

Impact of Financial Intermediation Costs on Private Sector Credit Delivery in Nigeria: A Dynamic Panel Regression Approach

¹NWAMBEKE, GODFREY C. , ¹IREM COLLINS O., ²OKO ROSELINE ALI AND ³NWAKAEGO PROMISE EDEOGU

¹Banking And Finance Department Ebonyi State University, Abakaliki, Nigeria

²Department of Banking And Finance, Faculty Of Management Science, Ebonyi State University, Abakaliki, Aefunai, Nigeria

³Department of Accountancy, Banking And Finance, Faculty Of Management Science, Aefunai Nigeria

ABSTRACT

This study investigated the impact of financial intermediation costs on private sector credit in Nigeria. Ex-Post Facto research design and panel data regression model estimation methods were used. Annual panel data for 10years were collected from individual annual reports and financial statements of the selected banks. The dependent variable in the panel data regression model was private sector credit delivery proxied as the ratio of loans and advances to total asset while the independent variables were bank operating cost, loan loss provision and interest rate spread. The study found that the level of bank operating cost has negative and insignificant impact on private sector credit delivery in Nigeria. The volume of loan loss provision was found to have negative and significant impact on private sector credit delivery. The level of interest rate spread was found to have negative and significant impact on private sector credit delivery. The implications of the finding is that huge proportion of bank loans are largely non-performing, reduction in bank operating cost does not translate to enhanced private sector credit delivery and the widening interest rate spread implies that the actual cost of intermediation is hidden in revolving fees and commission charged on loans and advances. The study concludes that the levels of loan loss provision and interest rate spread drive up financial intermediation costs and significantly influence private sector credit delivery. The study recommends the establishment of efficient credit information sharing mechanism among banks, regulation of fees and commission charged on bank credit and services extended to borrowers and lowering of the level of non-remunerated provisions to reduce financial intermediation costs and enhance credit delivery to the private sector in Nigeria.

KEYWORDS: Financial intermediation costs, Bank Operating cost, Loan loss provision, Bank credit.

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I. INTRODUCTION

Banking business entails mobilizing deposits from the public and using such deposit either in whole or part to extend credit facilities to the private and public sectors of the economy for investment activities needed to drive the economy and enhance economic growth. However, banks in the process of financial intermediation incur financial intermediation costs which [1] states that interest rate spread as a measure of financial intermediation cost refers to the gross margin between the total cost paid by the borrower and the net return received by the depositor. Banks thrive on financial intermediation with lending of funds (bank loans and advances) constituting the largest single income-earning asset in the portfolio of banks [2]. Over the years, the Nigerian government has pursued financial sector reforms aimed at enhancing credit availability, reduction in financial intermediation costs and access to private sector credit. The need for the reforms was informed largely by the persistent high level of financial intermediation cost (interest rate spread) which rose sharply from 3.5% in 2008 to as high as 8.4% in 2012 [3]. Available evidence, for instance, shows that developing countries has banking system that is mainly characterized by significantly high and persistent financial intermediation costs [4], [5] [6]. The persistence of high financial intermediation costs might suggest an indication of a number of problems such as: high operating costs resulting from low efficiency; lack of competition; small bank size that leads to scale diseconomies; perceived market and credit risks; and presence of various regulatory requirements that limits financial market activity. The components of financial intermediation costs according to [7] include three bank specific costs element namely: bank operating costs; loan loss provision and reserve requirement.

Theoretically, a strong positive correlation exists between the level of financial intermediation costs and access to credit delivery. Financial intermediation costs affect the volume and cost of loans and advances

extended to the borrowers because the costs incurred by the banks in the intermediation process are transferred to borrowers as the interest margin. Private sector credit are extended as loans and advances, purchases of non-equity securities, credit purchases and other account receivables that can be used as a claim for repayments. Private sector credit as a ratio of gross domestic product grew significantly up to 59.4% in 2008 [8] but dropped to 37.8% in 2009 and 35.6% in 2012 [9]. The growth recorded in this ratio in Nigeria is low compared to what is obtainable in developed countries where the ratio is a minimum of 70% [10]. The trend in credit growth showed that the percentage of private sector supply dropped from 90.8% in 2007 to 37.8% in 2009 and 31.6% in 2011 [11]. This shows that there is a declining trend in private sector delivery which might have suggested that credit demand and supply are affected by the interest rate spread.

Statement of the Problem

Despite the efforts of the Central Bank of Nigeria to drive down the cost of intermediation with a view to increasing bank lending capacity, interest rate spread has remained very high. Persistent high level of financial intermediation costs in the intermediation process could affect the volume of loans and advances given to the private sector especially in Nigeria where in the absence of well developed capital market, the private sector depends primarily on bank financing as source of funding for their businesses. In Nigeria, the extent to which financial intermediation costs affect private sector credit delivery has remained less investigated. This might suggest that the policy options applied by the government towards resolving the issue are based more on theoretical arguments or, at best, on foreign empirical evidence. Private sector credit delivery has not improved significantly in Nigeria despite government efforts in channeling credit to the private sectors through the commercial banks [12]. According to [13], a significant proportion of private sector credit transaction still takes place in the informal financial market.

Furthermore, the impacts of other components of intermediation costs (bank operating cost and loan loss provision) on credit flows to customers have remained scarcely investigated and are continuously based on theoretical considerations. Unfortunately, this has not been the case as the variations in bank operating costs might not have translated to reduction in financial intermediation cost and enhanced dynamic private sector credit delivery in Nigeria. The volume of non-performing loan in the lending portfolio of banks in Nigeria has assumed alarming increases and banks have continued to record rising incidences of loan loss provision [14]. Increasing level of loan loss provision affects bank liquidity, shrinks bank balance sheet and impairs shareholders fund. This study intends to fill the identified gaps created in knowledge by investigating the implications of financial intermediation costs on private sector credit delivery in Nigeria.

Objectives of the Study

The broad objective of the study is to investigate the impact of financial intermediation costs on private sector credit delivery in Nigeria. The specific objectives are as follows:

- i. To determine the extent to which bank operating costs affect private sector credit delivery in Nigeria.
- ii. To ascertain the extent to which loan loss provisions affect private sector credit delivery in Nigeria.
- iii. To determine the extent to which interest rate spreads affect private sector credit delivery in Nigeria.

Research Hypotheses

The research hypotheses were stated in null forms as follows:

- H₀₁: The level of bank operating costs has no significant impact on private sector credit delivery in Nigeria.
H₀₂: The volume of loan loss provisions has no significant impact on private sector credit delivery in Nigeria.
H₀₃: The level of interest rate spread has no significant impact on private sector credit delivery in Nigeria.

