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# Bank Credit and Private Sector Investment: Evidence from Nigeria

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**Abstract**

There has been a shift by most developing countries away from public sector centrally planned economy to private sector driven economy. This move is as a result of the fact that the public sector driven economy resulted in resource inefficiency, poor service delivery and for the most part, steeped in corrupt practices. This move to private sector, through the encouragement of small and medium scale businesses (SME) is fraught with challenges due to paucity of needed credits from commercial banks and infrastructural facilities. This study seeks specifically to examine the impact of bank credit on private sector investment in Nigeria. The study was approached using Ordinary Least Square (OLS) tool to construct an econometric model. The key explanatory variables that impact on private sector investment used in this study are: Banks Loans and Advances (BLA), Real Gross Domestic Product (GDP), Interest Rate (INT) and Foreign Direct Investment (FDI). A stationarity test was carried out using the Augmented Dickey-Fuller (ADF) test and stationarity was found at first difference at 5% level of significance. The Johansen-Juselius co-integration technique was also employed in this study in assessing the co-integrating properties of the variables, especially in a multivariate context. The result of the test showed that for the period, 1980-2009, there was co-integrating relationships among variables suggesting long run relationship. The result of white hetroscedasticity test confirmed that the assumption of homoscedasticity was not violated. Informed by the findings, recommendation demands that credits to private investors in Nigeria should be encouraged and that interest rate management should be structured to enhance private investment.

**Keywords:** Private Investment, Banks Loans and Advances, Bank Credit, Interest Rate, Credit Policie

## 1. Introduction

Improved financial environment unarguably is one of the greatest drivers of economic development. It stimulates the level of investment and income, on one hand, and enhances manufacturing capacity utilization, on the other hand. The ultimate effect is poverty reduction; increased per capita income, and by extension, economic growth. The need to re-focus development policies towards private investment in many developing countries has been of major emphasis of many analysts of recent. This is primarily because of the flexibility, adaptability and regenerative tendencies of the private sector to propel economic development. The private sector is seen as the bedrock of industrialization based on its expected impact and potential contributions towards a diversified production base. Its accelerative effect tends to gear towards achieving macroeconomic objectives such as full employment, equitable income distribution, balance of payment equilibrium, development of local technology as well as diffusion of management skills and stimulation of indigenous entrepreneurship. This argument becomes very strong since most developing countries of Africa have for more than four decades tried public sector driven economic development with little or no success. It was found that the return on the huge public investment was negative as a result of monumental waste,

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mismanagement of resources, gross inefficiency in operations and worst of all; they became conduit pipes for personal enrichment of government officials (Onodugo, 2013)

Limited access to credit facilities has been the bane of private sector in Nigeria and indeed most African countries. It has been for the most part, the major cause of widespread poverty and unemployment in the Less Developed Countries (LDCs). The idea of granting loans and advances, especially to priority sectors of the economy, with the goal of stimulating entrepreneurship in those preferred sectors has been widely canvassed in the literature. Direct bank credit, according to Ojo (1992), has been in use in developing economies, particularly where the money and capital markets were less developed. Bank credits in Nigeria are usually short- term loans which must be secured with collateral if the customer has poor credit history. It has three main variants namely: advances, overdrafts and loans ( Umoh, 1997; Emenna, 2006).

Banks and government policies regarding credit administration to private sector in Nigeria are fraught with inconsistencies, scepticism and in-effectiveness. First, the private sector in Nigeria is made up of largely micro, small and medium sized businesses which lack the basic requirements to raise commercial loans. Most of them do not have the required collateral nor the basic business financial plan and documentation to attract loan advances from commercial banks. Their credit history is even more doubtful, as they are known to divert credits to less economic yielding ventures. This makes commercial banks to prefer to pay penalty imposed on it by the Central Bank of Nigeria, for not channelling loans to such sectors than to risk toxic loans to this very risky sector. Incidentally, the private sector can only make the desired impact in an economy if there are sustainable development in the areas of volume of transactions/businesses, operational efficiency and increase in number of investors. These indices can only be attained when the financial sector of an economy provide the desired credit facilities. Where the desired financial support is lacking, the operators in the private sector tend to only operate below optimum level. The resultant effect is stagnation in the economy as the public sector does not have the muscle to shoulder the burden alone.

