

The Impact of Banking Consolidation on the Economic Development of Nigeria

Enya Emori¹ Stephen Nkamare² Ikenna Nneji^{3*}

1.Lecturer, Department of Banking and Finance, University of Calabar, Cross River, Nigeria

2.MSc Scholar, Department of Banking and Finance, University of Calabar, Cross River, Nigeria

3.PhD Scholar, Department of Banking and Finance, University of Calabar, Cross River, Nigeria

*dikenna@yahoo.com

Abstract

Consolidation was used as a key strategy by a number of banks to meet the capitalization requirements issued by the Central Bank of Nigeria (CBN) in 2005. In view of the need to understand the effect of this strategy as used by the banks, this study sought to establish the impact of bank capital, aggregate investment, loans and advances, bank profitability on the performance of the Nigerian economy. Time series was used from 1986-2011 and multiple regression was used to analyze data. It was found that bank capital was a determinant of banks performance and banks' investment had a positive impact on the economy. The study also showed that loans and advances were a determinant of banks profitability. Accordingly, it was recommended that the Central Bank of Nigeria should constantly monitor the activities and the performance of the emerging mega-banks in order to prevent bank distress and failure. It was also recommended that adequate capital should be provided to make Banks more liquid.

Keywords: Consolidation, economic development

1. Introduction

The banking industry is the most vibrant sector in the Nigeria economy. It serves as catalyst for growth and development. It is the pivot upon which a nation's economy rotates. Commercial banks are unique among financial institution. Commercial banks have the extra capacity to create new credit money (Nzotta, 2004). The money is invested in low and high risk assets to ensure that depositors funds are not impaired by cumulative losses and banks are by law and regulation expected to hold adequate capital cover to cushion out any loss, so that depositors funds may continue to be intact (Onoh, 2002).

The strength of a bank depends on the capital funds available to the bank. According Soludo (2004), banks have not played their expected role in the development of the economy because of their weak capital base and as such, the decision to raise capital base of banks was with the aim of strengthening and consolidating banking system. The strengthening and consolidation of the banking system was the first phase of reforms designed to ensure a diversified, strong and reliable banking sector which will ensure the safety of depositors' money, play active development roles in the Nigeria economy and also become competent and competitive in the financial system.

Consolidation of banking firms involves either a combination of existing bank growth among the leading banks. The capital of bank is to serve as a symbol of confidence in banking institutions. Therefore, the strong capital base prescribed under the recapitalization programme is consistent with corporate mandate of promoting public confidence in the banking system. The increase in the minimum capitalization requirement for banks will, to a large extent, engender public confidence in the banking system as it will enhance banks capacities to absorb operating losses and minimize recourse to depositors' funds protection agency.

1.1 Statement of the problem

Capital is required to support business but the importance of adequate capital in banking cannot be over-emphasized. It is an essential element which enhances confidence and permits a bank to engage in banking. A very important function of capital in a bank is to serve as a means of absorbing losses. It serves as a buffer between operating losses and insolvency.

Bank capital does not only serve as a cushion against deposition run-off, but forms the basis for future asset growth. The rate at which retained earnings grow is determined to a large extent by the growth of bank capital and invariably the growth of bank asset. If the rate of growth of retained earnings is low, it could be an indication of poor profitability which may affect the performance Nigeria economy.

Bank consolidation stems from the need to resolve problem of financial distress in order to avoid systematic crises as well as to restrict inefficient banks because of inadequate capital cover to wipe out or at least reduce losses sustained from failed investments. The presence of weak, unhealthy and undercapitalized banks increased the need for a high level of consolidated banks through mergers and acquisitions. This has necessitated the work to see how bank consolidated in Nigeria in the past years have led to economic development

1.2 Objective of the study

The general objective of the study is to make a critical look at the impact of banking consolidation on the economic development of Nigeria.

The specific objectives underlying this research are;

- To examine the impact of bank capital on the banks performance
- To ascertain the effectiveness of bank investment on the performance of banks in Nigeria.
- To determine the role of investment and its contribution to the performance of banks in Nigeria
- To investigate the impact of consolidated banks on the performance of Nigeria economy

1.3 Research hypotheses

From the above research objectives, the formulated research hypotheses are stated in null form.