Conceptual Review

[15] states that financial intermediation costs comprise of all the costs which banks incur in the intermediation process. [16] define financial intermediation costs as the total interest income to loans less total interest expense divided by total interest-bearing assets. [17] states that financial intermediation costs refers to the gross margin between total cost that is paid by the borrower and the net return which the depositor has received. Financial intermediation cost at individual bank level is viewed as the ratio of net interest income to total assets of bank. Financial intermediation costs captures the spread by differencing implicit earnings from interest bearing activities of banks while adding implicit cost incurred for using interest bearing funds. In a summary, financial intermediation cost refers to the charges required by banks to provide financial services to the borrowers/depositors. Investigating the impact of financial intermediation costs on private sector credit delivery is particularly important in Nigeria. In Nigeria, capitalization, merger and acquisition, and consolidation programmes as part of the financial reforms have led to the decrease in the number of commercial banks from 89 banks before 2004 to 20 banks [18]. The phenomenal decrease in the number of banks and the corresponding increases in the size of banks and scale of operation of banks are indication of the emergence of

oligopolistic market structure whereby few numbers of banks dominates financial intermediation processes. The likely implication of the emerging oligopolistic market structure is that the few larger banks would take advantage of their economies of scale, market power and low level of competition to raise lending rates and lower deposit rates and at the same time transfer a higher portion of overhead costs to depositors and borrowers.

[19] used the accounting framework proposed by [20] to decompose financial intermediation costs into three costs element namely: operating costs; loan loss provision and reserve requirements. Similarly, increased loan loss provisioning, high operating expenses, high reserve requirements, policy environment and banking behaviours with regards to market power from unchanged operating structures have been identified as factors that sustain high intermediation costs in developing countries [21] [22].

The private sector include large companies, micro, small and medium scale enterprises producing agricultural products, textile materials, fabricated metal, household utensils, woodworks and other services. The level of credit facilities that flow to the private sector varies according to the perceived credit risk exposures and financial intermediation costs incurred in the intermediation process by the banks. Private sector credit delivery measures the volume of financial resources provided by the banks to the non-financial private sectors [23]. At individual bank level, the ratio of loans and advances to total bank assets measures private sector credit delivery.

Empirical Review

[24] carried out a study on the impact of non-performing loan on bank lending behaviour in the Italian banking sector over the period 2007-2013 using panel regression model and ordinary least square regression model. The study found that non-performing loan has negative impact on bank credit supply in Italian banking sector.

[25] carried out a study on loan loss provisioning, bank credit and the real economy using a Panel Vector Auto Regression Model for an unbalanced sample of 12 Organization for Economic Cooperation and Development (OECD) countries for the period 1980-2008. The study found that bank lending and loan loss provision drives business cycle fluctuation. Also, it was found that loan loss provision decreases as bank lending increases.

[26] carried out a study on the impact of loan loss provision on bank credit in Nigeria during the consolidation period using a sample of 10 deposit money banks for the period 2002-2008. The study found that loan loss provision has negative and insignificant effect on bank credit extended to customers. This implies that bank credit policy on loan loss provisions after consolidation was not effectively implemented by most banks hence, the insignificant negative impact.

[27] investigated the impact of financial intermediation costs on private sector credit supply to the housing market in developed and emerging countries. The study made use of Dynamic Stochastic General Equilibrium (DSGE) model which states that bank intermediates between the borrowers and savers at a cost and requires some borrowers' real estate and/ or physical capital to be collateralized. The study found that financial intermediation cost for banks in emerging countries such as Turkey is two times more than for banks in developed countries such as the United States of America.

[28] investigated the impact of non-performing loans on private sector credit and macro economic performance in Central, Eastern and South Eastern Europe (CESEE). Data was generated on annual basis from 16 CESEE economies for the period 1998-2011. The study employed Vector Auto Regression (VAR) and Generalized Method of Moment (GMM). The study found that non-performing loan has negative and insignificant impact on bank credit to the private sector in CESEE. The policy implication of the finding is that given the adverse effect of non-performing loans, there is need to strengthen bank supervision to prevent accumulation of non-performing loans in the future.

[29] utilized firm dynamic models to evaluate how financial intermediation costs affect corporate credit and size of the formal sector in Brazil. The study specifically sought to determine how changes in corporate credit and formalization can be attributed to reduction in financial intermediation costs. The study found that reduction in financial intermediation costs significantly affects corporate credit and firm size in Brazil.

[30] examined the relationship between non-performing loans and growth in private sector credit in Italian banking sector. The study found that a positive relationship exist between non-performing loans and bank lending behaviour. The implication of the finding is that the main obstacle to the growth of loans is the deterioration of the credit risk.

[31] investigated how cost of lending affects bank credit supply to the private sector in Albania. Vector Error Correction Mechanism (VECM) was used based on the assumption that availability of credit is determined by economic activity and the capacity to supply and demand credit. Data were obtained on quarterly basis from 2001-2011. The result showed that lower cost of lending, diminished government borrowing and qualitative bank credit enhances bank credit delivery to the private sector.

[32] carried out a study on private sector credit growth in 10 South East European Countries over the period 2008 to 2011 using quarterly data. The study found that private sector lending in the economies was

negatively influenced by non-performing loans and interest rates. However, economic growth, volume of deposits and level of foreign borrowings of the banking system have significant positive impact on private sector credit growth or lending.

[33] investigated the potential impact of relatively high banking spreads in the Philippines and Asia on private credit expansion. Using bank level data for 38 emerging markets from 2001-2010, the study found that higher credit growth, lower inflation, high reserve requirements, greater banking sector development, small stock market development and lower government deficits reduce interest rate spread.

[34] investigated bank private sector credit delivery in six Pacific Island Countries (Fiji, Tonga, Australia, New Zealand and Thailand) for the period 1982-2009. The sought to know how lending rates affects private sector credit growth in six Pacific Island Countries. Time series and cross country panel data were used. The study found that rising average lending rates and inflation rate significantly affects private sector credit growth in Pacific Island Countries.

[35] investigated the factors that drive financial intermediation cost in low income countries relative to emerging countries. The study adopted the augmented dealership model which assumes that bank serves as risk-averse dealer in deposit and loan markets. The result showed that higher riskiness of credit portfolio, lower bank capitalization and small bank size significantly increases financial intermediation costs. The implication of the findings is that concentrated market structure and lack of competition within the low income countries banking system constitute the key impediments responsible for the rising financial intermediation cost. The study recommended implementation of policies that will enhance banking competition and institutional frameworks.

[36] investigated credit delivery to private sector, interest spread and volatility in credit-flows in 81 developing and emerging countries from 1995-2009. Cherry-picking model which assumes that foreign banks primarily compete with domestic banks in deposit and lending market was adopted. The study found that increased foreign bank presence leads to higher interest rate spreads; less credit delivery to the private sector and higher volatility in bank loan. The implication of the finding is that the entry of foreign banks lowers the share of bank deposits controlled by domestic commercial banks and the effect is that domestic banks resort to other non-deposit funding options at higher costs and uncertainty thereby reducing credit delivery to the private sector.

[37] investigated the impact of non-performing loan on credit to the private sector and macroeconomic performance in 26 advanced economies in the period of 1998–2009. The study found that adverse shocks to macroeconomic performance and credit to the private sector leads to deterioration of loan quality. The implication is that higher level of non-performing loans lead to a decline in credit to private sector (credit to GDP ratio) and macroeconomic performance (GDP growth).

