
Effects of Recapitalization on Profitability of Quoted Deposit Money Banks in Nigeria

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Abstract

The main objective of this paper is to empirically assess the effects of bank recapitalization on the profitability of Deposit Money Banks in Nigeria. The empirical analysis covered the period from 2005 to 2016, and taking a case study of fifteen banks quoted on the Nigerian stock Exchange. The data for the study were obtained from secondary sources including the annual reports and financial statements of all the Deposit Money banks quoted on the Nigerian stock Exchange. The study adopts causal research design which uses historical information to study the existing knowledge. The data were analyzed using pooled regression analysis through STATA window 14 package. The finding from the study shows that bank recapitalization has effects on returns on assets (profitability). The implication of this study is that the bank management have been able to effectively and efficiently utilize their assets to generate more profit for the banks. It therefore recommended that banks should improve on their total assets turn over and to diversify their finds so that they can generate more income on their assets.

Key Words: Recapitalization, Bank Profitability, Return on Assets, Deposit Money Banks

1. Introduction

Banking is inescapable in any society where commerce and trades are in existence, whether in a rudimentary or advanced form because it occupies a strategic position in the financial system of any nation. It is the life wire of any economy and pivot on which economic growth revolves. Therefore, it has become inevitable to recapitalize the Nigerian banks for proper intermediation roles.

Bank recapitalization has been a matter of discussion among policy makers, researchers, bank regulators, academics and the general public because of its importance in the economic development of the country. It is an aspect of reform in the banking industry which is based on the need for reorientation and repositioning of existing banks in order to attain an affective and more efficient state. It is used as a strategy to address the insolvency of banks and forestall future possibilities of financial distress.

According to Adegbaju and Olokoyo (2008) recapitalization entails increasing the debt stock of a company or issuing additional shares through existing shareholders or new shareholders or a combination. Sani and Alani (2013) advocate that the objectives of recapitalization are to enable the banks increase their market power, induce restructuring and engender the alignment and realignment of banks to ensure a good, responsive, competitive and transparent banking system suited to the demand of the Nigerian economy and the challenges of globalization. Okpanachi (2001) posits that recapitalization is carried out in order to arrest systems decay, restoration of public confidence, building of strong, competent

and competitive players in the global arena, ensuring longevity and many more which act as spring board to achieving improved performance. Supporting this statement, Bakare (2011) argues that apart from its multiplier effect on the economy as a whole, adequate capital acts as a buffer and security for banks.

Spong (1990) postulates that commercial banks must have adequate capital to provide a cushion for absorbing possible loan losses, fund for its internal needs, and expansion drives and added security for depositors. According to him this can only be done through recapitalization. No wonder, Kanu and Isu (2013) argue that many banks go out of their way to increase their capital even without the prompting of the Central Bank of Nigeria and this is because a profitable banking sector is better able to withstand negative shocks and contribute to the stability of the financial system.

1.1 Statement of the problem

The main problem of this study is whether recapitalization of Nigerian Deposit Money Banks has effect on their profitability.

1.2 Objective of the study

The main objective of this study is to evaluate the effects of recapitalization on financial performance of Nigerian Deposit Money Banks. However, the specific objective is to examine the effects of bank recapitalization on the profitability of Nigerian Deposit Money Banks.

1.3 Hypothesis formulation

In order to provide objective answers to the research question and achieve the study objective the testable hypothesis is formulated as follows.

Ho: Bank recapitalization has no significant. Effect on the profit of Nigerian Deposit money Banks

H1: Banks recapitalization has a significant effect on the profit of Nigerian Deposit Money Banks.

