A TIME SERIES ANALYSIS ON THE EFFECT OF BANKING REFORMS ON NIGERIA’S ECONOMIC GROWTH
MRS B.A AZEEZ
Department of Banking and Finance, Faculty of Management Sciences
Ekiti State University, Ado Ekiti, Nigeria, Tel: 08028388763
and
OKE, MICHEAL OJO.(PhD)
Department of Banking and Finance, Faculty of Management Sciences
Ekiti State University, Ado Ekiti, Nigeria, E-mail: okemike2001@yahoo.com
Mobile No -08033881330

Abstract
The study examines the effect of banking reforms on the economic growth of Nigeria from 1986 to 2010. The model used in the study proxy Gross Domestic Product (GDP) as being dependent on Interest Rate Margin (IRM), Credit to Private Sector (CPS), Savings (SAV) and Inflation (INF), all representing banking reform indices. The econometric techniques of Augmented Dickey-Fuller (ADF) Unit Root test, Johansen Co-integration test and Error Correction Mechanism (ECM). The empirical result shows the presence of long run relationship among the variables. The overall findings suggest that banking reforms has not adequately and positively impacted on the economy. The study recommends that the regulatory and supervisory framework should be further strengthened, healthy competition promoted among banks and interest rate policy should be made to stimulate savings through high real deposit rates and lending rate made reasonable as possible in order to encourage investors to borrow to participate in productive activities.

Keywords: Banking Reforms, Economic Growth, Nigeria, Augmented Dickey-Fuller (ADF) Unit Root Test, Johansen Co-integration Test, Error Correction Mechanism (ECM)

INTRODUCTION
Banking reforms are viewed as government intervention in the banking industry to provide a panacea for existing anomalies in the banking sector. Countries reform their banking sectors for a number of reasons, including structural, capitalization and ownership issues (Ogbunuka, 2005). Most importantly, banking reforms are geared towards financial development in all ramifications and this would inevitably boost economic performance.

According to Ajayi (2005), banking reforms involve several elements that are unique to each country based on historical, economic and institutional imperatives. Banking reforms are implemented to enhance the intermediation role of banks. The reforms ensure that banks are well positioned to greatly mobilize savings and optimally allocate these mobilized savings in form of credit to profitable investments. These investments are of cognizance to the development process of a nation as provided in the framework of the dual-gap analysis.

In the pre-reform era, the activities of the banking sector were administratively controlled by the government as a means to implement its development strategy. The banking sector could be adjudged to be financially repressed when the interest and exchange rates are fixed against the dictate of the forces of demand and supply and also credit allocation was made based on fiat. Recognizing the ill-effect of financially repressing on the banking sector and the economy as shown in the seminal works of Mckinnon (1973) and Shaw (1973), many governments liberalized their economy. The liberalization of the Nigerian economy was prompted by the adoption of an economic...
reform package in 1986 recommended by the Bretton Woods Twins (International Monetary Fund and World Bank) dubbed “Structural Adjustment Programme”.

Banking sector reforms is an integral part of the economic reform package. The reform involved the liberalization of interest rates, promotion of market-based system of credit allocation, enhancing competition, and efficiency of the regulatory and supervisory framework (Jegede and Mokulolu, 2004). Banking reforms in Nigeria was motivated by the need to proactively put the Nigerian banking industry and the economy at large on the path of global competitiveness. Banking reforms started effectively in Nigeria with the liberalization of interest rates in August, 1987. Interest rate liberalization was aimed at enhancing the ability of banks to charge market-based loan rates and hence guarantee the efficient allocation of scarce resources (Ikhide and Alawode, 2001). Since liberalizing interest rate, series of banking reforms have subsequently followed.