[38] carried out a study on commercial banks' lending behaviour in Nigeria over the period 1980 to 2005. The study found that the volume deposits, lagged value of commercial bank loans and advances, investment portfolio, gross domestic product and foreign exchange had significant positive impact on loans and advances. The study also showed that lending rate, cash reserve requirement and liquidity reserve had positive but insignificant relationship with loans and advances. The implication of the findings is that higher reserves, high lending rate and high liquidity reserves reduces the volume of funds available for lending and consequently affects banks' ability to extend credit to the private sector.

[39] studied the impact of non-performing loan on bank credit to the private sector in the Gulf Cooperation Council (GCC) region. The study selected a sample of 80 banks from the Gulf Cooperation Council (GCC) region. The study used the Panel Vector Auto-Regression (VAR) analysis and found that an increase in non-performing loan reduces credit growth and the non-GDP growth.

[40] investigated the factors that affect total credit to the private sector and credit denominated in domestic currency in Albania for the period 2004 to 2006. The Generalized Method of Moment (GMM) was used for the study. The study showed that gross domestic product (GDP) and liquidity of the banking system had positive correlation with private sector credit. On the other hand, repurchase agreement rate and size of banks had negative correlation with private sector credit in Albania.

[41] carried out a study on bank operating performance in seven South Eastern European (SEE) countries for the period 1998-2003. The study adopted panel regression models and estimation techniques. The study found that bank operating cost (operating expenses/total asset) has negative and insignificant impact on private sector credit (loans and advances/total asset).

[42] examined financial intermediation costs in pre-consolidated banking sector in Nigeria over the period 2000-2005 using fixed effect and pooled ordinary least square regression model to evaluate quarterly data on all the 89 banks in Nigeria. The study found that larger banks incur lower overhead cost and holding of liquidity decreases interest spread while increased bank concentration has no effect on interest spread.

[43] investigated why financial intermediation cost is high in Uganda over the period 1999 to 2005. Using panel data regression model, the study found that bank specific variables such as bank size, operating

costs and composition of loan portfolio affects financial intermediation cost and that bank lending to agricultural sector attracts higher financial intermediation costs.

II. THEORETICAL FRAMEWORK

This study adopted three financial intermediation theories namely; information asymmetry theory, adverse selection theory and moral hazard theory.

Information Asymmetry Theory: Information asymmetry theory was propounded by [44] and the theory was first applied to market for used cars by Akerlof in the year 1970. The theory assumes that financial markets are not perfect and financial intermediaries primarily exist to reduce information and transaction costs that arise from market imperfection between borrowers and lenders. Information asymmetry theory states that it may be complex to differentiate between good/honest and bad/dishonest borrowers. Many potential private sector borrowers who are honest fail to access credit because the banks cannot objectively establish credit worthiness of borrowers as a result of information asymmetry. Some bad credit risk borrowers have taken advantage of the information asymmetry problems to create multiple bad loans in the Nigerian banking industry.

Information asymmetry problems creates higher interest rate and as interest rate rises above the rate honest borrowers could pay; some honest borrowers will decide not to borrow and this increases the proportion of loans extended to dishonest borrowers who are not likely to repay the loans thus leading to increasing loan default rate. As loan default (non-performing loan) increases, the banks further raises the interest spread to offset the rising financial intermediation costs and this situation adversely affects bank credit delivery to the private sector. Information asymmetry emphasizes that lack of information about customers can increase the problems of adverse selection and moral hazard, and as such can exacerbate the quality of bank loans [45]. Information asymmetry leads to adverse selection and moral hazard problems.

Adverse Selection Theory: Adverse selection theory was propounded by [46] [47]. The theory assumes that banks are not certain in selecting creditworthy borrowers from a pool of borrowers with different credit risk exposures ex-ante. An ex-ante information asymmetry arises when lenders cannot differentiate between borrowers with different credit risks before extending credits to them. Adverse selection refer to the situation in which the probability of loan default increases with rising interest rate and quality of pool of borrowers worsens as the cost of borrowing rises [48]. Adverse selection theory offers useful explanation on the problem of getting borrowers to share hidden information honestly since it is assumed that only the borrowers know better the level of risk associated with their business. Adverse selection problem arises in intermediation process when an increase in interest rates on bank credit extended to borrowers brings about a more risky pool of borrowers seeking for funds. Financial intermediaries in such situations are therefore more likely to be lending to high-risk borrowers who are not only less concerned about the harsh lending conditions but are more prone to loan default [49]. Higher cost of borrowing will therefore attract more risky borrowers and drive away honest borrowers that are not willing to accept bank credit extended to them at higher interest rate. The implication is that banks would require higher interest spread to cover the rising financial intermediation costs and loan default. Information sharing reduces adverse selection problems by enhancing information on loan applicants. This means that through credit information sharing mechanism, lenders can distinguish between bad and good borrowers from a pool of borrowers. [34] assert that if banks share information on credit defaults, borrowers are motivated to apply more energy in their businesses knowing full well that loan default carries the penalty of higher interest rates or perhaps no future access to loans and advances.

Moral Hazard Theory: [11] proposed the moral hazard theory. The theory assumes that the likelihood that borrowers will engage in activities that will guarantee repayment of bank credit extended to them cannot be determined ex-post by banks. Moral hazard refers to the situation where the borrower of bank credit takes action that adversely affects the returns to the lender [26]. Moral hazard arises if the borrower/lender has diverging interest and the lender cannot effectively monitor the borrowers and her projects implementation ex-post. Moral hazard problem in the intermediation process arises when a borrower of bank credit engages in activities (taking excessive risk) that reduce the likelihood of a loan to be repaid. Moral hazard problem also arises from the difficulty which lenders have in assessing the capacity of borrowers to repay their debt obligation in future at the time of loan application and disbursement. [38] argues that banks with relatively low capital respond to moral hazard incentives by raising the riskiness of their loan composition, which in turn leads to higher non-performing loans on average in the future.

III. RESEARCH DESIGN

This study adopted the *Ex-Post Facto* research design because the study relied on historic accounting data. The study involved both time series and cross-sectional data, and as such relied on panel data techniques. The study used panel estimation techniques to estimate a panel of 14 commercial banks that have been in operation in Nigeria since 2005 to 2014. According to [38], the justifications for using panel estimation techniques includes: the availability of data across the sampled banks; panel empirical results are regarded as

generalizable to populations not represented in the empirical tests; and the problems of multicollinearity, aggregation bias and endogeneity are avoided. Panel data also allow for better analysis of dynamic adjustment [11]. The statistical package used in data analyses were E-view 9.0 and STATA 13.0 Versions.

