A POST CONSOLIDATION ANALYSIS OF RECAPITALIZATION AND LENDING BEHAVIOUR IN NIGERIAN BANKING SECTOR

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Abstract

Banking reforms have been a persistent process globally. In Nigeria, banking reforms began as a result of banking crisis due to extreme under-capitalization. Although several studies have been conducted on banks' lending globally, however literature revealed that the precise relationship that exists between bank lending and capitalization has been inconclusive. While most studies on the subject reported a significant relationship between bank lending and capitalization; others reported no significant relationship between bank lending and capitalization. Using correlational research design, this study examines the relationship between banks' capitalization and lending behaviour in Nigeria. A census study was conducted on the population of 22 deposit money banks operating in Nigeria as at December, 2012. Information obtained from the audited annual reports of the banks was subjected to regression analysis; the result revealed that there is no significant relationship between lending and capitalization in Nigerian banks. The study recommended to management of banks to make efforts to boost banks' lending level with the increase in capitalization.

Key Words: Banking Reform, Consolidation, Capitalization, Globalization, Lending Behaviour.

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Background

Banking reforms have been a continuous event globally, beginning from the 1980s, but it is further strengthened in recent time because of the influence of globalization which is precipitated by constant integration of the global market and economies (Adegbaju & Olokoyo, 2008). In Nigeria, banking reforms began as a result of banking crisis due to extremely undercapitalized deposit taking banks, weakness in the regulatory and supervisory framework, weak management practices, and the tolerance of deficiencies in the corporate governance behaviour of banks (Uchendu, 2005; Adegbaju & Olokoyo, 2008). Bank consolidation is implemented 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 (Berger, 2000).

Alhassan, Brobbey and Asamoah (2013) noted that deposit money banks are the most significant savings mobilization and financial resource allocation institutions in any modern economy. As a result, these roles make them an imperative phenomenon in economic growth and development. In performing this function, it must be recognized that banks have the potential, capacity and prospects for mobilizing financial resources and allocating them to productive investments. Both theoretical and empirical finance literature reveal that the accessibility of bank credit is an essential determinant of economic growth and development in emerging economies (Imala, 2005).

Arising from various studies conducted on bank capitalization and lending, especially in the advanced market economies (Thakor, 1996; Kishan & Opiela, 2000); Kishan and Opiela (2000) noted that the universal conclusion in the literature on bank capitalization and lending behaviour is that there is a connection between bank capitalization and bank lending behaviour in the advanced market economies. However, Ladime, Sarpong-Kumankoma and Osei (2013) observed that the precise relationship that exists between bank capitalization and lending behaviour has been mixed, particularly as evidenced in the emerging market economies. Therefore, this study seeks to investigate the effect of capital base on banks' lending in Nigeria since the recapitalization of 2006.

Extant Literature

Lending represents one of the core services rendered by commercial banks to their customers globally (Olokoyo, 2011). Ladime, et al., (2013) suggested that one of the underlying factors for lending decision is the level of bank capital. The effects of bank capital on lending behaviour have been widely debated from the time of the 1988 Basel Capital Accord (Gambacorta & Mistrulli, 2004).

Olusanya, Oyebo and Ohadebere (2012) investigated the determinants of lending behaviour of commercial banks in Nigeria within the period of 1975 to 2010. The study did not however take cognizance of the various banking reforms within the period. Data for the study were obtained purely from secondary sources; series of econometrics techniques were adopted to justify the long run relationship between commercial banks and lending. The model result revealed positive relationship between loan and advances and each of volume of deposits, annual average exchange rate of the naira to dollar, gross domestic product at current market price and cash reserve requirement ratio. On the other hand, investment portfolio and interest lending rate showed a negative relationship with loan and advances. It was also revealed from the result that a long run relationship exist between loan and advances and all of the explanatory variables in the model.