2. Review of Related Literature

Relevant literature will be reviewed under the following sub-topics

2.1 Basic Concepts

2.1.1 Recapitalization of Deposit Money Bank

Recapitalization is an important component of Nigerian Banking industry reform. It is a policy undertaken by the federal government through the Central Bank of Nigerian mainly to address the serious problems of general under performance and to develop strategies towards improving its capacity for better performance. According to Ikpefan (2013) recapitalization is the act of beefing up the long term capital of a bank to the level at least required by the monetary authorities and to ensure the security of shareholder fund. According to Soludo (2004), the idea of recapitalization was to ensure a diversified, strong and reliable banking industry where there is safety of depositor' funds and re-assurance of the banks' continual play of the active intermediation role in the economy. It has become inexorable in the high of the global dynamic exigencies and as a need to enhance the banking industry's competitiveness and capacity to play the fundamental role of financial investment and improving economic growth which it was created for (Ajede, 2011) According to Adah (2012) recapitalization is expected to improve the banks performance by ensuring adequate capital and profitability as well as enhancing the banks' intermediation capacity.

The objective of recapitalization according to Central Bank of Nigeria (2005) was to ensure that the banks have adequate capacity to absorb operational losses, support the economic development of this country, play more effectively their intermediation function, meet their expansionary drive and compete effectively in the global financial market. Omoruyi (1991) argues that recapitalization appears to be the main driving force of bank reforms and that it focuses mainly on restructuring, rebranding and refurbishing the banking system to accommodate the challenges of bank liquidation. In the same vein, Demirguc Kunt and Levine (2000) postulate that recapitalization drives bank consolidation so that increased concentration goes hand-in-hand with efficiency improvement. They further argue that consolidated banking system enhances profit efficiency and lower bank fragility which provide a buffer against adverse shocks and increases the franchise value of the banks. However, Mbizi (2012) emphasizes that the type of recapitalization envisaged should improve bank performance by ensuring solvency and profitability as well as enhancing financial intermediation capacity. Arguing further Kanu and Isu (2013) support the statement by saying that when there are increases in the capital bases of banks; profit performance also tends to increase. Still, Oladejo and Oladipuo (2011) argue that bank capital has a direct relationship with profitability as more and more money is pumped into the business, more profit will be recorded. Ikpefan (2013) advocates that the return on asset also increases as the firm's capital base increases.

2.1.2 Recapitalization and Profitability of Quoted Deposit Money Banks in Nigeria

Sani (2006) opines that profitability connotes a situation where the income generated during a same length of time for the purpose of generating income.

Profitability is the state of producing a financing profit or gain According to Bobakokoia (2003) profit is the essential pre requisite of a competitive bank institution and the cheapness source of funds and that it is not merely a result, but also necessity for successful bank in a period of growing competition and uncertainty in financial markets. He further argues that the basic desire of a bank's management is to make profit as the essential requirement for conducting any business. Aransiola (2013) emphasizes that several gains have been recorded in the banking sector are result of consolidation.

Bank recapitalization has a considerable effect on the profitability of Deposit Money Banks in Nigeria According to Athanasoglou, Sophocles and Matthaios (2005) the importance of bank profitability has made researcher, academics, bank management, shareholders and bank regulatory authorities to develop considerable interest on the factors that determiners bank profitability because of its effects on the economy. Ikpefan, Okorie, Agwu and Achingamonu (2014) posit that bank recapitalization has helped to improve the gross earnings of banks, deposits, loans and advances, shareholders fund at least in the short run. They further argue that it has helped the banks to undertake big ticket transactions with increased deposit, the earnings of the banks have increased on the average, the loan capacity of banks has also improved considerably and equity investment has gone up considerably and has improved the equity capital and reserves.

Samusi (2012) postulates that a number of banks have returned to the profit-making path and improved their Balance Sheets. With recapitalization put in place, Nigerian banks are now key players in the global financial market with many of them falling within the twenty (20) banks in Africa and among top one thousand (1000) banks in the world. Bank have gradually resumed lending to the private sector with the additional liquidity of more than N1.7 million injected into the banking system through issuance of AMCON bonds. Also the giving of credit to the power sector and small and medium scale enterprises at single digit

interest rate have helped create thousands of jobs in the economy (.Samusi, 2012). Demirguc-Kunt and Levine (2003) argue that consolidated banking system enhances profit efficiency and lower bank fragility and that more importantly, high profits arising from this provides a better buffer against adverse shocks and increases the franchise value of the banks

Basically, there are three widely used measures of bank profitability namely. Net interest margin (NIM), Return on Assets (ROA), and Return on equity (ROE). According to Ejoh (2014) anyone or a combination of the indicators can be used to measure profitability in banks. For the purpose of this study, Return on assets (ROA) will be adopted. It measures how profitable and efficient the management of a bank is in using the banks total assets in generating income.