Model Specification

The study in line with previous studies [23]; [24]; [25] adopted multiple regression models using panel data from selected Nigerian banks. These models included the ordinary least square (OLS) pooled and panel regression models, fixed effects and random effects panel regression models and the dynamic panel regression models. Although results for both panel and pooled estimation are presented in this study, greater emphases were given to panel estimations. The baseline panel regression model is specified as follows:

$$PSC_{it} = \alpha_i + \beta_1 OC_{it} + \beta_2 LLP_{it} + \beta_3 IRS_{it} + \beta_4 PR_{it} + \varepsilon_{it} \quad \dots 1$$

Where;

PSC_{it} = Private sector credit delivery measured as loans and advances to total assets (dependent variable), OC_{it} = Bank operating costs measured as operating expenses to total assets (independent variable), LLP_{it} = Loan loss provision measured as non-performing loan to total loan (independent variable), IRS_{it} = Interest rate spread measured as net interest income to total assets (independent variable), PR_{it} = Bank profitability net income to total asset (control variable), α = intercept term or constant factor, ε = Error term (incorporating omitted factors), $\beta_1 \dots \beta_4$ = Regression coefficients to be determined, i = index for individual bank (for the 14 sampled banks), t = time effects (year 2005 - 2014)

The study used random effect panel regression model because the Hausman test when applied considered random effect model appropriate for the study hence the new equation upon which the tests of hypotheses were based became:

$$PSC_{it} = \alpha_i + \beta_1 OC_{it} + \beta_2 LLP_{it} + \beta_3 IRS_{it} + \beta_4 PR_{it} + \mu_i + \varepsilon_{it} \quad \dots 2$$

Results emanating from the random effect panel regression model (equation 2) were subsequently used to interpret the three research hypotheses.

The study also considered dynamic panel estimation. The consideration of the dynamic panel regression model is characterized by two sources of persistence over time and these are autocorrelation arising from the inclusion of lagged dependent variable among the explanatory variables and the unobserved major effects and interaction effects underlying the heterogeneity/dynamic trends among units [17]. The study chooses a dynamic model with lagged dependent variable to estimate the impact of private sector credit delivery (dependent variable) on the independent variables based on a panel data set.

The dynamic panel regression model specifies that:

$$Y_{it} = \delta y_{i,t-1} + \beta X_{it} + \mu_i + v_{it} \quad \dots 3$$

To eliminate bank specific and time-invariant component μ_i , Equation (3) above was written as Equation (4) below.

$$Y_{it} - Y_{i,t-1} = \delta(y_{i,t-1} - y_{i,t-2}) + \beta(X_{it} - X_{i,t-1}) + (v_{it} - v_{i,t-1}) \quad \dots 4$$

Where;

Y_{it} = dependent variable (PSC), $Y_{it} - Y_{i,t-1} = \Delta$ in the dependent variable (ΔPSC), $\delta(y_{i,t-1} - y_{i,t-2})$ = differenced values of the change in the dependent variable (PSC-1, PSC-2), $X_{it} - X_{i,t-1} = \Delta$ in the independent variables Δ (OC, LLP, IRS, PR), β = coefficients of the parameters, $(v_{it} - v_{i,t-1}) = \Delta$ in the error term (μ_i).

One of the prominent estimation techniques for dynamic panel data models is the Arellano and Bond Generalized Method of Moment (GMM). Essentially, the GMM estimator proposed by [43] differenced the dynamic model of the above to get rid of the unobserved effects along with any time-invariant regressor. The study considered two alternative estimation techniques namely difference generalized method of moment method (Diff. GMM) and system generalized method of moment method (System GMM). The justification for applying difference GMM method of [3] was to transform the data to first differences to remove the fixed effect element.

The second dynamic estimation method was the System Generalized Method of Moment (System GMM). The justification for applying the System GMM is that it combines regression in level and difference. GMM is a technique that uses lagged values as instruments for the endogenous variables. In level estimation, lagged differences are used as instruments, in difference estimation, lag levels are used. Results obtained from these two estimations, hence called system, are more efficient than difference GMM which is only difference estimation.

IV. RESULTS

Descriptive Test Results

Table 1: Descriptive Statistics

	PSC	OC	LLP	IRS	PR
Mean	0.3782	0.0497	0.2135	0.1702	0.0350
Median	0.3812	0.0498	0.0671	0.1379	0.0193
Maximum	0.5804	0.1303	6.2252	3.4496	0.5018
Minimum	0.0886	0.0031	0.0001	8.29E-05	0.0009
Std. Dev.	0.1056	0.0205	0.6015	0.2857	0.0626

Source: Author’s Computation 2016 from E-view 9.0 Version

Table 1 above shows the descriptive statistical analysis between the dependent and independent variables. The average percentage of private sector credit delivery (PSC) across the selected banks within the period under review (2005–2014) stood at 37.82%. This indicates that the volume of bank credit extended to the private sector is low compared to a minimum of 70% in developed countries [30]. The level of bank operating costs (OC) averaged 4.98% over the study period. It implies that banks might have taken advantage of economies of scale of operation arising from bank consolidation in Nigeria since 2005 to reduce operating costs. The volume of loan loss provision (LLP) stood at 21.36% on average and this shows that loan loss provision exerts the highest level of influence on private sector credit delivery in Nigeria. This is an indication of asset deterioration or poor asset quality in the balance sheet of banks. The level of interest rate spread (IRS) measured as the ratio of net interest income/total assets stood at 17.02% on average. This might suggest that on average, interest rate spread account for only 17.02% change in private sector credit delivery in Nigeria.

Correlation Test Result

Table 2: Correlation Matrix

	PSC	OC	LLP	IRS	PR
PSC	1.0000				
OC	-0.1437	1.0000			
	0.0903				
LLP	-0.3248	0.0864	1.0000		
	0.0001**	0.3101			
IRS	-0.2056	0.0872	0.0042	1.0000	
	0.0148**	0.3053	0.9608		
PR	-0.057	0.1109	0.2975*	-0.0352	1.0000
	0.5033	0.1919	0.0004	0.6799	

Source: Author’s Computation 2016 from STATA 13.0 Version

** indicates significance at 5% level

The correlation test result in table 2 above indicates that loan loss provision (LLP) has significant negative relationship with private sector credit delivery in Nigeria as indicated by its coefficient estimate of -0.3248 and p-value of 0.0001. This implies that loan loss provision has inverse relationship with private sector credit delivery meaning that increase in the volume of loan loss provision leads to the reduction in private sector credit delivery in Nigeria. Interest rate spread (IRS) has significant negative relationship with private sector credit delivery in Nigeria as confirmed by the value of the coefficient estimate of -0.2056 and the corresponding p-value of 0.0148. This implies that interest rate spread has inverse relationship with private sector credit delivery meaning that increase in the level of interest rate spread leads to the reduction in private sector credit delivery in Nigeria. The correlation result also showed that the level of bank operating costs (OC) has insignificant negative relationship with the private sector credit delivery (PSC) in Nigeria as the coefficient estimate was -0.1437 while the corresponding p-value was 0.0903. This implies that bank operating costs have inverse relationship with private sector credit delivery however the level of bank operating costs exerts insignificant influence on private sector credit delivery in Nigeria.