There is no gainsaying that the banking sector is essential to the growth of any nation. The ability of banks to effectively impact on economic growth depends largely on the soundness and stability of the banking system. Hence, measures (reforms) to ensure its efficient functioning and stability must always be in place. Since 1986 when the Structural Adjustment Programme (SAP) was adopted, banking reforms in Nigeria has taken various dimensions and the basis for each reform is towards correcting the lapses in the banking industry and consequently promoting economic growth. However, due to the frequent changes and sequencing of banking reforms in Nigeria, the effect of banking reforms on economic growth remains ambiguous. The study intends to carry out a proper empirical investigation to examine the effect of banking reforms on the economic growth of Nigeria. The study will be of significant interest as it would shed light into how banking reforms has affected the level of output in Nigeria and provide policy recommendations on the basis of its findings. The study is limited to only Nigeria and annual time series from 1986 to 2010 was used. The starting year i.e. 1986 were chosen because the history of banking reforms In Nigeria can be traced to 1986 when Nigeria adopted SAP. The remainder of the paper is outlined as follows; section two deals with the review of related literatures, section three deals discusses the methodology of the study, section four exclusively presents the data analysis and interpretation of findings and the last section provides the conclusion and recommendations.

**LITERATURE REVIEW**

Banking reforms were introduced upon the need to enhance the quality of banks and ensure an effective and efficient banking sector. Banking reforms interchangeably called financial reforms aims at providing lasting solutions to problems experienced in the financial system. According to Ebong (2006), financial reforms are deliberate policy response to correct perceived or impending financial crises and subsequent failure. Financial reforms were designed to enable the banking industry develop the required resilience to support the economic development of a nation by efficiently performing its function of financial intermediation (Lemo, 2005). Banking sector reforms were as a matter of fact implemented in light of problems that bedeviled the banking system.

According to Omoruyi (1991), the objectives of banking reforms in Nigeria include;
• To improve the regulatory framework and procedures in order to prevent bank distress.
• To promote healthy competition in the provision of banking services.
• To expand the savings mobilization base in support of investment and growth through market-based interest rates.
• Less government interference in the market to ensure optimum allocation of resources.
• To provide a conducive enabling environment by laying the basis for minimal inflationary growth.

For any nation to achieve the desired position results from banking reforms, Villanueva and Mirakhor (1990) proposed the following conditions for successful banking sector reforms stated below;

1. A country with an unstable economy and the supervisory framework for banks is weak should before liberalizing the interest rates attain macroeconomic stability and strengthen its supervisory framework.
2. A country with an unstable economy but adequate supervisory framework in place should achieve balance in the economy while maintaining firm supervision. This can then be followed with gradual deregulation.
3. A country having a stable economy but with inadequate supervision should simultaneously maintain stability and improve regulations and supervision. Interest rates should be regulated temporarily.
4. A country with a stable economy and adequate supervisory framework should go ahead immediately with financial liberalization.

Review of Related Empirical Studies
Various academic researchers have examined the effect of banking reforms in varying dimensions. Their empirical studies are reviewed to provide evidence.

Saez (2001) investigated the impact of financial reforms in two countries (India and China). The study provided evidence that banking reforms enabled India to overcome the problem of bad debt by allowing new entrant into market while China restored its state-owned banks by establishing asset management institutions. Asamoah (2008) examined the impact of the financial sector reforms on savings, investment, and growth of gross domestic product (GDP) of the Ghanaian economy. Regression analysis and saving-investment model were used. It was revealed that financial sector reforms stimulated savings, investment and growth of GDP and consequently economic growth by increasing the rate of capital accumulation and improving the optimum allocation of capital.

Fadare (2010) investigated the effect of banking sector reforms on economic growth in Nigeria over the period 1999 to 2009. Using the ordinary least square regression technique, it was established that interest rate margins, parallel market premiums, total banking sector credit to private sector, inflation rate, inflation rate lagged by one year, size of banking sector capital and cash reserve ratio account for a very high proportion of the variation in economic growth. Except total banking sector capital, other exogenous variables revealed wrong signs with economic growth. Tressel and Detragiache (2008) conducted a study to determine whether financial sector reforms lead to financial development in multiple countries. Their findings demonstrated a positive impact of banking reforms on economic growth especially in those countries where institutional environment was conducive. Iganiga (2010) examined the effectiveness and efficiency of financial reforms on
Nigerian financial institutions with emphasis on the banking sub-sector. Using the classical least squares techniques, the results showed that the performance of the financial sector has been greatly influenced over time by these reforms that began in 1986. Fries and Taci (2002) examined the impact of banking and enterprises reforms and other factors on banking development in transition economies at both aggregate level and that of individual banks. The study conducted the analysis using a new panel data set of 515 banks in 16 transition economies for the period between 1994 to 1999. From their results, it could be evidenced that progress in banking reform is essential for banking development which inevitably affects economic growth.