The foregoing analysis presents a developmental dilemma for most LDCs like Nigeria. There is need to shift from public sector to private sector driven economy with the SMEs at the driving seat. However, the SMEs growth potential is limited by absence of necessary start-up and expansion funds to operate. This study seeks to empirically assess the impact of deposit money banks on growing the private sector in Nigeria.

## 2. Review of Related Literature

### Analysis of Credit Policies in Nigeria

The broad objectives of credit policies in Nigeria over the years have been the enhancements of availability, reduction of cost and access of credit to the private sector as well as the stimulation of growth in the productive sectors of the economy. Consequently, credit guidelines were designed to ensure that the financial needs of small and medium scale enterprises were adequately catered for. Banks were, therefore, required to pay greater attention to the prescribed aggregate and sectoral allocation of their loans and advances to enhance the attainment of the objectives of the Government.

In the early 1980s, credit allocation was sectoral, namely preferred and less preferred sectors. The preferred sector comprised production (agriculture and manufacturing), services, exports and development finance; while the less preferred sector comprised general commerce (imports & domestic trade), government and others (credit & financial institutions, personal & professional and miscellaneous). Analysis by the CBN indicated that between 1981 and 1985, 75 per cent of commercial banks' aggregate credit went to the preferred sector, while 25 per cent was allocated to the less preferred sector. Similarly, 79 per cent of merchant banks credit allocation, in the same period, went to the preferred sector and 21 per cent to the less preferred sector. Out of this, a larger chunk was allocated to the productive sub-sector: commercial banks (59 per cent), merchant banks (69 per cent). Banks were allowed to expand their credit limits by specified margins over the previous year's level. For instance, the permissible credit expansion in 1982 was 30 per cent. However, small banks with loans and advances not exceeding N100 million were allowed to exceed

30 per cent ceiling up to 40 per cent, or 70 per cent of their total deposit liabilities (excluding government deposits maturing earlier than six months), whichever was higher.

Banks were also required to maintain a minimum credit allocation of 70 per cent to indigenous borrowers as a means of encouraging the development of small scale enterprises. In order to enhance the rapid economic development of the rural areas, banks were required to lend not less than 30 per cent of the total deposits collected in the rural branches to customers in the rural areas. Also, the range of lending rates for the preferred sector/sub-sectors for loans maturing within 3 years was 8.5 to 10.5 per cent. But loans to these sectors maturing after 3 years could carry interest rates up to a maximum of 12 per cent.

The policy objectives of 1985 was geared towards the stimulation of increased agricultural production (especially staple food items and basic raw materials) and increased industrial production in order to reduce the persisting high level of dependence on the external sector. In 1986, it was envisaged that foreign exchange scarcity would continue to constrain full utilization of the productive sector. In order to accommodate the expected increase in the demand for bank credit, particularly for agricultural production, it became necessary to raise the ceiling on bank credit expansion from 7 per cent fixed for the previous year to 10 per cent.

The need to give banks greater initiative and flexibility in their credit operations led to further simplification of the credit categorization to two sectors in 1987, namely high priority sector (agricultural production and manufacturing enterprises) and 'others' sector. The stipulated credit allocation was as follows: high priority sectors (50 per cent) comprising, agricultural production (15%) and manufacturing enterprises (35%) and 'others' sector (50 per cent). In line with government's policy to deregulate the economy, interest rates policy was sufficiently flexible and responsive to market forces. The minimum interest rate payable on time deposits was 12 per cent and that on savings deposits 11 per cent, while banks were allowed to negotiate higher rates with their customers. In pursuit of the objective of achieving non-inflationary growth, there was a compelling need for the moderation in bank credit expansion to the domestic economy in 1989. In this regard, the ceiling on commercial and merchant banks' aggregate credit expansion was reduced from 12.5 per cent to 10.0 per cent in 1989, but raised again to 12.5 per cent in 1990. Unlike in the past, when the ceiling applied to only loans and advances, the 1990 ceiling applied to all credit granted to the private sector without any exception. In order to ensure adequate provision of credit to the priority sectors, preference continued to be accorded the agricultural and manufacturing sectors in the allocation of available credit