Baseline Panel Regression Model Result

Table 3 below presents the baseline regression results using Pooled OLS, Fixed Effect Model (FEM) and Random Effect Model (REM).

Table 3: Baseline Panel Regression Results

Series	Pooled OLS (1)	FE OLS (2)	Random E. OLS (3)
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C	0.42647 [0.0000]**	0.40425 [0.0000]**	0.42529 [0.0000]**
OC	-0.53097 [0.1976]	-0.22400 [0.6362]	-0.51686 [0.2036]
LLP	-0.05770 [0.0001]**	-0.04717 [0.0030]**	-0.05711 [0.0001]**
IRS	-0.07158 [0.0159]**	-0.04309 [0.1667]	-0.06968 [0.0169]**
PR	0.07649 [0.5859]	0.07164 [0.6428]	0.07723 [0.5764]
Observations	140	140	140
R-Squared	0.159	0.275	0.154
F-Value	6.3730 [0.0001]	2.7187 [0.0008]	6.1193 [0.0001]
Hausman Test =	0.273842 P-	Value =	[0.0585]

Sources: Researcher's computation from E-view (version 9.0)

** indicates 5% level of significance

In table 3, the study considered the pooled regression result, fixed effect and random effect ordinary least square (OLS) regression results. The study applied the Hausman test to select the model (fixed or random effect) that will be mostly appropriate for estimation. Hausman test null Hypothesis states that random effects model is appropriate while its alternative hypothesis states that fixed-effects model is appropriate and the test is based on the statistical significance of the P-value. From table 3, the Hausman test statistics P-value is [0.0585]. It implies that its P-value is insignificant because it is greater than 5% (0.05) chosen level of significance. Thus, the null hypothesis cannot be rejected. Therefore, it is concluded that random effect model is desirable for prediction.

Test of Research Hypotheses

The three hypotheses were tested using based on the result obtained in table 3 (Panel 3) based on the decision rules as follows:

Decision Rule 1: Accept the alternate hypothesis and reject the null hypothesis if the P-value is less than the chosen level of significance (0.05). It implies that the estimated variable has significant impact on the dependent variable.

Decision Rule 2: Accept the null hypothesis and reject the alternate hypothesis if the P-value is greater than the chosen level of significance (0.05). It implies that the estimated variable has insignificant impact on the dependent variable.

Test of Hypothesis One

Research hypothesis one examined the impact of the level of bank operating costs on private sector credit delivery in Nigeria. Based on the regression result presented in table 3, the coefficient of bank operating cost (OC) is -0.51686 while its P-value is [0.2036]. The parameter of OC is negative and insignificant in measuring PSC as confirmed by its P-value. Since 5% (0.05) level of significance is less than the P-value [0.2036], we accept the null hypothesis and conclude that the level of bank operating costs has no significant impact on private sector credit delivery in Nigeria. The study, accordingly reject the alternate hypothesis since the p-value is greater than 0.05 at 5% level of significance.

Test of Hypothesis Two

Research hypothesis two examined the impact of the volume of loan loss provision private sector credit delivery in Nigeria. Based on the regression result presented in table 4, the coefficient of loan loss provision (LLP) is -0.05711 whereas its P-value is [0.0001]. The parameter of LLP has negative and significant influence on PSC as confirmed by its P-value. Since 5% (0.05) level of significance is greater than the P-value [0.0001], we accept the alternate hypothesis and conclude that the volume of loan loss provision has significant negative impact on private sector credit delivery in Nigeria. The study, accordingly reject the null hypothesis since the p-value is less than 0.05 at 5% level of significance.

Test of Hypothesis Three

Research hypothesis three examined the impact of the level of interest rate spread on private sector credit delivery in Nigeria. Based on the regression result presented in table 4, the coefficient of interest rate spread (IRS) is -0.06968 while the P-value is [0.0169]. The parameter of interest rate spread has negative and significant influence on PSC as confirmed by its P-value. Since 5% (0.05) level of significance is greater than the P-value [0.0169], we accept the alternate hypothesis and conclude that the level of interest rate spread has significant negative impact on private sector credit delivery in Nigeria. The study, accordingly reject the null hypothesis since the p-value is less than 0.05 at 5% level of significance.

Dynamic Panel Regression Model Result

The study presents dynamic panel model regression results of Diff-1 GMM, Diff-2 GMM and System GMM. Generalized Method of Moment (GMM) is a technique that uses lagged values as instruments for the endogenous variables. System GMM combines regression in level and difference. In level estimation, lagged differences are used as instruments while in difference estimation, lag levels are used. Results obtained from these two estimations, hence called system, are more efficient than difference GMM which is only difference estimation. The dependent variable (PSC) was lagged in the first year (PSC-1) and second year (PSC-2). The justification for the lag (PSC-1, PSC-2) was to ascertain the extent to which the past values of the dependent variable would affect the present value of the dependent variable in the dynamic panel estimation. Table 4 below presents the results of the dynamic panel regression model.

Table 4: Dynamic Panel Regression Results

Series	Pooled OLS (1)	Random E. OLS (2)	Diff-1 GMM (3)	Diff-2 GMM (4)	System GMM (5)
PSC(-1)	-	-	0.57545	0.52982	0.20866
			[0.0000]**	[0.0001]**	[0.0221]**
PSC(-2)	-	-	-	-0.01486	-0.0909
			-	[0.8478]	[0.1528]
C	0.42647	0.42529	-	-	-
	[0.0000]**	[0.0000]**	-	-	-
OC	-0.53097	-0.51686	1.31529	1.20478	0.9344
	[0.1976]	[0.2036]	[0.4027]	[0.4575]	[0.0439]**
LLP	-0.05770	-0.05711	0.05317	0.04664	-0.06969
	[0.0001]**	[0.0001]**	[0.5618]	[0.5583]	[0.0036]**
IRS	-0.07158	-0.06968	-0.3815	-0.36107	-0.0190
	[0.0159]**	[0.0169]**	[0.6374]	[0.4989]	[0.3462]
PR	0.07649	0.07723	-0.0189	-0.06986	-0.19587
	[0.5859]	[0.5764]	[0.9609]	[0.8455]	[0.1783]
Instruments	-	-	8	7	7
Jarque-Bera	[0.3140]**	[0.3166]**	[0.0000]	[0.0000]	[0.1726]**
Hansen J-test	0.158837	0.153485	9.8041	10.2619	35.1684
			[0.3666]	[0.2471]	[0.1991]
AR(1)	-	-	[0.7475]	[0.7117]	-
AR(2)	-	-	[0.9105]	[0.9067]	-
Observations	140	140	112	98	98
Banks	14	14	14	14	14

Sources: Researcher's computation from E-view (version 9.0)

** indicates 5% level of significance

Note: AR(1) and AR(2) are the first and second order Lagrange Multiplier test for residual serial correlation.