Jegede and Mokuolu (2004) examined the effect of financial sector reforms as a panacea to capital market growth in Nigeria. Two approaches were employed in the study, the first approach involves the comparison of the capital market variables before and after the adoption of financial sector reform and the second approach is a regression analysis. Overall, the main findings indicated that the financial sector reform in Nigeria has led to a significant improvement and growth of the capital market. Rehman (2011) conducted an empirical analysis of financial reforms in Pakistan to examine whether it affects economic growth. It explored correlation among economic growth, deposits, lending, real interest rate, savings, and inflation, taking data of thirty-six years (1973-2008). The regression analysis showed a positive impact of financial reforms on the growth of the Pakistani economy.

Balogun (2007) conducted a study to review the perspective of banking sector reforms since 1970. The study pointed these eras of banking reforms in Nigeria viz; Pre-SAP (1970-1985), Post-SAP (1986-1993), the Reforms Lethargy (1993-1998), Pre-Soludo (1999-2004) and Post-Soludo (2005-2006). Using both descriptive statistics and econometric methods, the empirical results confirm that eras of pursuits of market reforms were characterized by improved incentives. Also, growth was stifled in eras of control while the reform era was associated with rise in inflationary pressure. Mwenda and Mutoti (2011) investigated the effects of market-based financial sector reforms on the competitiveness and efficiency of commercial banks, and economic growth in Zambia. The results show that reforms adopted in Phase II and III had significant positive effects on bank cost efficiency. They also found using an endogenous growth model that bank cost efficiency, financial depth, Phase II and III financial sector reforms, degree of economic openness, and rate of inflation are significant determinants of economic growth. Phase II policies and inflation rate have adverse effects while the rest of the variables have positive impact on economic growth.

**METHODODOLOGY**

The paper examines the effect of banking reforms on the economic growth of Nigeria. The study hypothesized that banking reforms does not have a significant effect on Nigeria’s economic growth. To test the hypothesis, annual time-series data from 1986 to 2010 was obtained from the Central Bank of Nigeria Statistical bulletin. The model is built on the empirical work of previous researchers and estimated employing the econometric techniques of Augmented Dickey-Fuller (ADF) unit root test, Johansen co-integration test, and Error Correction Mechanism ( ECM).

**Specification of Empirical Model**

The model is based on the modification of the empirical models of Fadare (2010) and
Rehman (2011). Gross Domestic Product (GDP) measured economic growth which is the dependent variable as a function of Interest Rate Margin (IRM), Credit to Private Sector (CPS), Savings (SAV), Inflation rate (INF). The functional relationship of the model becomes;

\[ \text{GDP} = f(\text{IRM, CPS, SAV, INF}) \]

The econometric equation is specified as;

\[ \text{GDP}_t = \beta_0 + \beta_1 \text{IRM}_t + \beta_2 \text{CPS}_t + \beta_3 \text{SAV}_t + \beta_4 \text{INF}_t + \epsilon_t \] \hspace{1cm} (1)

Where;

- \( \beta_0 \) = Intercept/constant
- \( \beta_1-\beta_4 \) = Coefficient of parameters
- \( \epsilon_t \) = Stochastic/ Error term

By log linearizing, the model becomes;

\[ \log \text{GDP}_t = \beta_0 + \beta_1 \log \text{IRM}_t + \beta_2 \log \text{CPS}_t + \beta_3 \log \text{SAV}_t + \beta_4 \log \text{INF}_t + \epsilon_t \] \hspace{1cm} (2)