In order to further enhance the development of small-scale enterprises, commercial and merchant banks' total credit outstanding to small-scale enterprises wholly owned by Nigerians was raised from 16 per cent to 20 per cent in 1990. Such loans would finance strictly activities in the industrial sector and exclude general commerce. The policy of interest rates deregulation continued to be in force in 1989. Under this dispensation, individual bank was free to determine the level and structure of its deposit and lending rates in line with prevailing market conditions. Banks were however, required to narrow the spread between their savings deposit and prime lending rates to a maximum of 7.5 percentage points.

In an effort to eliminate the distortions and inefficiency in the financial system caused by the prolonged use of credit ceilings, monetary policy in 1991 shifted from the direct control of credit growth to a market-oriented approach based on the use of instruments of indirect credit control. Similarly, Government's commitment to abstain from additional borrowing from the banking system was expected to make more credit available to the private sector and exert a downward pressure on interest rates. These developments would further enhance the objective of stimulating private sector productive capacity and output growth. Thus, the ceiling on commercial and merchant banks' aggregate credit to the private sector was raised from 12.5 per cent to 13.2 per cent in fiscal 1991. In an effort to provide stimulus for the growth of output, a higher rate of bank lending to the private sector was allowed in 1992. To this end, the ceiling on the growth of commercial and merchant banks' credit to the sector was raised to 16 per cent from 13.2 per cent in the preceding year. For effective monitoring of the performance of banks, the permissible expansion rate was broken into four quarterly growth ceilings of 3.8, 2.7, 3.5 and 6.0 per cent.

In 1993, interest rates rose to unprecedented high levels, following the deregulation of interest rates and the undue discretion it conferred on key market players in pricing their funds as well as the arbitraging activities of market players. Savings deposit rates ranged from 13.5 to 25.0 per cent, while prime-lending rates ranged from 26.0 to 60.0 per cent for commercial banks and 42.0 and 80.0 per cent for merchant banks. This resulted in the widening of the margin between banks' savings and lending rates. Such high rates seriously discouraged investment, especially in the directly productive sectors of the economy. Similarly, the persistently high and rising government deficit financing resulted in the 'crowding out' of the private sector in the credit market. Consequently, several measures were adopted in 1994 to address the identified causes of high and unstable interest rates in order to ensure a more investor-friendly regime. For instance, the instilling of fiscal discipline through the zero-deficit budget adopted during the year was expected to release more loadable funds to the private sector and thereby exert a downward pressure on market interest rates. The fixing of interest rates was reintroduced in 1994. These measures resulted in a rapid increase in banking systems credit to the private sector as well as relatively low interest and exchange rates during the year. In particular, private sector borrowers took advantage of the cheap bank credit to buy cheap foreign exchange. However, interest rates were substantially negative in real terms as the inflation rate remained high during the period.

The low interest rate regime was maintained in 1995 and 1996 but with a minor modification to make for flexibility. Under the new arrangement, banks and other financial institutions were required to maintain a maximum spread of 7.5 percentage points between their deposit and lending rates, subject to a maximum lending rate of 21.0 per cent. In 1996, the requirement that a minimum of 20 per cent of merchant banks' loans and advances should be of medium and long-term tenure was abolished. In recognition of the need for enhanced efficiency of resource allocation in the economy, the prolonged use of the policy of sectoral credit allocation was phased out in stages in 1996, and was replaced by an incentive system which encouraged banks' voluntary lending to the priority sectors, In line with the need to realize the interest rate regime with the policy of financial market deregulation, the cap on interest rates, which was imposed since 1994, was removed with effect from 1st October, 1996. However, the CBN continued to influence interest rates through its intervention with various market instruments, especially through the Minimum Rediscount Rate (MRR) and the marginal rate at the weekly tender for treasury bills. The abolition of mandatory bank credit allocation to the preferred sectors remained in force since 1997. However, banks were enjoined to continue to provide adequate credit to the growth sectors of the economy, including loans to rural borrowers and small- scale enterprises.