The dynamic panel regression results are presented in table 4. Panel 1 reports estimates from Pooled Ordinary Least Squares (OLS) Result. Panel 2 reports Random Effect OLS Results which was adopted as suggested by Hausman test statistic. Panel 3 reports Diff-1 GMM, panel 4 reports Diff-2 GMM and panel 5 reports System GMM. While panels 1 and 2 respectively, provided estimates without the interaction term of PSC(-1) and PSC(-2) for Pooled OLS and Random Effect OLS results, panels 3, 4 and 5 gave their counterparts with interaction in difference GMM and system GMM. As expected, PSC(-1) was significant to influence the dependent variable as found in differenced and system GMM estimators. This is confirmed by their p-values such as [0.0000], [0.0001] and [0.0221] respectively. In models with the dynamic term, OC and LLP were found to influence PSC significantly in System GMM. This is evident as observed from their p-values of [0.0439] and [0.0036].

It was observed that in the Diff-1 GMM, Diff-2 GMM and System GMM results all the diagnostics are satisfactory. Hansen J-test was used for test of validity of instrument and it followed an X^2 distribution with r degrees of freedom under the null hypothesis of valid instruments. The Hansen test accepts the validity of instruments in Diff-1 GMM, Diff-2 GMM and System GMM. The acceptance of validity of instruments is confirmed by their p-values of [0.3666], [0.2471] and [0.1991] respectively. However, [35] [36] highlight the potential bias in the estimated results that come from instrument proliferation. Even if there are efficiency improvements, the problem of too many instruments is a valid concern in the GMM estimation framework because it weakens the Hansen/Sargan tests for over identifying restrictions. Jarque-Bera normality test and its' p-values showed that the data set were well modeled by a normal distribution.

The results from the Hansen J-test confirm the validity of the instruments in the GMM system. As expected, there was absence of first and second order serial correlations in Diff-1 GMM and Diff-2 GMM.

Since the test for first and second order residual serial correlation was insignificant, it shows that the panels do not suffer from serial correlation.

Robustness Check

Robustness check was carried out on the dynamic panel regression results. The justification for carrying out robustness check is to ascertain whether the addition of external instruments to the dynamic panel regression model will produce similar results. Therefore, robustness check was conducted as additional external instruments were included in the dynamic model as suggested by [15]. The results of the robustness check (dynamic panel regression result) was presented in table 5 below.

Table 5: Robustness Check [Dynamic Panel Regression Results]

Series	Pooled OLS (1)	Random E. OLS (2)	Diff-1 GMM (3)	Diff-2 GMM (4)	System GMM (5)
PSC(-1)	-	-	0.58032	0.52779	0.12829
PSC(-2)	-	-	[0.0000]**	[0.0001]**	[0.1044]
			-	0.01162	-0.2203
			-	[0.8724]	[0.0000]**
C	0.42647 [0.0000]**	0.42529 [0.0000]**	-	-	-
OC	-0.53097 [0.1976]	-0.51686 [0.2036]	1.44151 [0.4244]	1.37758 [0.3386]	1.03876 [0.0066]**
LLP	-0.05770 [0.0001]**	-0.05711 [0.0001]**	0.04713 [0.6852]	0.03382 [0.7596]	-0.04897 [0.0068]**
IRS	-0.07158 [0.0159]**	-0.06968 [0.0169]**	-0.39556 [0.4193]	-0.31827 [0.5300]	-0.0195 [0.3124]
PR	0.07649 [0.5859]	0.07723 [0.5764]	0.16321 [0.6621]	-0.00461 [0.9865]	-0.28331 [0.0413]
Instruments	-	-	8	7	7
Jarque-Bera	[0.3140]**	[0.3166]**	[0.0000]	[0.0000]	[0.0000]
Wald Test	-	-	-	-	11.3496 [0.0000]**
Hansen J-test	0.158837	0.153485	10.5452 [0.30818]	10.6171 [0.2244]	34.5676 [0.2191]
AR(1)	-	-	-	[0.4506]	-
AR(2)	-	-	[0.9833]	-	-
Observations	140	140	112	98	98
Banks	14	14	14	14	14

Sources: Researcher’s computation from E-view (version 9.0)

** indicates 5% level of significance

In table 5, PSC(-2) was found to exert significant influence on the dependent variable in column 5 (System GMM) and this is confirmed by the p-value of [0.0000]. However, it was not same in column 5 (System GMM) in table 4. This could as well be attributed to the presence of added instruments in the model. The level of bank operating costs (OC) was confirmed to significantly affect PSC as seen in tables 4 and 5 respectively. This is confirmed by its’ P-value [0.0439] and [0.0066] in column 5 (System GMM) of table 4 and 5 respectively. The volume of loan loss provision (LLP) was found to significantly influence PSC as confirmed by the P-values of [0.0036] and [0.0068] in table 4 and 5 of column 5. It indicates the significant influence of the volume of loan loss provision (LLP) on private sector credit delivery (PSC) in Nigeria. IRS was justified by the robustness check to have an inverse relationship with PSC. This is confirmed by the coefficient estimates of the parameter found in table 5 to be -0.3815, -0.36107 and -0.0190 in Diff-1 GMM, Diff-2 GMM and System GMM respectively. Also in the robustness check, IRS in table 5 has coefficient estimates of -0.39556, -0.31827 and -0.0195 in Diff-1 GMM, Diff-2 GMM and System GMM respectively. The same inverse relationship was confirmed to be borne between PR and PSC.

The Diagnostics part of the Robustness Check in table 5 show the appropriateness of the instruments used. The Wald test for the joint significance of regressors (excluding time dummies) is statistically significant at the 5 percent level in the robustness check of the model. The Wald test indicates that the joint influence of the explanatory variables on PSC is statistically significant as proved by its p-value [0.0000]. The Hansen J-test identifies restrictions under the null hypothesis of the validity of the instruments (Arellano and Bond, 1991). The validity of the instrument set is checked using the Hansen J-test. The instruments used in the first differenced GMM or in the system GMM are not rejected by the Hansen J-test of over-identifying. In Table 4 and 5, we found that the Hansen J-test of the validity of instruments used is not statistically significant at the 5 percent level in first differenced GMM and system GMM for all models. With respect to the Hansen J-test of

over-identifying restrictions, the high p-value suggests that we cannot reject the null hypothesis that the set of instruments is appropriate. Therefore, the Hansen J-test supports the validity of the GMM estimator and GMM system and do not indicate a serious problem with the validity of the instrumental variables. This is consistent with the presence of measurement errors (Blundell and Bond, 1998) as well as instruments used in the estimation.

The tests of first and second-order serial correlation in the first-differenced and System GMM of the robustness check fails to reject the null hypothesis of no autocorrelation. In table 5, AR (2) has a p-value of 0.9833 in column 3 while AR(1) has a p-value of 0.4506 thus, giving the probability of correctly rejecting the null hypothesis of no autocorrelation. Therefore, both AR(1) and AR(2) test support the validity of the first differenced GMM and the system GMM estimator of table 4 and 5. The estimations clearly seem to be consistent and the absence of serial correlation shows in the differenced residuals that there is no presence of first and second order serial correlation. .