2.2 Theoretical Review

This study is hinged on recapitalization reform of Deposit Money Banks in Nigeria as a necessity for restructuring and refurbishing the banking system for effective and efficient intermediation function. Recapitalization is a strategy often utilized by the Central Bank of Nigeria to strengthen banks in Nigeria and save them from financial distress. Ajede (2011) looks at recapitalization as the fundamental restructuring needed to address structural and operational problems in the system in order to create a strong and reliable banking sector which will play active development roles in Nigerian economy and which can as well be a competitive player in the global financial system.

According to Uchendu, (2005) consolidation which is carried out through recapitalization is implemented to strengthen the banking system, embrace globalization, improve healthy competition, exploit economics of scale raise efficiency and improve profitability. This study is based on the theory of the doctrine of necessity. It postulates that banks are the focal point or hub of every economy and as such plays a vital role to the survival of the entire economic system. It is for this reason that it becomes necessary to regulate the activities of the banks to fit into the economic policies of the government (Okofor, 2011).

3. Methodology

The purpose of this study is to evaluate the effects of recapitalization on profitability of Deposit Money Banks in Nigeria. The study adopted causal research design. This research design uses historical information in studying the existing phenomenon with the intent of using the result to understand current trend in the issues under study. The data for the study are obtained from secondary sources including comprehensive income statement, statement of financial position, Nigerian Deposit Insurance Corporation Annual Reports, the Nigerian Stock Exchange fact Book and from various issues of the reports of Deposit Money Banks in Nigeria. The data collected were estimated by fixed-effects, random-effect and pooled intimation. Model selection criteria applied was the Hausman specification test to choose between the random and fixed effects the study covered the period from 2005 to 2016. This period was selected because it was characterized by bank restructuring programmes and financial deregulation. A sample size of fifteen banks that are quoted on the Nigerian Stock Exchange was used for the study which comprises of both the old and new generation so as to have full cover of the entire sector.

3.1 Model Specification

In this study the banks' profitability is measured by its Return on Assets (ROA). The ROA is the profit before tax divided by the total assets. 'The' ratio measures how well a bank management is in using the banks' real investment resources to generate profits

The variable used as proxy for profitability is return on asset while the variable used as proxy

for recapitalization is shareholder equity. Gross Domestic product is the proxy for the growth and the moderating variable.

The functional relationship is represented in a model form as follows:

$$ROA = F(RCAP, GDP)$$

The model is written in explicit form to reflect proxy (ROA) adopted for the banks' profitability as follows:

$$ROA_{it} = B_0 + B_1RCAP_{it} + B_2 GDP_{it} + V_i + U_{it}$$

Where:

B_0 = the intercept term

B_1, B_2 = Regression coefficient

ROA = Return on Asset of bank i in period t

RCAP = shareholder equity of bank i in period t

GDP = Economic growth of bank i in period t

V_i = Bank specific error term

M = Composite error term

i = The Unit ($i = 1, 2, \dots, 15$ banks)

t = The time Unit ($t = 1, 2, \dots, 12$ years)

On a prior basis: Our a priori expectation about the relationship between profitability and bank recapitalization is that recapitalization is expected to have positive effect on the profitability of the banks.

Decision rule: The decision to accept or reject the null hypothesis shall be based on probability value (p – value) and R_2 test. For P – value: where the calculated P –value is greater than 5 percent; we do not reject the null hypothesis otherwise we reject the null hypothesis and accept the alternate hypothesis. For R_2 : The closer the R_2 is to 1 the stronger the explanatory power of the regression line.

Testing of Hypothesis

H_0 : Bank capitalization has no significant effect on profit of Nigerian Deposit Money Banks.