In 2000, the CBN pursued initiatives to strengthen the community banks with a view to enhancing their efficiency to attract savings and provide credit at the micro level. A new initiative was evolved in 2001, under the aegis of the bankers' committee, to ensure adequate assistance to small and medium- scale industries to enhance their performance in terms of employment generation, developing local technology, and contributing to output growth under the Small and Medium Industries Equity Investment Scheme (SMIEIS), banks were required to set aside 10.0 per cent of their profit before tax for the financing and promotion of small and medium-scale industries. Banks' investment would be in the form of equity participation and long-term loans, project packaging/monitoring, advisory services and nurturing of specific industries to maturity. The scheme, which has been the most recent up till the end of 2011, was expected to enhance and improve funding that would facilitate the achievement of higher economic growth.

In recognition of the role of private sector, especially the SMEs in the promotion of economic growth and employment generation, the Government put in places various programmes and schemes to assist them, including the establishment of sector-specific Development Financial Institutions (DFIs). These included People's Bank of Nigeria (PBN), Nigerian Agricultural and Co-operative Bank (NACB), Nigerian Industrial Development Bank (N1DB), Nigerian Bank for Commerce and Industry (NBCI) and National Economic Reconstruction Fund (NERFUND). These institutions were later merged in 2001 to form the Nigerian Agricultural, Cooperative and Rural Development Bank (NACRDB) and the Bank of Industry (BOI). Also, to ensure improved supply of credit to the agricultural sector, the Agricultural Credit Guarantee Scheme (ACGS) was established to cater for secured and unsecured loans to individuals as well as corporate

borrowers.  Microfinance scheme was introduced in 2005 in order to make financial services accessible to a large segment of the potentially productive population, which otherwise would have little or no access to such services provide credit and enhance access to adequate formal productive credit to poor and low income persons.

### 3.  Constraints to Bank Credit in Nigeria

The Nigeria environment presents some forces that limit and may adversely influence the credit portfolio of banks which can be distinguished as observed by Sule  (2006). They are:

**Liquidity Requirements:**

creates a limitation in credit creation. The problem of liquidity arises from the problem of insufficient funds to meet at all times, the demands for money withdrawals by the depositors for transactions, loans and investment. To avert a situation where the bank will be short of funds to meet its contingent liabilities, the regulatory agencies usually fixes a ceiling on the liquidity levels of banks. The higher the liquidity requirement the lower the loan- able funds for credit disbursement    and vice versa.
**Volume of Banks Deposit Base:**

By far the greatest constraints to lending are the volume of the banks deposit base. Presently banks' capital base is N25 billion, this has constrainted bank lending rate to investors.  Also other factors that constrain bank credits are seen in the area of statutory lending limits, sectoral allocation, monitory policy guidelines, economic environment and geographical spread. Lending is often made to achieve geographical spread in line with government policy. A good example was the rural banking scheme. (Sule 2006) opined that although the credit factors are interrelated, it is the responsibility of each bank to monitor the changing tides in the social, political and economic environment in order to apply appropriate lending flexibility.

### 4.  Challenges of Private Sector Investment in Nigeria

Private Sector investment in Nigeria is faced with some daunting challenges. For decades, Nigeria's economy was characterized by growing dominance of the public Sector, over-dependence on oil exports and the pursuit of highly import-dependent industrial strategy. The private sector was dogged by weaknesses inherent in its skewed structure: dominated by a few multinationals and a large segment of small and medium-size enterprises with little linkage to the multinationals. Other problems included the poor state of physical infrastructure, particular road networks, electricity and water supply; high cost and limited access to banks credit, high cost of imported raw materials and spare parts, high production cost, inadequate security, corruption, weak enforcement of contracts, and lack of skilled labour. Nigeria's infrastructure does not meet the needs of the average investor, thereby inhibiting and increasing the cost of doing business. The most worrisome is energy supply.