Policy Implications of the Results

The results obtained from the study have demand-side and supply-side policy implications. On the demand-side, one of the major policy implications of the results is that the rising level of interest rate spread will further encourage higher level of informality in private sector credit delivery in Nigeria. This is because higher level of interest rate widens the margin between interest rate paid by borrowers and the deposit rate paid on customers' deposits by banks. Therefore, the rising level of interest rate spread coupled with the absence of developed capital market implies that borrowers are more likely to resort to accessing financial services from the informal financial institutions and arrangements. However, on the supply-side, rising level of interest rate spread is more likely to increase banks interest income thereby enhancing bank performance.

The second policy implication of the result is that the level of bank operating costs decreases with increasing sizes and scale of operation of banks. The result implies that bank operating cost has reduced drastically since the introduction of banking consolidation in 2005. Therefore, it is a confirmation of the theoretical argument advanced in literature that banks have actually maximized the benefit of economies of scale arising from bank consolidation to reduce bank operating costs.

The third policy implication is that banks have not complied substantially with prudential regulations established by the Central Bank of Nigeria (CBN) in terms of loan loss provision and maintaining high asset quality. The rising level of loan loss provision implies that a huge proportion of bank loans are largely non-performing and such a situation portends a great danger to financial system stability. Another policy implication of the result is that the problems of moral hazard and adverse selection sustain increasing volume of loan loss provision.

Fourthly, the policy implication of the result is that the true costs of financial intermediation are hidden in revolving fees and commissions charged on loans and advances extended to the private sector. The addition of these charges to the margin between lending and deposit rates gives the true cost of borrowing. However, banks have always circumvented regulatory control by giving the impression that the cost of lending to borrowers is low.

V. SUMMARY OF FINDINGS

The study found that the level of bank operating costs with coefficient value (-0.51686) and p-value (0.2036) has negative and insignificant impact on private sector credit delivery in Nigeria. The study found that the volume of loan loss provision with coefficient value (-0.05711 and p-value (0.0001) has negative and significant impact on private sector credit delivery in Nigeria. The study found that the level of interest rate spread with coefficient value (-0.06968) and p-value (0.0169) has negative and significant impact on private sector credit delivery in Nigeria.

VI. CONCLUSION

It was concluded that the levels of loan loss provision and interest rate spread have significant negative impact on private sector delivery in Nigeria. The level of bank operating costs has negative and insignificant impact on private sector credit delivery in Nigeria while the level of bank profitability has positive and insignificant impact on private sector credit delivery in Nigeria.

The study equally concluded that banks have become more efficient in their operations as confirmed by the negative and insignificant impact which bank operating costs has on bank credit delivery in Nigeria. The study also concluded that the rising level of financial intermediation costs is driven mainly by high level of interest rate spread (net interest income/total asset) and high level of loan loss provision (non-performing loan/total loan). The rising incidences of non-performing loans are indicators that moral hazard and adverse selection problems exist and that there is a huge information gap or deficit between lenders and borrowers in the Nigerian banking system.

The foregoing conclusion indicates that financial intermediation cost is high and that it impacts negatively on private sector credit delivery in Nigeria. The conclusion equally indicates that banks as financial intermediaries primarily exist to reduce transaction and information costs associated with lending and borrowing activities.

VII. RECOMMENDATIONS

Based on the research findings and the conclusions drawn thereof, the following recommendations were made:

1. That the high level of loan loss provision (non-performing loans/total loans) should be addressed through efficient information sharing system among the commercial banks.
2. That the Central Bank of Nigeria should evolve policies to regulate the level of commissions and fees charged on bank credit and services extended to customers since it has been established that the addition of these charges and commissions to the interest spread raises the level of financial intermediation costs (net interest income/total asset) which consequently reduces private sector credit delivery.
3. That the Central Bank of Nigeria should sustain the current banking sector consolidation programme since the banks have maximized the economies of scale of operation thereof to reduce costs of funding and costs of operation.

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Appendix A: Raw Data for Analysis

BANK	YEAR	NPL	NII	NI	OE	TLA	TA
ACCESS	2005	1752232	3929248	501515	4182839	16183353	66918315
	2006	8092412	8732783	737149	8383807	54111173	174553866
	2007	10741448	10358344	6083439	13110924	107750578	328615194
	2008	9588685	22431481	16056464	20112197	244595621	1031842021
	2009	8765935	61836721	22885794	26253003	391688687	674865041
	2010	31228154	59388433	880752	38797403	360387649	647574719
	2011	20682485	50745459	12931441	39776147	403178957	726960580
	2012	23861019	84996482	13660448	38964674	463131979	945966603
	2013	17924178	66685119	29754522	65619998	735300741	1704094012
	2014	19966521	88667121	22057198	64938813	1019908848	1981955730
DIAMOND	2005	2534977	6939152	2526522	7876222	18444445	124994957
	2006	4005619	10078431	3849545	11906030	40822966	223047862
	2007	7244809	15905687	6930754	18665528	96384941	312249721
	2008	10280201		11822011	24570069	231445158	603326540
	2009	23378125	24731795	4883446	27356396	296537785	604000914
	2010	46605507	49165644	6522455	43115551	294920909	548402560
	2011	36878356	69203014	22868254	34865734	344397331	714063959
	2012	25334646	84800858	23073427	39549134	523374608	1059137257
	2013	20262048	99089280	29754522	76355705	585953062	1354930871
	2014	33195372	101933000	22057198	90619000	712065000	1750270423
ECO	2005	3108114	3188945	1668174	4458013	19130959	67652618
	2006	1688989		3558591		52279284	132091706
	2007	11307655	13257793	7449777	15469293	116180680	311395894