H₀₁: There is no significant relationship between bank capital and the performance of banks in Nigeria.

H₀₂: There is no significant relationship between bank investment and the bank performance in Nigeria.

H₀₃: There is no significant relationship between total investment and the performance of banks in Nigeria

H₀₄: There is no significant relationship between consolidated banks and the performance of Nigeria banks

2.0 Theoretical framework

Banking consolidation theories on the economic development of Nigeria are:

2.1 Pro concentration theories

Proponents of banking sector concentration argue that economies of scale drive bank mergers and acquisition (increasing concentration) so that increased concentration goes hand-in-hand with efficiency improvements. (Demirgüç-kunt and Levine, 2000). This is partly because reduced concentration in a banking market results in increased competition among banks. Proponents of this “concentration-stability” view argue that larger banks can diversify better so that banking systems characterized by a few large banks will be tend to be less fragile than banking system with many small banks. Concentrated banking system may also enhance profits and therefore lower bank fragility. High profits provide a buffer against adverse shocks and increase the franchise value of the bank, reducing incentives for bankers to take excessive risk. Furthermore, a few large banks are easier to monitor than many small banks, so that corporate control of banks will be more effective in a concentrated banking system.

2.2 Pro de-concentration theories

This theory indicates that bank consolidation tends to increase the risk of bank portfolios. proponent of banking sector de-concentration also argue that concentration will intensify market power and political influence of financial conglomerates, reduce efficiency and destabilize financial systems as banks become too big to discipline and use their influence to shape banking regulation and policies. While excessive competition may create an unstable banking environment, insufficient competition and contestability in the banking sector may breed inefficiencies.

In concentrated banking systems, bigger, politically connected banks may become more leveraged and take on greater risk since they can rely on policy makers to help when adverse shocks hurt their solvency or profitability similarly, large, politically influential banks may help shape the policies and regulations influencing banks’ activities in ways that help banks, but not necessarily in ways that help the overall economy.

2.3 Supply-leading theories

In this theory, the premise underlying the proposition that financial liberalization (a major component of financial development) promotes growth is fairly straight forward. Given that investment is a primary determinant (factor) of growth, for investment to take place, firms (investors) and savers must be given incentives. Moreover, savings have to be channel to investors. Financial liberalized, (financial development) ensures that this takes place efficiently (efficient financial intermediation). As interest rates rise, the quality of investments is enhanced, since financial repression is often associated with mediocre quality investments. In addition, investment (quantity) rises, since higher deposit rates increase the supply of funds.

In this supply-led theory, finance was considered a means to induce innovation, as a form of input. For example, conveyed the idea that economic growth and development could be encouraged through interventions in the financial system by supplying finance in advance of demand. These supply-leading financial theories came to dominate rural finance for several decades.

3. Research methodology

3.1 Research design

Research design is the approach or scheme which defines the tools and strategies of the research. In

this study, the exploratory design is employed to identify the factors that contribute to bank consolidation on the economic development of Nigeria.

3.2 Sources of data

Two major sources of data exist; these are the primary sources and the secondary sources. Primary sources are generated by the research and secondary source consists of already existing data used for some other work but were found to be useful in this study. Based on the objectives of the study, the secondary sources are employed in this research.

3.3 Techniques of data analysis

In analyzing the data gathered for this work, multiple regression models were employed to establish the relationship between dependent variable and independent variables.

3.4 Model specification

The objective of the study is to establish the relationship existing between the banking consolidation and economic development. Based on this, the model below has been developed for the study.

$$GFCF = F(BC)$$

Where;

GFCF = Gross Fixed Capital Formation

The functional relationship is turned into ordinary least square (OLS) model.

$$GFCF = \alpha_0 + \alpha_1 BC + e$$

Where ;

Dependent variable	=	GFCF
Independent variable	=	BC
Regression constant	=	α_0
Regression coefficient	=	α_1
Stochastic error term	=	e

Model two:

$$GDP = \alpha_0 + \alpha_1 ABINC + \alpha_2 AGINV + e$$

Where;