H_1 : Bank capitalization has a significant effect on profit of Nigerian Deposit Money Banks

Choice between Fixed and Random Effects

In choosing the most appropriate method between fixed effect and random in this research work, the researcher adopts Hausman Chi-square test to select whether the Fixed or Random should be used.

Method: Hausman Specification Test

Formula: $\chi^2 = (\hat{\beta}_c - \hat{\beta}_e) [\text{var}(\hat{\beta}_c) - \text{var}(\hat{\beta}_e)]^{-1} (\hat{\beta}_c - \hat{\beta}_e)$

Where: $\hat{\beta}_c$ is the Instrumental Variable estimate and $\hat{\beta}_e$ is the Ordinary Least Square estimate.

Data: The data for the estimation of the stated model above is attached as appendix B5

Result: The result of the Hausman test is presented in table 1.

Table 1: Hausman Test

---- Coefficients ----				
	(b) fixed	(B) random	(b-B) Difference	sqrt (diag (V_b-V_B)) S.E.
recap	-1.26e-07	-2.47e-08	-1.01e-07	3.74e-08
gdp	5.35e-07	3.28e-07	2.07e-07	6.77e-08

b = consistent under Ho and Ha; obtained from xtreg
 B = inconsistent under Ha, efficient under Ho; obtained from xtreg
 Test: Ho: difference in coefficients not systematic
 $\chi^2 = (b-B)'[(V_b-V_B)^{-1}](b-B)$
 = 7.28
 P-Value = 0.0262

Source: STATA Window 14

Table 1 shows the result of the Hausman specification test. The Hausman test indicated that the chi-square value of 7.28, with a p-value of 0.0262 at 5% significance level.

Decision

The fixed effect method (FEM) was adopted because the result of the Hausman test showed that the fixed effect is the best estimator. FEM appears when there is the individual effect and explanatory variables have a correlation with X_{it} or have a pattern that nature is not random.

Model for Hypothesis

$$ROA_{it} = 0.0030261 + 1.26e-07 RCAP_{it} + 5.35e-07 GDP_{it}$$

Decision Rule:

If the p value is greater than the level of significance of 0.05, the null hypothesis is accepted while the alternate hypothesis is rejected. If the p value is less than the significance level of 0.05, the null hypothesis is rejected and the alternate hypothesis is accepted.

- Reject H_0 if $P < 0.05$
- Accept H_0 if $P > 0.05$

The data for the estimation of the stated model above is attached as appendix B4

Table 2: Result of Pooled Regression, Fixed Effect and Random Effect

	Expected sign	Panel A Pooled coefficient	P-value	Panel B Fixed coefficient	P-value	Panel C Random coefficient	P-value
$RCAP_{it}$	+	9.35e-09	0.808	1.26e-07	0.030	-2.47e-08	0.571
GDP_{it}	+	2.51e-07	0.138	5.35e-07	0.004	3.28e-07	0.053
$CONSTANT$		-0.001225	0.894	0.003026	0.733	-0.000609	0.950
R^2		0.0182		0.0027		0.0149	
N		180		180		180	
F^*		1.64	0.1973	4.40	0.0138	3.98	0.1364
Corr(U_i, X)		-	-	-0.4542	-	0	-

Dependent Variable: ROA_{it}
Source: STATA Windows 14

Interpretation

The result for model three indicated it is robust, has a correct functional form, normally distributed and homoskedastic. Therefore, the results reported are valid for reliable interpretation.

Result of the pooled result in *Panel A*, recapitalization has a positive effect on profitability i.e. return on asset (ROA) with a coefficient value of 9.25e-09. For *Panel C*, recapitalization has a negative effect on return on asset (ROA) with a coefficient value of -2.47e-07. Panel A and C are not used because the Hausman test indicated fixed effect model is the best estimator. Accordingly, in *Panel B*, recapitalization has a positive effect on return on asset (ROA) with a coefficient value of 1.26e-07. The implication from the result in *Panel B* which is the fixed effect shows that recapitalisation brought about an increase in ROA of money deposit banks in Nigeria as at the time of this study.