	2008	69406287	18391667	2130461	26602095	144917536	432466245
	2009	89620000	23257000	4588000	30614000	183719000	355662000
	2010	64539000	28554000	1619000	30521000	231108000	454239000
	2011	7359940	22129000	19344000	26511000	410150000	1085058000
	2012	548053	73382000	7805000	47340000	546873000	1325315000
	2013	744272	88399000	11658000	42459000	625907000	1460811000
	2014	96154	99128000	29733000	54981000	892721000	1772922000
FCMB	2005	995597	3360471	797792	2628184	11436232	51318268
	2006	1628132	2747402	2841380	4556131	19070768	106611289
	2007	2739982	9492904	5802857	10674615	83577134	262805890
	2008	5290848	29920489	13720470	19380206		465210901
	2009	22517000	36823966	3465812	26460056	270188782	614409614
	2010	19085000	40702524	669371	28369962	323631060	630073488
	2011	9086000	53748587	7322322	29648123	315101376	593273465
	2012	909012	37398853	10322664	12417616	350489990	890313606
	2013	9450876		6027752	6088029		131482189
	2014	22962196	438029	66027752	5450877		131570290
FIDELITY	2005	2008165	2298072	856885	2189767	13892290	34953351
	2006	7756529	4500585	3162347	4579601	38661271	119985351
	2007	6264340	8820212	4160007	9039820	70237512	217144465
	2008	7207519	29839060	12986570	15825410	230713051	533122233
	2009	48084866	43491275	2296799	26013943	215112075	504163720
	2010	47116000	26381000	5828000	29235000	158516000	478020000
	2011	17355000	29178000	5959000	38387000	255257000	739508000
	2012	13829000	36810	17924000	50708000	345500000	914360000
	2013	16573000	30812000	7721000	54816000	426076000	1081217000
	2014	17451000	48826000	13796000	57099000	541686000	1187025000
FIRSTBANK	2005	34674000	26421000	13243000	26648000	114673000	377496000
	2006	17339000	29468000	17383000	33748000	175657000	540129000
	2007	6620000	39627000	20636000	41446000	219185000	762881000
	2008	6195000	57527000	36540000	62260000	437768000	1165461000
	2009	88506000	87059000	35074000	81533000	684107000	1667422000
	2010	89703000	46045000	1275000	14153616	575790096	1410243538
	2011	28098000	167223000	32123000	133368000	580293531	1841737651
	2012	22171000	205547000	23052000	168908000	924807196	2047496098
	2013	22174000	206709000	59365000	96308000	1134069198	2088134589
	2014	23070000	215449000	79351000	127727000	1794037000	3490871000
GTBANK	2005	1359293	7535955	13234000	9103465	65035248	167897704
	2006	2911474	11593534	17383000	12199196	83476852	305080565
	2007	2289784	17555062	20636000	17688652	113705183	478369179
	2008	3573179	45762318	36540000	35423810	413983817	918278756
	2009	70123787	73468110	23848061	49963277	538137569	1019911536
	2010	41107607	77596839	38411612	54451935	574255521	1067172389
	2011	22397489	93527341	51653251	60701662	678358919	1525010483
	2012	21464872	123098741	85263826	67343628	742436944	1620317223

	2013	25355634	127857215	85545510	72049146	926967093	1904365795
	2014	23085493	128698830	93431604	79148134	1182393874	2126608312
SKYEBANK	2005	1252503	1763469	492719	3003522	12122680	31990861
	2006	4759897	6840000	1961371	10919472	71718000	174197000
	2007	5513000	16238000	5517000	18427000	108450000	446114000
	2008	8535000	26233000	15126000	28082000	246390000	784878000
	2009	69100000	47583000	1130000	41535000	317764000	622164000
	2010	49639000	39936000	9308000	38485000	385435000	674664000
	2011	25341000	45287000	2627000	21423000	489251000	876527000
	2012	17079000	44071000	12692000	39370000	540036000	1071311000
	2013	17545000	61209000	15865000	50465000	551328000	1114009000
	2014		16209000	2766000	17476000	567472000	1042934000
STANBIC	2005	396543	3047505	4250440	2358155	13487436	34567664
	2006	12130171	5614344	8164014	4124020	50067653	110781785
	2007	9258018	9499455	18872568	6941765	79635690	304519994
	2008	15537000	21950000	35087000	9214000	99010000	345762000
	2009	17702000	24082000	36835000	6258000	110967000	331796000
	2010	8642776	25796000	40627000	7811000	164203000	372612000
	2011	7542256	26836000	45221000	3964000	302771000	554507000
	2012	14340000	31603000	52728000	5576000	290915000	676819000
	2013	13407000	34802000	61228000	8386000	383927000	763046000
	2014		46658000	104602000	32065000	398604000	944542000
STERLING	2005	10725125		4820558		1722851	19435289
	2006	11839912	3350650	961645	7214315	38945949	109664427
	2007	10901676	2952041	620658	9934041	45957835	145974674
	2008	7196566	11720717	6523153	13966433	65787520	236502923
	2009	22289082	12452784	6660406	19434227	78140098	205640827
	2010	11059183	14468906	4178493	15162982	99312070	259579523
	2011	8227240		6908598		162063156	504048213
	2012	11752908	23894000	6953539	31952000	229420873	580225940
	2013	12945690	35812646	8274864	40013363	321743748	707797181
	2014		43016783	9004973	50626714	371246273	824539426
UBA BANK	2005	2420000	10966000	4921000	15737000	67610000	248928000
	2006	12989000	32328000	11468000	43512000	107194000	851241000
	2007	14087000	26531	19831000	44424000	320229000	1102348000
	2008	15579000	71372000	40002000	58345000	405540000	1520091000
	2009	39647000	108536000	12889000	107717000	573465000	1400879000
	2010	40200000	62927000	2167000	82458000	569312000	1432632000
	2011	9088000	56224000	79669000	101978000	552526000	1655465000
	2012	827141628	74845000	54765000	91704000	570714000	1933065000
	2013	1045248209	76176000	46483000	85922000	796942000	2217417000
	2014	1120731414	82125000	40083000	99226000	884587000	2338858000
UNION	2005	18588000	31175000	9375000	23745000	78684000	398271000
	2006	28281000		10036000		116060000	517564000
	2007	23597000		12126000		149376000	619800000

	2008	54289000	53809000	24737000	41926000	244845000	907074000
	2009	209089000	72869000	71052000	60369000	401546000	1106779000
	2010	102044000					845231000
	2011	95044000	56224000	7966000	82084000		842763000
	2012		74845000	47373000	75393000		886468000
	2013		791700000	3800000	58600000	229500000	1002800000
	2014		95300000	26800000	58700000	312800000	1009000000
WEMA	2005	15677263	2527994	844285	7213096	46183046	97909060
	2006	42284405	584613	6601962	8525158	53702803	120109067
	2007	21161431	4239718	2554098	11014350	68796732	165081532
	2008	25151243	8377591	57738739	16794212	48394253	128906575
	2009	69907288	3717430	2094492	13293765	28636557	142785723
	2010	37427763	5670177	16238533	18206006	38637809	203144627
	2011	32123453					
	2012	12932960	11768106	5040629	17786240	73745728	245704597
	2013	4076942	12524356	1596531	1016882	98631825	330872475
	2014	3789373	18551913	2372445	3093940	149293849	382562312
ZENITH	2005	2084923	17265208	7155926	18153540	122494396	329716511
	2006	2309405	26832021	11488800	31298000	199707860	608505175
	2007	4022377	43283859	17509145	45388460	218306000	883941000
	2008	9406000	87851598	46524991	85094715	417073000	1680032000
	2009	46413000	103183000	18365000	103410000	669261000	1573196000
	2010	41832000	83969000	33335000	89074000	667860000	1789458000
	2011	31476000	117960000	32100000	108450000	767372000	2169073000
	2012	28457000	147878000	42411000	51733000	895354000	2436886000
	2013	34208000	175381000	45419000	72066000	1126559000	2878693000
	2014	26407000	185732000	47445000	75366000	1580250000	3423819000

Key: NPL = Non Performing loans, NII = Net Interest Income, NI = Net Income, OE = Operating Expenses, TLA = Total Loans and Advances, TA = Total Assets.

Source: Individual Bank Annual Reports and Financial Statements (2005-2014)