Dependent variable	=	GDP
Independent variables	=	ABINV, AGINV
Regression constant	=	α_0
Regression coefficient	=	$\alpha_1 - \alpha_2$
Stochastic error term	=	e

Model three:

$$Bprof = \alpha_0 + \alpha_1 BINV + e$$

Where;

Dependent variable	=	BPROF
Independent variables	=	BINV
Regression constant	=	α_0
Regression coefficient	=	α_1
Stochastic error term	=	e

4. Data analysis and discussion of findings

4.1 Data analysis

The estimation technique used was the ordinary least square (OLS) method. The first step involved in the estimation of linear relationship is the comprehensive pre-testing procedure to investigate the variables.

The bank capital variable had a positive sign, as seen in table 1. Thus, a one percent increase in bank capital will lead to 0.972772 percent increase in GFCF, ceteris paribus. The variable of Bank capital is statistically significant at 1% per cent level. Thus, it is a reliable variable that influences GFCF.

On the other hand 0.973 had a positive impact on gross fixed formation. The coefficient of determination, the adjusted R^2 with 0.800467 using error correction modeling shows that about 80 per cent variation in GFCFC is determined by changes in the explanatory variables specified in the model. Thus, it is a good fit. The f-statistics as shown in the Table 4.2.1 showed that the whole model is jointly significant at 5 per cent level. The Durbin-Watson (DW) statistics of 96.28090 reveals that it is difficult to establish whether there is autocorrelation or not as the value lies between 4-du and 4-dl. Thus, it is in the inconclusive region and within

the acceptable bounds. Hence, it is good for policy analysis.

There is no multicollinearity in the model because the adjusted R^2 is relatively high as most of the coefficients of the variables are significant at five percent level. More so, the standard error is as shown in the table.

The coefficient of the error correction term carries the correct sign and it is statistically significant at five percent level with the speed of convergences to equilibrium.

The presentation of result from table 2 is given below;

$$LGDP = -3.75 + 10.00LABINV - 0.4200LAGINV$$

$$t\text{-stat.} = (2.26) \quad (8.071) \quad (-2981)$$

The coefficient of determination (R^2) is 0.919 and an adjusted R^2 of 0.912. The later indicates that 91% of variations in the observed behavior of GDP is jointly explained by the independent variables namely; LABINV, LAGINV. This shows that the model fits the data well and has a tight fit. Also, the f-statistic is used to test for the significance of such good or tight fit. The model reports on effectively high f-statistic value of 130.2025 which when compared with the table value. This indicates that the high-adjusted R^2 value is better than would have occurred by chance; therefore, the model is statistically robust.

Using this criterion, therefore, LABINV is significant at 1% level. Specifically, a 1% increase in LABINV (10.0%), and LAGINV (-0.42%) will prop up the economy more than proportionate percentage point. The constant term indicates that if all variables held constant, the economy will be depressed by -3.74. The DW statistic (1.272) is used to test for the serial correlation in the residuals of the model. The calculated DW is 1.27. The $du = 1.66$, $4-du = 2.34$, $dl = 1.12$, $4-dl = 2.88$ at 5% level. The decision rule is that if the calculated DW falls outside du and $4-du$ (1.66 and 2.34) then there is a serial correlation in the residuals. This shows that our calculated DW = 1.272 falls and this indicates that the estimates should be taken with caution.

The presentation of result from table 3 is thus;

$$BPROF = 3767081 + 1.999579$$

$$BPROF = 3767081 + 1.999579BINV$$

$$t\text{-stat.} = (5.095246) \quad (1.890149)$$

This shows that the model fits data well and has a tight fit.

Using this criterion, therefore BINV is insignificant. Specifically, a 1% increase in BINV (1.99%) will prop the performance of banks.

4.2 Test of hypotheses

In order to test the already stated hypotheses in chapter one, the following decision rule is stated:

Decision rule

The decision rule is to reject the null hypothesis if the t-calculated is $>$ t-table. And accept the null hypothesis if the t-calculated $<$ t-table.