Some macroeconomic policies have also not been conducive for a vibrant private sector investment. These include interest and exchange rate policies as well as other sectoral policies. Most entrepreneurs in Nigeria inadvertently reduced their borrowings from banks due to high interest rates and the short-term nature of the available loans. At the same time, banks were not actively lending to the real sector and loanable funds were primarily used to finance customer imports and for speculation in the foreign exchange markets. These factors have combined to act as deterrents to foreign investment flows and induced many Nigerians to take their money and skills abroad. To this end, infrastructure is expected to be developed, particularly power generation, transport and telecommunications to stimulate the growth of the private sector.

### 5.  Model Specification
The model for our study is specified thus:
PINV = f (BLA, RGDP, INT, FDI) …………………………………………………… (1)
Econometric transformation of (1)

$PINV_t = \rho_0 + \rho_1 BLA_t + \rho_2 RGDP_t + \rho_3 INT_t + \rho_4 FDI_t + \varepsilon_t$ ……………………………… (2)

Taking the natural log transformation of (2), we have:

$L_n PINV_t = \rho_0 + \rho_1 L_n BLA_t + \rho_2 L_n RGDP_t + \rho_3 L_n INT_t + \rho_4 L_n FDI_t + \varepsilon_t$ ……………. (3)

Where:

PINV = Private investment;

BLA = Banks Loans and Advances;

GDP = Real Gross Domestic Product;

INT = Interest Rate;

FDI = Foreign Direct Investment;

$\rho_0$ = Intercept of the function;     $\rho_1$ = coefficient of BLA;   $\rho_2$ = coefficient of RGDP;

$\rho_3$ = coefficient of INT;   $\rho_4$ = coefficient of FDI;   $\varepsilon$ = Stochastic variable; and

 t = Unit of time.

$\qquad\qquad\qquad\qquad$ **a proiri expectations:**   $\rho_0 > 0$;   $\rho_1 > 0$;   $\rho_2 > 0$;   $\rho_3 < 0$;   $\rho_4 > 0$;

**Data and Sources of Data**

Data were collected for Private Investment (PINV), Bank Loans and Advances (BLA), Real Gross Domestic Product (RGDP), Interest Rate (INT) and Foreign Direct Investment (FDI). These data were collected from some institutions like: National Bureau of Statistics (NBS), Central Bank of Nigeria (CBN), World Development Indicators (WDI), UNESCO and the United Nation's Statistical Division (UNSTAT), etc. We also made a comparative analysis of the various data collected from year to year so as to see the fluctuation and variations.

**6. Analyses**

We present and analyse here the results for our model as specified. The estimation procedure employed in this analysis is the Ordinary Least Squares (OLS).

**Table 1: Evaluation of Regression Function**

Dependent Variable: PINV
Method: Least Squares
Date: 06/03/13   Time: 20:50
Sample: 1980 2009
Included observations: 30

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | -3321396. | 4016097. | -0.827021 | 0.4160 |
| LOG(BLA) | 996424.2 | 270835.2 | 3.679080 | 0.0011 |
| LOG(RGDP) | 315522.0 | 410482.8 | 0.768661 | 0.4493 |
| LOG(INT) | -1092074. | 456157.0 | -2.394074 | 0.0245 |
| LOG(FDI) | -838321.5 | 330156.3 | -2.539166 | 0.0177 |
| R-squared | 0.793344 | Mean dependent var | | 663241.7 |
| Adjusted R-squared | 0.760279 | S.D. dependent var | | 1326193. |
| S.E. of regression | 649322.0 | Akaike info criterion | | 29.75626 |
| Sum squared resid | 1.05E+13 | Schwarz criterion | | 29.98979 |
| Log likelihood | -441.3439 | F-statistic | | 23.99345 |
| Durbin-Watson stat | 0.696672 | Prob(F-statistic) | | 0.000000 |

Source: Authors' computation using E-View Statistical Software Package.