In addition, the result from table 13 shows that the control variable, GDP is positive for all the estimation techniques (pooled, fixed and random effects). This indicated that GDP which represented the level of productivity and economic activity in the country have positively affected the profitability of banks in Nigeria.

The coefficient of determination $r^2 = 0.0138$ shows that a 1.38% change in ROA_{it} is as a result of the changes in bank recapitalization and GDP. The F- test with a value of 4.40 and p-value of 0.0138 shows that there is a strong linear dependency existing between indicators of bank ROA_{it} and recapitalization economic growth. The estimated result is heteroscedastic because the Breusch-Pagan / Cook-Weisberg test indicated the presence of heteroscedasticity. This was corrected by the estimation of Robustness standard error (Gujarati, 2004).

Decision for model

Since the p-value is 0.030 is less than the level of significance of 0.05. We therefore accept the alternate hypothesis which states that bank recapitalization has a significant effect on profit of Deposit Money Bank in Nigeria. Thus, it is concluded that Bank capitalization has a significant effect on profit of Nigerian Deposit Money Banks.

4. Discussion of Findings

In this hypothesis, the null hypothesis is rejected while the alternate hypothesis which states that bank recapitalization has a significant effect on the profit of Nigeria Deposit Money Banks (NDMBs) is accepted. This indicates that recapitalization brought about increase in the Return on Asset (ROA) of Deposit Money Banks in Nigeria. The likely cause of this finding is that the bank management was able to utilize the banks' financial and real investment resources effectively to generate profit. The result does corroborate with the findings of Agwu and Actugamonu (2014), Ojong, Ekpuk, Ogar and Emori (2014), Aransiola (2013), and Kanu and Isu (2013) that bank recapitalization has positive effect on Return on Asset (ROA).

However, the result does not support Alajekwu and Obialor (2014), Sani and Alani (2013), Achua and Ola (2013) and Kenn-Ndubuisi and Akani (2015) who found that a negative effect exists.

Empirical evidence of increasing returns on assets of Deposit Money Banks is an indication that recapitalization has a positive effect on profit of Deposit Money Banks in Nigeria. As a result of recapitalization, many banks were able to turn over their assets enough to generate more profits. The finding agreed with the efficient structure theory and public interest theory. The efficient structure theory holds that efficient banks could capture a market share and even earn economic returns which naturally lead to elevated concentration.

Therefore, large banks earn elevated returns because of their efficiency. The increased returns on assets indicated that the banks are making profit for their shareholders and providing loans and advances to the public which facilitates the creation of shareholder value, protection of the individual and collective interest of all stakeholders in the banking industry.

The implication of this finding is that the banks have been able to generate profit thereby creating shareholders wealth and also providing loanable funds for more production of profit. It is obvious that the bank after recapitalization were earning better returns on their assets which led to improved performances of the Deposit Money Banks in Nigeria.

5. Conclusion

The objective of this study is to critically examine the effects of Bank recapitalization on the profitability of Deposit Money Banks in Nigeria. From our tested hypothesis employing pooled regression analysis, the result shows that recapitalization has a significant effect on the profitability of Deposit Money Banks in Nigeria.

The finding Corroborates with the finding of Ojong, Ekpuk, Ogar and Emor (2014), Aransiola (2013) and Kanu and Isu (2013) that bank recapitalization has a positive significant effect on Return on Assets (ROA). As a result of recapitalization banks' were able to utilize their assets effectively to generate more profits. This means that increased capital lead to improved profitability.

6. Recommendations

In the light of the finding the following recommendations will be useful.

1. Bank management were not making effective use of their assets to generate more profit that could had to enhance performances. This problem led to consolidation via recapitalization of Nigerian banks the present study reveals that recapitalization has a significant effect on return on assets. In order to improve and maintain high return on assets, bank management should put into more effective and efficient utilization of their asset to generate more profits. It can be done by investing such assets in profitable ventures that can bring greater returns for enhanced performance.
2. The banks should boost loan and advances to individuals and organizations which can be translated into higher profitability through interest.

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