In Ghana, Alhassan, Brobbey and Asamoah (2013) examined the relationship between the persistence of asset quality and lending behaviour of banks. Using a dataset from 25 Ghanaian banks for the periods of 2005 to 2010, the study employed a random effects model to test the relationship between bank lending behaviour proxied as the ratio loans and advances to total asset and bank asset quality such as ratio of nonperforming loans to gross loans and advances while controlling for deposit mobilization, equity, management efficiency, intermediation spread and income diversification. The result of the study revealed that the effect of the deterioration of bank asset quality such as high levels of non-performing loans on bank lending behaviour is persistence and not contemporaneous. Additionally, bank deposit mobilization, intermediation spread and equity were also found to influence bank lending behaviour.

Gambacorta and Mistrulli (2003) investigated the existence of cross-sectional differences in the response of lending to monetary policy and GDP shocks due to a different degree of bank capitalization in Italy. The study considered the excess capital a measure of capitalization that is better able to control for the riskiness of bank's portfolio than the well-known capital-to-asset ratio. It also disentangled the effects of the bank lending channel from those of the bank capital channel in the case of a monetary shock; and provided an explanation for asymmetric effects of GDP shocks on lending based on the link between bank capital and risk-aversion. The study used a unique dataset of quarterly data for Italian banks over the period 1992-2001; the full coverage of banks and the long sample period helped to overcome some distributional bias detected for other public available dataset. The results indicated that well-capitalized banks can better shield their lending from monetary policy shocks as they have, consistently with the bank lending channel hypothesis, an easier access to non-deposit fund raising. A bank capital channel was also detected, with higher effects for cooperative banks that suffer a higher maturity mismatching. Capitalization also influenced the way banks in Italy react to GDP shocks.

Ewert, Schenk and Szczesny (2000) carried out similar investigation on determinants of banks lending in Germany. The study used the common data set of a research project on credit management in Germany that was initiated by the Center for Financial Studies (CFS) in Frankfurt. The sample comprised a randomly selected cross-section of 260 borrowers over the seven years between 1992 and 1998, and included an oversampling of potentially distressed firms. Taken together, the results of both regressions revealed that credit contracts were priced lower where the risks were greater. This constituted an empirical puzzle that should be further analyzed by future research. The study further revealed that in both regressions, bank dummies are significant.

Maurin and Toivanen (2012) who also examined the relationship risk, capital and bank lending in Euro area banks. The study analyzed the determinants of the target capital ratio on a bank-by-bank basis, whether banks have a capital surplus or deficit and the impact of banks' adjustment on the availability of loans and holdings of securities. The study developed a partial adjustment model in order to estimate the factors contributing to banks' internal target capital ratio, lending policy and holding of securities. The model was estimated on a panel of listed Euro area banks

and country specific macro variables. Firstly, banks' internal target capital ratios were estimated by using information on banks' riskiness and earnings capacity. Secondly, the impact of banks' capital gap on the credit supply and the security portfolio was estimated while controlling for the macroeconomic environment. An increase in bank' balance sheet risk was revealed to increase the target capital ratios. The adjustment towards higher equilibrium capital ratios has a significant impact on banks' assets. The impact was found to be more sizeable on security holdings than on loans, thereby suggesting a pecking order.

Using partial adjustment models and estimates on banks' target capital ratios, Berrospide and Edge (2010) and Francis and Osborne (2009) examine how banks' capital targets impact on banks' lending. By analyzing US banks, Berrospide and Edge (2010) found relatively modest effects of bank capital on lending and a more important role for factors such as economic activity and the perceived macroeconomic uncertainty. Francis and Osborne (2009) concentrate in UK banks and found that banks with surplus of capital relative to their target tend to record higher credit growth.

Karmakar and Mok (2013) carried out an investigation on bank capital and lending in the United States of America. The question as to how the bank capital affects the lending decisions of banks was the main concern of the study. The sample only included commercial banks in the United States. The data were obtained from the Call Reports database, maintained by the Federal Reserve Bank of Chicago. The regression analysis was conducted only for the middle eighty percent of banks, by total assets. The result of the study indicated a significant relationship between bank capital and lending in the United States.