From the result above, the intercept (C) indicates that on the average a unit change of the independent variables (BLA, RGDP, INT and FDI) will led to 33.2 percentage change in PINV. The parameter estimates ($\rho_1$, $\rho_2$, and $\rho_3$) conformed to a priori expected signs while that of the FDI ($\rho_4$) did not. The parameter

estimates for BLA, INT and FDI as shown by the probability table are statistically significant at 5% level of significance. While RGDP fail the statistical test at 5% level of significance. The adjusted coefficient of determination suggests that 76% of variations in PINV can be explained by changes in BLA, RGDP, INT and FDI; other changes are attributed to stochastic variables.

**Augmented Dickey-Fuller Stationarity Tests**

The variables in the model being macroeconomic aggregates may be non stationary so regression models using these aggregates most likely will generate spurious result and the outcome will be biased towards finding significant relationships among variables. We therefore subjected the data representing specified variables in this study to test of stationarity by testing for the presence or absence of **unit root** using Johansen cointegration test to overcome this undesirable outcome. The results are summarized in the table below:

**Table 2: Stationarity Table**

| VARIABLES | ADF. STAT | 5% CRITICAL VALUE | ORDER OF DIFFERENCE | ASSESSMENT |
|---|---|---|---|---|
| PINV | 3.495497 | -2.9705 | D(PINV(-1),2) | STATIONARY @ ORDER 1 |
| LOG (BLA) | -5.084990 | -2.9705 | D(BLA(-1),2) | STATIONARY @ ORDER 1 |
| LOG (RGDP) | -6.452635 | -2.9705 | D(RGDP(-1),2) | STATIONARY @ ORDER 1 |
| LOG (INT) | -5.596937 | -2.9705 | D(INT(-1),2) | STATIONARY @ ORDER 1 |
| LOG (FDI) | -3.839483 | -2.9705 | D(FDI(-1),2) | STATIONARY @ ORDER 1 |

Source: Authors' computation using E-View Statistical Software Package.

The results in the table above showed that the variables as specified are all stationary at first difference order of integration.

**Cointegration Test**

**Table 3: Cointegration Table**

| VARIABLES | ADF STAT. | 5% CRITICAL VALUE | ASSESSMENT |
|---|---|---|---|
| D(RESID01) | **-**4.675204 | -2.9705 | Cointegrated |

Source: Authors' computation using E-View Statistical Software Package.

This implies that the variables are cointegrated at level form, thus there is stability among variables in the short run and as well as in the long run. With a probability value of **0.00000,** the result of white hetroscedasticity test confirmed that the assumption of homoscedasticity (constant variance) was not violated. With a probability value of **0.00000,** the Ramsey specification test indicates that the model is well specified.

**7. Conclusion**

Our results reveal that bank loans and advances as well as RGDP conformed to our expectations by bearing positive signs. This implies that an increase in bank loans and advances to private sector, also results in income increase and will spur private investment in Nigeria. Meanwhile, interest rate, as expected, has an inverse relationship with private investment.

However, FDI has a negative impact on private investment and this is not in line with theoretical expectations. This indicates that continue dominant presence of multinational corporations (represented by FDI) in contribution to national income over time has the tendencies of weakening competitive strength of Small and Medium Enterprises (SMEs) in both local and international markets. This has further exposed what has been happening to the private sector investment in Nigeria.

Finally, it is worthy of note, that at the aggregate level, bank credit scheme activities are means of broadening economic participation and promoting political stability as more people are engaged in economic activities in the country, thus, enhance growth and development to a sustainable level.

## 8. Recommendations

Based on the results and findings of this study, we therefore make the following recommendations:

i. The regulatory body should device a means of compelling banks to channel credit facilities to the private investors on soft terms, i.e. making banks to channel reasonable percentage of their credit to private investors.

ii. **Encourage Rural Banking**: Rural banking scheme should be established so as to provide credit facilities to encourage micro-private business in the rural areas.

iii. **Regulatory Agencies**: The regulatory agencies should organize sensitization programmes to private sectors on both the benefits of and pre-conditions for accessing credit facilities.

iv. **Regulation of lending rate**: The lending rate should properly be regulated such that it will be accessible to genuine investors.

v. **Encourage individuals to save**: People should be encouraged to save as it forms the basis for credit accumulation for investment. This can be done by making savings attractive through increased interest on savings which is currently very low.

vi. **Priority Area:** Government should encouraged credit on priority areas of the economy which will help to develop these sectors. Such credit should be monitored to its full implementation to avoid diversion.

vii. There is need to pursue ancillary pro-credit policies such as improving the legal framework, adequate infrastructure, good governance, an effective judicial system and respect for the rule of law among others.