Specifying the Error Correction Model (ECM) from equation 2, the model becomes;

\[ \Delta \log \text{GDP}_t = \beta_0 + \beta_1 \sum \log \text{IRM}_{t-1} + \beta_2 \sum \log \text{CPS}_{t-1} + \beta_3 \sum \log \text{SAV}_{t-1} + \beta_4 \sum \log \text{INF}_{t-1} + \sum \text{ECM}(-1)_{t-1} + \epsilon_t \] \hspace{1cm} (3)

Where;

- ECM(-1) = Lagged error correction term
- \( t – 1 \) = Variable lagged by one period
- \( \epsilon_t \) = White noise residual

The ‘a prior’ expectation for the coefficients in the model are as follows; \( \beta_1, \beta_2, \beta_3 > 0 \) while \( \beta_4 < 0 \). \( < \) means economic growth declines with a unit increase in the explanatory variable while \( > \) denotes an improvement in economic growth as the explanatory variable increases by a unit.

**DATA ANALYSIS AND INTERPRETATION OF FINDINGS**

The study seeks to examine the quantitative effect of banking reforms on the economic growth of Nigeria with a view to arrive at a logical conclusion. The analysis is conducted using the Augmented Dickey-Fuller (ADF) Unit Root test, Johansen Co-integration test and the Error Correction Mechanism (ECM). The classical Ordinary Least Square (OLS) method is excluded because it gives short-run oriented and spurious results which may be misleading arising from the non-stationarity of time series data used in the OLS method. Since, unit root test is a pre-requisite for co-integration, the reliability of the empirical results is assured.

**Unit Root Test**

Most time series data are not stationary, therefore it is necessary to conduct unit root test on data. The Augmented Dickey-Fuller (ADF) test would be employed to establish
the stationarity of data and order of integration. To determine if the time series is stationary, the ADF test statistic value must be greater than Mackinnon critical value at 5% level of significance, with the comparison done at absolute term.

The table below presents the unit root test on all the variables in the model. The ADF test was carried at level, first difference and second difference.

Table 1: Results of ADF Test

<table>
<thead>
<tr>
<th>Variable</th>
<th>At Level</th>
<th>First difference</th>
<th>Second difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ADF Test Statistic Value</td>
<td>5% Mackinnon Critical Value</td>
<td>ADF Test Statistic Value</td>
</tr>
<tr>
<td>GDP</td>
<td>-1.360667</td>
<td>-2.9969</td>
<td>-5.178167*</td>
</tr>
<tr>
<td>IRM</td>
<td>-2.487940</td>
<td>-2.9969</td>
<td>-5.089957*</td>
</tr>
<tr>
<td>CPS</td>
<td>1.238262</td>
<td>-2.9969</td>
<td>-2.623413</td>
</tr>
<tr>
<td>SAV</td>
<td>0.667408</td>
<td>-2.9969</td>
<td>-3.438808*</td>
</tr>
<tr>
<td>INF</td>
<td>-3.325892*</td>
<td>-2.9969</td>
<td>———</td>
</tr>
</tbody>
</table>

(*) denotes that stationarity has been established at 5% significance level

Source: Author’s computation

After conducting the ADF unit root test, the order of integration can be summarized in table 2 as reported below

Table 2: Summary of Order of Integration

<table>
<thead>
<tr>
<th>Variable</th>
<th>Order of Integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>I(1)</td>
</tr>
<tr>
<td>IRM</td>
<td>I(1)</td>
</tr>
<tr>
<td>CPS</td>
<td>I(2)</td>
</tr>
<tr>
<td>SAV</td>
<td>I(1)</td>
</tr>
<tr>
<td>INF</td>
<td>I(0)</td>
</tr>
</tbody>
</table>

It can be deduced that the variables are integrated in different order. GDP, IRM and SAV are series I (1) i.e. stationary at first difference. CPS is a series I (2) i.e. stationary at second while INF is a series I (0) because it was found stationary at level.