Hypothesis 1

Results

$$t\text{-calculated for LBC} = 9.812283$$

$$t\text{-critical at 23 df } 0.05 = 2.01$$

Based on these results and our decision rule the null hypothesis is rejected and alternate hypothesis is upheld and concluded that there is a significant relationship between bank capital asset and performance of banks.

Hypothesis 2

Results

$$t\text{-calculated for LABINV} = 8.071236$$

$$t\text{-critical at 23 df } 0.05 = 2.01$$

Based on these results and our decision rule the null hypothesis is rejected and alternate hypothesis is upheld and concluded that there is a significant relationship between total investment and the performance of banks

Hypothesis 3

Results

$$t\text{-calculated for BINV} = 1.999579$$

$$t\text{-critical at 23 df } 0.05 = 2.01$$

Based on these results and our decision rule the null hypothesis is rejected and alternate hypothesis is upheld and concluded that there is no significant relationship between investment and the performance of bank capital.

4.3 Discussion of findings

From the results of our hypotheses as stated above, bank total asset had a significant impact on the growth and development of banks through investment. This means that the effectiveness of recapitalization is dependent on the ability of the Central bank to use this as a strategy to fine tune the performance of banks in Nigeria. Bank total capital had a positive impact in the performance of banks and it contributed positively to the growth and development of banks.

The result shows that bank investment (BINV) had a positive impact and it was statistically significant. Also, aggregate investment had a negative impact on the performance of banks and it was statistically insignificant to the growth and development of Nigeria banks.

On the other hand, bank investment had a bank positive impact on banks profitability and it was a policy variable that affected the growth and development of banks and was found statistically significant, this means that bank total investment was relevant during the period of study. All the incorporated variables were determinants of bank recapitalization with a positive performance. 1% increase on each variable contributed positively to the growth of banks.

Given the empirical results of the model, the study revealed that bank capital, bank investment and aggregated investment contributed positively to the growth of Nigerian economy. More so, these results are in conformity with economic theory that states that a rise in independent variables led to a rise in the dependent variable.

As an addendum, this study is in conformity with the pro-concentration theories which states that concentrated banking system may also enhance profits. Also high profits provide a buffer against adverse shocks and increase the value of the bank.

5 Conclusions and Recommendations

5.1 Conclusions

The study has established that bank consolidation in the Nigerian financial system secured through mergers and acquisition by increasing shareholders fund for investors confidence as well as financial stability and operational efficiency of the consolidated banks. The research study has established that bank consolidation helps in storing up investment capital, enhances shareholders value, protects both creditors and depositors as well as lower costs and enhancing their liquidity positions. Also, adequate capital brings financial stability, growth and profitability.

As an addendum, the increased capital base of commercial banks will curb the incidence of distressed and technically insolvent banks which has been a plight to the banking institutions in the past and as a result of low capital base of banks.

5.2 Recommendations

The following recommendations are proffered based on the findings of the study:

1. The CBN must remain resolve and focused on the implementation of its statutory requirements even in post-consolidation so as to guide against distress in the banking sector
2. The CBN must also ensure that quality services are rendered to investors by the consolidated banks
3. The lending and interest rates of banks should be fairly uniform so as to restore investors confidence in the banks.
4. The CBN needs to constantly monitor the activities and the performance of the emerging mega banks to prevent bank distress and failure
5. Commercial banks should have enough capital to provide a cushion for absorbing loan losses or other problems, funds for internal needs and for expansion and added security for depositors and deposit insurance system
6. Adequate capital should be provided to make banks liquid

References

- Ajayi, M. (2005). Banking sector reforms and bank consolidation: Conceptual framework. *In bullion a Journal of Central Bank of Nigeria*. Lagos: Central Bank of Nigeria Press.
- Baridem, D. M. (2001). *Research methods in administrative sciences*. Port Harcourt: Belt Publishers Ltd.
- Bello, Y. A. (2005). Banking system consolidation in Nigeria and some regional experience challenges and prospects. *The Bullion* 29(2), 47-54,
- Berger, A. N. Demesetz, R. S. (2008). The consolidation financial services industry causes, consequences and implications for the future, *Journal of Banking and Finance* 231: 135-199.
- Beverly, H. and Melti, C. (2008). "Growth, consolidation and strategy" in *Federal Reserve Bank of New York*, 10(8), 20-27.