## References

Adebusuyi, B. S. (2007): Performance Evaluation of Small- Medium Enterprises (SMEs) in Nigeria CBN Economic and Financial Review, vol. 81. No 4.

Ajayi, S. (1998): Growth in the Banking Industry in Nigeria, Nigerian Institute Bankers Annual Seminar, Lagos, June 5.

Bashir, U.K. (2008) Overview of Credit Delivery Channel in Nigeria Vol. 32 No. 1

Calomiris, C. and Himmelberg, C. (1995): Directed Credit Programms for Agriculture and Industry: Arguments from Theory and Fact. Annual World Bank Conference on Development Economics, The World Bank.

Cameron, R (1967): Banking in the Early Stages of Industrialization: A Study in Comparative Economics History. New York Oxford University press.

CBN Statistical bulletin 2011.

CBN Annual Report and Statement of Account (Various Issues)

CBN Monetary and Credit Policy Guideline (Various Issues)

Central Bank of Nigeria (1997): Economic and Financial Review vol. 21 No 2.

Cho and Kin, C. (1995): The Role of Government in East Asian Economic Development: Comparative Institutions Analysis. Oxford University press.

Cookey, A.E (1998): Research Method for Business and Economics Studies Abbort Books LTD, Onitsha.

Diener, R. (2003): How to Finance a Growing Business, New York, Fredrick Fell Publishers Inc.

Economic and Financial Review. Vol 24 No. 4 Central Bank of Nigeria, Lagos, December.

Emeanus, A. 0. (2006): Bank Loans Sources of Loan Fund, Loan Valuation and Loan Syndication, Corporate Treasury Course Period Finance and Investment Co. PHC.

Essien, S.N. and Akpan, N. (2007): Credit Policies and Private Sector Investment in Nigeria vol. 31 No 1.

Gibson, H. and Tsakalotos, H. (1994): The Scope and Limits of Financial Liberalization in Developing Countries: A Critical Survey. Journal of Development studies 30(3), 578-628.

Hartly, K. and Parker, D. (1991): Privatization and Economic Efficiency: A Comparative Analysis of Developing Countries. Alder Short, Edward Elgar.

Obitayo, K. M. (2008): A Review of the Industrial Policy for Nigeria, CBN Economic and Financial Review, Vol. 27 No 1 Page 59-61 March.

Ojo, M.O. (1992): ''Monetary policy in Nigeria in the 1980's and Prospects Investment in the 1990's, Central Bank of Nigeria Economic and Financial Review, 30(1).

Onodugo, V. A., Kalu, I. E. & Anowor, O. F. (2013): Financial Intermediation and Private Sector Investment in Nigeria. Research Journal of Finance and Accounting, Vol.4, No.12, pg 47 – 54.

Parker, D. (1994): Privatization and the International Business Environment in Eagal, the Challenge of International Business, London, Kegan, Page Ltd.

Shaw, E. (1973): Financial Developing in Economic Development. New York Oxford University Press.

Soludo, C.C. (2006): Beyond Banking Sector Consolidation in Nigeria. Paper presented at the Global Banking Conference.

Steve, O.T. (2009) Rural Development in Rivers State an effective Approach. Paragraphic Publication, 314 Nigerian Air Force Shops, Aba Road, Port Harcourt.

Sule, E.I.K. (2006) Small Scale Industries in Nigerian Concepts. Appraisal of Government Policies and Suggested Solutions to Identified Problems, Economic and Financial Review Vol. 24 No. 4 Central Bank of Nigeria.