Johansen Co-integration Test

Co-integration test determines the existence of long run relationship among variables in the model. The hypothesis for the co-integration test is stated in null (H₀) and alternative (H₁).

H₀: No Co-integration (absence of long run relationship)

H₁: Co-integration exist (presence of long run relationship)

Trace test is employed to test the hypothesis. The condition for co-integration is that the trace statistic (likelihood ratio) must be
greater than the critical value at 5% or 1% levels of significance.

**Table 3: Result of Johansen Co-integration Test**

<table>
<thead>
<tr>
<th>Trace Statistics</th>
<th>5% Critical Value</th>
<th>1% Critical Value</th>
<th>Hypothesized No. of CE(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>78.77152</td>
<td>68.52</td>
<td>76.07</td>
<td>r = 0**</td>
</tr>
<tr>
<td>41.93708</td>
<td>47.21</td>
<td>54.46</td>
<td>r &lt; or = 1</td>
</tr>
<tr>
<td>15.83202</td>
<td>29.68</td>
<td>35.65</td>
<td>r &lt; or = 2</td>
</tr>
<tr>
<td>5.441401</td>
<td>15.41</td>
<td>20.04</td>
<td>r &lt; or = 3</td>
</tr>
<tr>
<td>0.119647</td>
<td>3.76</td>
<td>6.65</td>
<td>r &lt; or = 4</td>
</tr>
</tbody>
</table>

*(**) denotes rejection of the null hypothesis at 5% (1%) significance level

*Source: Author’s computation*

\[
GDP = 0.637685IRM - 6.757106CPS* + 7.090844SAV + 2.953085INF* - 25.85746
\]

\[
(0.76496) \quad (3.14482) \quad (3.65408) \quad (1.26461)
\]

(*) denotes significance in the long run using standard error test of significance

*Note: Standard Error statistics are stated in parenthesis*

The co-integrating equation shows that if all the independent or exogenous variables are held constant, GDP declines by 25.85746 units, thereby asserting the importance of IRM, CPS, SAV and INF to influence on economic growth in the long run. IRM, SAV and INF have long run positive relationship with GDP while CPS is negatively related to GDP. Also, IRM and SAV are not statistically significant while CPS and INF are found to be statistically significant. A unit increase in IRM, SAV and INF leads to 0.637685, 7.090844 and 2.953085 units increase in GDP respectively while a unit increase in CPS causes GDP to decrease by 6.757106 units.

From table 3 above, the trace test shows that one co-integration equation exist at 5% significance level because the trace statistic is greater than 5% critical value in row 1, implying that a long run relationship exist among the variables. A long run relationship means that the variables move together over time so that short-term disturbances from the long-term will be corrected.

The co-integrating or long run equation is chosen from the Normalized co-integrating coefficients, taking into consideration the one with the lowest loglikelihood ratio. The lowest loglikelihood ratio is -7.849438 and its corresponding co-integrating equation is given as;

**Error Correction Mechanism (ECM)**

The error correction mechanism involves developing an over-parameterized model (ECM1) or Autoregressive Distributed Lag (ARDL) which is built by setting the lag length long enough so as ensure that the dynamics of the model as not been constrained by a too short lag length and afterwards estimating the parsimonious model (ECM2) which introduces short run dynamism.
Table 4: Result of ECM1
Dependent Variable = D(GDP,2)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>t-statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.104168</td>
<td>0.488265</td>
</tr>
<tr>
<td>D(IRM,2)</td>
<td>0.492638</td>
<td>1.222656</td>
</tr>
<tr>
<td>D(IRM(-1),2)</td>
<td>0.384914</td>
<td>1.251334</td>
</tr>
<tr>
<td>D(CPS,2)</td>
<td>-1.915327</td>
<td>-1.125533</td>
</tr>
<tr>
<td>D(CPS(-1),2)</td>
<td>-1.641562</td>
<td>-0.778842</td>
</tr>
<tr>
<td>D(SAV,2)</td>
<td>1.151999</td>
<td>0.719531</td>
</tr>
<tr>
<td>D(SAV(-1),2)</td>
<td>1.066381</td>
<td>0.667378</td>
</tr>
<tr>
<td>D(INF,2)</td>
<td>-0.131024</td>
<td>-0.478398</td>
</tr>
<tr>
<td>D(INF(-1),2)</td>
<td>0.180035</td>
<td>0.632412</td>
</tr>
<tr>
<td>ECM(-1)</td>
<td>-1.236217*</td>
<td>-3.130941*</td>
</tr>
</tbody>
</table>

