yield more returns than the pre banking sector reform equity. However, table 3 showed that at 5 % level of significance there was difference in the two means compared, meaning that it is statistically significant. This means that null hypothesis would be rejected and accepted the alternative hypothesis and concluded that there is significant difference in return on equity (ROE) between pre and post banking sector reform period.

Hypothesis three: there is no significant difference in earnings per share (EPS) between pre and post banking sector reform period.

The Earnings per share result shows that the pre banking sector reform mean is lower at 33.98 % and 17.28 % standard deviation than the post banking sector reform mean of 80.65 %, though it has a better standard deviation of 18.76 % However the t-test shows that the difference between the pre and post consolidation periods is significant at the 5 % level of significance.

This means that the shareholders are not earning as much as they were earning before the reform exercise. Therefore, the null hypothesis that there is no significant difference between the pre banking sector reform EPS and post banking sector reform EPS should be rejected and the alternate hypothesis is accepted.

Hypothesis Four: There is no significant difference in liquidity position of the banks between pre and post banking sector reform period.

The Table 3 showed that the liquidity position of the banks in before the reform mean is lower at 1.9425 with standard deviation of 1.70562 than the post banking sector reform mean at 2.7500 with standard deviation of 2.18624.

The implication of this result is that the post banking sector reform yield more returns than the pre banking sector reform. However, Tables 3 showed that at 5 % level of significance there is difference in the two means compared, meaning that it is statistically significant. This means that null hypothesis would be rejected and accepted the alternative hypothesis and concluded that post there is significant difference in liquidity position of banks between pre and post banking sector reform period.

3.3 Discussion of Findings

Test of Equality of means helps to compare mean of a variable to see if there is any significant different between the mean of a period compared with another period of the same variable to know if there is any significant different in the two mean compared. The fact that banking sector reform had a considerable impact on the financial performance of Nigerian deposit money banks is confirmed as the mean for the post banking sector reform period in table 3 shows post banking sector reform mean is better than the pre banking sector reform mean and the t-test show that the difference between the two mean are significant at 0.05 significant level. This implies that the banks, after the 2005 banking sector reform are turning over their assets enough to generate more profit after tax.

The return on equity result shows that the post banking sector reform mean is much higher at 26.83 and 12.02 standard deviation than the pre banking sector reform mean of 2.84 with standard deviation of 2.0. This implies that the shareholders earn better return on their investment after the banking sector reform .The t-test also shows the difference between the pre mean and the post mean, is significant at the 0.05 level of significance. This means that the shareholders are earning as much as they were earning before and after 2005 banking sector reform. This finding is consistent with the result obtained from previous studies such as Okafor (2005), Olubayo, et al., (2011) and Uduak and Ubong (2015).

On earnings per share, the pre banking sector reform mean is 33.98 with a standard deviation of 17.28 while the post banking sector reform mean is 80.65 with a better standard deviation of 18.76. The implication of the result is that the post banks earning per share have higher yield after the 2005 banking sector reform exercise. The Table 3, also shows that different in the pre and post mean is significant at 5 % significant level which implies that statistically, there is a significant different in the mean of the two periods compared Olokoyo (2013) and Ogwuanyi and Amanze (2014).

On liquidity position of the banks, the pre mean shows 1.95 with a standard deviation of 1.71 while the post 2005 banking sector reform mean shows 2.75 with a standard deviation of 2.19. The implication of this is that post banking sector reform is better than the pre. However, table 3 shows that at 5 % significant level there is different in the two means compared, meaning that it is statistically significant. This implies that statistically, there is difference in the mean of the pre and the post on liquidity position of the banks.

This finding is consistent with the result obtained from previous studies such as Okafor, (2005), Olubayo et al., (2011) and Uduak and Ubong, (2015).

4 Conclusion

It is true that the lip services paid to assets and liabilities management in the banking industry may have accounted for the banking distress of the 1980's, mid-1990 and earlier 2000. The framework and emerging studies of banking sector reform has become very crucial amongst nations since it is the hub around which other economic activities revolve.

Based on the findings above, it is concluded that effective banking sector reforms is a regulatory imperative for a sustainable banking industry in Nigeria. This has become necessary in the face of evolving developments in the banking sector in Nigeria especially with the series of reform programs in the banking industry.

As a result of this, Nigerian banking system has undergone remarkable changes in recent years. The findings of this research indicate that there are significant changes in the financial performance of post banking reform and

therefore concluded that post banking sector reform has significant impact on financial performance of Nigerian deposit money banks.

5. Recommendations

The following recommendations are made based on the findings:

- i. In order to improve performance, management of banks should focus on maintaining meaningful amounts of reserves which can be ploughed back into the business, improving the quality of their credit portfolios, diversifying product and services, beefing up the capital in line with regulatory authorities and best practices. This cannot be possible without employing skillful, experience and efficient team of management that are visionary and focus. To forestall future credit crunch and bank distress in the Nigerian banking industry, the CBN should tailor its policies and regulations toward ensuring that banks do not falter in their performance.
- ii. In order to build and retain public confidence and avoid a run on Nigerian banks, greater transparency and accountability should be firmly embedded as the hallmark of the Nigerian banking system.
- iii. Shareholders' fund and total assets of the bank should be periodically evaluated. The regulatory authorities will need to put in place appropriate machinery or tool that will address issues of bank liquidity and shore assets quality in the industry. Bank management in conjunction with the regulatory authorities should at all times address causes of illiquidity rather than the systems. In this way, lost confidence can once again be restored in the Nigerian banking industry. It is important to carry routine checks, periodic examinations on bank returns.
- iv. The banks should put in place good corporate governance that will allow for transparency and minimize fraud in the bank. The shareholders have the responsibility to choose their directors, which will in turn choose members of management that will run the affairs of the banks. They should put in place good management that will protect their investment and increase their performance.
- v. In the bid to ensure the practice of good corporate governance, which is a system by which corporations are governed and controlled with a view to increasing shareholder value and meeting the expectations of the other stakeholders, the CBN and other regulatory bodies like Security and Exchange Commission, Nigeria Stock Exchange, Nigeria Deposit Insurance Corporation, among others, should not allow any of the banks to have weak corporate governance.

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