Vittas, D. and Cho Y.J. (1996): Credit Policies: Lessons from Japan and Korea. World Bank Research Observer, 11(2). Washington D.C., World Bank, August.

World Bank (1995): Private Sector Development in Low Income Countries, Washington Dc.

**Appendix:**

**Table 4: White Heteroskedasticity Test**

| | | | |
|---|---|---|---|
| F-statistic | 35.34441 | Probability | 0.000000 |
| Obs*R-squared | 27.92596 | Probability | 0.000489 |

Test Equation:
Dependent Variable: RESID^2
Method: Least Squares
Date: 06/06/13   Time: 11:27
Sample: 1980 2009
Included observations: 30

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | -1.04E+09 | 1.14E+10 | -0.091264 | 0.9281 |
| BLA | 20690.95 | 8008.378 | 2.583663 | 0.0173 |
| BLA^2 | -0.000808 | 0.000601 | -1.343617 | 0.1934 |
| RGDP | -57296.04 | 71614.19 | -0.800065 | 0.4326 |
| RGDP^2 | 0.032308 | 0.112126 | 0.288143 | 0.7761 |
| INT | 1.51E+09 | 1.97E+09 | 0.763959 | 0.4534 |
| INT^2 | -43039615 | 59000835 | -0.729475 | 0.4738 |
| FDI | -8325.950 | 46388.50 | -0.179483 | 0.8593 |
| FDI^2 | -0.073214 | 0.070208 | -1.042820 | 0.3089 |

| | | | |
|---|---|---|---|
| R-squared | 0.930865 | Mean dependent var | 9.46E+09 |
| Adjusted R-squared | 0.904528 | S.D. dependent var | 2.35E+10 |
| S.E. of regression | 7.25E+09 | Akaike info criterion | 48.48962 |
| Sum squared resid | 1.10E+21 | Schwarz criterion | 48.90998 |
| Log likelihood | -718.3443 | F-statistic | 35.34441 |
| Durbin-Watson stat | 2.712287 | Prob(F-statistic) | 0.000000 |

Source: Authors' computation using E-View Statistical Software Package.

**Table 5: Ramsey RESET Test:**

| | | | |
|---|---|---|---|
| F-statistic | 33.67945 | Probability | 0.000000 |
| Log likelihood ratio | 67.28462 | Probability | 0.000000 |

Test Equation:
Dependent Variable: PINV
Method: Least Squares
Date: 06/06/13   Time: 11:24
Sample: 1980 2009
Included observations: 30

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | -277.7252 | 38194.24 | -0.007271 | 0.9943 |
| BLA | 0.985627 | 0.401489 | 2.454927 | 0.0234 |
| RGDP | -0.148749 | 0.227865 | -0.652795 | 0.5213 |
| INT | 2634.879 | 2407.750 | 1.094332 | 0.2868 |
| FDI | 0.224150 | 0.387973 | 0.577748 | 0.5699 |
| FITTED^2 | -2.60E-06 | 1.73E-06 | -1.498116 | 0.1497 |
| FITTED^3 | 3.13E-12 | 1.78E-12 | 1.755875 | 0.0944 |

| | | | | |
|---|---|---|---|---|
| FITTED^4 | -1.47E-18 | 7.73E-19 | -1.907570 | 0.0709 |
| FITTED^5 | 2.91E-25 | 1.46E-25 | 1.997040 | 0.0596 |
| FITTED^6 | -2.03E-32 | 9.89E-33 | -2.049287 | 0.0538 |

| | | | |
|---|---|---|---|
| R-squared | 0.999409 | Mean dependent var | 663241.7 |
| Adjusted R-squared | 0.999143 | S.D. dependent var | 1326193. |
| S.E. of regression | 38813.74 | Akaike info criterion | 24.23214 |
| Sum squared resid | 3.01E+10 | Schwarz criterion | 24.69920 |
| Log likelihood | -353.4821 | F-statistic | 3759.599 |
| Durbin-Watson stat | 2.065518 | Prob(F-statistic) | 0.000000 |

Source: Authors' computation using E-View Statistical Software Package.