Methodology

The study adopted the correlational research design. A census study was conducted on the population of 22 deposit money banks currently operating in Nigeria as at December, 2012. All the 22 banks were included in the study because of the small size. Data were obtained from the audited annual reports of the banks for the post-consolidation period of 2006-2012. The analysis was conducted using regression analysis. The regression function is as follows: LOAD = f

(CAP). Where LOAD = Loan and Advances, CAP = Capital Base. Furthermore, the following research hypothesis has been developed:

H_0: There is no significant relationship between bank lending and capitalization in the Nigerian deposit money banks.

Results

The results of the analysis carried out on the data obtained from the audited annual reports of the banks are as follows:

Table 1: Result of Regression Analysis between Capitalization and Lending

	Coefficient	Standard Error	t-Statistics	P-Value
Constant	341724.599	84485.021	4.045	.000
Capitalization	.933	.493	1.892	.060

Dependent Variable: Loan and Advances

Source: Researchers' Computation (2014)

Table 1 revealed that there is no statistically significant relationship between capitalization and bank lending in Nigeria as the significance level (.060) is greater than the p-value (.050). Hence the null hypothesis that there is no significant relationship between bank lending and capitalization in the Nigerian deposit money banks is accepted. Furthermore, table 1 contains the constant (alpha 341724.599) which predicted the value of the dependent variable that measured bank lending when the predictor was set at zero, and the coefficient on the independent variable (beta) is .933.

Table 2: Result of ANOVA of Regression Analysis between Capitalization and Lending

	Sum of Square	Df	Mean Square	F-Statistics	P-Value
Regression	2.488	1	2.488	3.578	.060[a]
Residual	1.057	152	6.953		
Total	1.082	153			

Source: Researchers' Computation (2014)

Table 2 reports the result of the ANOVA of regression analysis between capitalization and lending. It shows that the F-statistics value is 3.578. It further reports the degree of freedom of 1 for the regression, 152 for the residual and 153 for the total. The p-value of .60 is also reported in the table; and it indicates that the relationship between capitalization and bank lending is not statistically significant.

Table 3: Diagnostic Statistics of the ANOVA of Regression Analysis between Capitalization and Lending

R	R-Squared	Adjusted R-Squared	S.E of the Estimate	Sig. F Change	Durbin-Watson
.152[a]	.023	.017	833833.150	.060	.393

Source: Researchers' Computation (2014)

The result from table 3 indicates that the value of the coefficient of correlation (R) is 0.152. This shows a weak positive correlation between capitalization and bank lending. The coefficient of determination (R^2) stands at.0 23. This indicates that only 2.3% of the total variation of loan and advances is accounted for by capitalization, while the remaining 97.7% is accounted for by other variables. The adjusted R^2 of .017 compliments the low explanatory power of the R^2. The standard error of the estimate is 833833.150 while the Durbin-Watson (DW) statistics is .393.

The result of this study indicates that there is a positive but non-significant relationship between the dependent variable (loan and advances) and the independent variables (capital base) in the Nigerian deposit money banks. This result aligns with the finding reported by Alhassan, et al. (2013) who examined the relationship between the persistence of asset quality and lending behaviour of banks in Ghana. It was reported that bank deposit mobilization, intermediation spread and equity (capitalization) influence bank lending behaviour. Similarly, the result of the current study corroborates the finding reported by Gambacorta and Mistrulli (2003) who investigated the existence of cross-sectional differences in the response of lending to monetary policy and GDP shocks due to a different degree of bank capitalization in Italy. The results indicated that well-capitalized banks perform better in terms of lending to customers. In like manner, Berrospide and Edge (2010) found relatively modest effects of bank capital on lending in US banks.

Conclusion and Recommendations

This study examines the relationship between banks' capitalization and lending behaviour in the Nigerian context. The analysis indicates that a positive relationship exists between capitalization and bank lending, although the relationship is not statistically significant. Thus, the null hypothesis that there is no significant relationship between the dependent variable (loan and advances) and the independent variables (capital base) in the Nigerian deposit money banks is accepted. From the literature review and the result of data analysis, it is recommended to bank

management to make deliberate efforts to boost their loan and advances level with the increase of capitalization. Due process should also be adhered to in loan and advances administration in the banks. This is germane to non-performing loan reduction and prevention.

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