- Bis, (2001). Risk management principles for electronic banking? In *Bullion*, 29(2; April/June,), 55-57.
- Central Bank of Nigeria (2004). Guidelines and incentives on consolidation in the Nigerian banking system, Abuja: CBN Press.
- De Nicolo (2004). Bank consolidation internalization and conglomeration. Trends and implications for financial risk, IMF working paper 03/158. Encyclopedia America International Edition (2002): *World Financial Analysis*, 128(2), 40-43.
- Ezen, F. (2006). Banking consolidation, a mere change of identity and log, *Financial Standard*, 7(23), 35.
- Ezirim, B. C. (1996). Finance dynamic principles techniques and application Port Harcourt Marcowitz Centre for Research and Development .in Nigeria
- Herald, D. (2004). *New banking reforms to focus on consolidation*. New Delhi: DHNS.
- Hughes, D. (2004). The dollars and sense of bank consolidation. *A Journal of Banking and Finance*, 3(5);56-98
- Idigbe, A. I. (2005 february,1). Legal issues in mergers and acquisition in Nigeria: Implication for bank consolidation. *The Guardian*, p. 98, .
- Imala, O. I. (2005). Challenges of banking sector reforms and bank consolidation in Nigeria. *Bullion*, 29(2), 26-36.
- Kwam, S. H.& Eisenbecks, R. A. (1999). Mergers of publicly fraded banking organisation revisited in *Federal Reserve banking of Atlanta Economic A Journal of Banking and Finance* 84(4), 26-37.
- Nzotta, S. M. (2004). *Money, banking and finance: Theory and Practice*, Lagos: International Publishers Ltd.
- Ogbumka, U. M. (2005). Banking sector reforms and bank consolidation: The experience of Turkey *Bullion*, 29(2), 17-36.
- Okereke, E. J. (2003). *Banking in Nigeria: Practice and Management*. Owerri: Jeso International Publishers Ltd.
- Onoh, J. K. (2002). *Dynamics of money banking and finance in Nigeria*. Aba: Astra Meridian Publishers.
- Uchendu, O. A. (2005). Banking sector reforms and bank consolidation: The Malaysian experience. *Bullion*, 29(2), 12-16,.

TABLE 1
 Regression results (The relationship between BC)
 Dependent variable: LGFCF

Variables	Coefficient	Std. error	t-stat	Sig.
C	3.481684	0.932634	3.7332	0.0010
LBC	0.9728	0.09914	9.8122	0.0000

SOURCE: Statistical software application

R ²	=	0.800467
R ² (adj)	=	0.792153
SER	=	0.957217
f-stat	=	96.28090
DW	=	0.742222

TABLE 2
 Regression results (Relationship between LABINV, LAGINV)
 Dependent variable: LGDP

Variable	Coefficient	Std. error	t-stat	Sig.
C	-3.746	1.657169	-2.260667**	0.0336
LABINV	10.00510	1.23959	8.071236*	0.0000
LAGINV	-0.4200	0.14090	-2.981051*	0.0067

SOURCE: Statistical software application.

R ²	=	0.918844
R ² (adj)	=	0.911787
SER	=	0.574625
F-stat	=	130.2025
DW	=	1.272411

TABLE 3
Regression results (Relationship between BINV and BPROF)

Dependent variable: BPROF

Variable	Coefficient	Std. error	t-stat	Sig.
C	3767081	7393324	5.095246*	0.0000
BINV	1.999579	1.122935	1.890149	0.3822

SOURCE: Statistical software application.

R^2 = 0.831960
R2(adj) = 0.808375
SER = 3482141
F-stat = 84.92364
DW = 1.388090

The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage:
<http://www.iiste.org>

CALL FOR JOURNAL PAPERS

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

Prospective authors of journals can find the submission instruction on the following page: <http://www.iiste.org/journals/> All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

MORE RESOURCES

Book publication information: <http://www.iiste.org/book/>

IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digital Library, NewJour, Google Scholar