R² = 0.835915   F-statistic = 5.603838*  Prob(F-statistic) = 0.004363

(*) denotes significance at 0.05 significance level
Source: Author’s computation

The ECM1 results show that all the variables explain 83.6% of total variation or changes in GDP with the remaining 16.4% accounted for by the white noise residual. The F-statistic value of 5.603838 is statistically significant at 0.05 level or 95% confidence level and this is justified by its probability value of 0.004363; therefore showing that the ECM1 is significant. The estimated coefficient of the ECM(-1) is significant with the appropriate negative sign, implying that the disequilibria of the past period shocks is adjusted into long run equilibrium in the present period.

However, ECM1 is simplified into a parsimonious model (ECM2) by selecting between the lead and lagged value of each of the independent variables that is significant or has greater significance if both are significant or closer to significance if none is significant and introducing them into the ECM2 so as to incorporate short run dynamism.

Table 5: Result of ECM2
Dependent Variable = D(GDP,2)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>t-statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.084760</td>
<td>0.401090</td>
</tr>
<tr>
<td>D(IRM(-1),2)</td>
<td>-0.073384</td>
<td>0.6654</td>
</tr>
<tr>
<td>D(CPS,2)</td>
<td>-0.299102</td>
<td>0.7949</td>
</tr>
<tr>
<td>D(SAV,2)</td>
<td>-0.396202</td>
<td>0.7710</td>
</tr>
<tr>
<td>D(INF(-1),2)</td>
<td>0.247716</td>
<td>0.2561</td>
</tr>
<tr>
<td>ECM(-1)</td>
<td>-1.348404*</td>
<td>-3.820644*</td>
</tr>
</tbody>
</table>

R² = 0.772918   F-statistic = 8.509236*  Prob(F-statistic) = 0.000383

(*) denotes significance at 0.05 significance level
Source: Author’s computation

The ECM2 has a R² of 0.772918, therefore implying that 77.3% of total variation in GDP is explained by IRM, CPS, SAV and INF and the remainder of 22.7% is accounted for by factors not specified in the model or white noise residual. The F-statistic value of 8.509236 shows that the model is statistically significant at 0.05 level of significance, hence concluding that the model is adequate enough to empirically investigate the effect of banking reforms on economic growth. The significance of the model is further justified by probability value of F-statistic of 0.000383. The lagged error correction term in ECM2 is -1.348404, implying that it is significant judging from its negatively signed coefficient and showing that ECM2 has a higher adjustment rate process than ECM1.

From ECM2, the error correction model (ECM) equation can be stated mathematically as;
From the ECM equation, it can be observed that all the parameters have their coefficient less than unity. The constant parameter is 0.084760 that is if all exogenous variables are held constant, economic growth is enhanced by 0.084760 units. Interest Rate Margin (IRM) is negatively related to economic growth. Its coefficient of -0.073384 means that a unit increase in IRM causes a reduction in the economic growth measure by 0.073384 units. This is due to the wide margin between lending and deposit rates which is a common characteristic of developing countries which Nigeria is no exemption. The interest rate margin has militated against banks’ role in financial intermediation which is a necessity for sustainable economic growth. The high margin reduced the ability of banks to mobilize deposits and allocate credit efficiently based on interest rate policy which is major determinant of the volume of deposits and level of investment in developed economies. The coefficient of Credit to Private Sector (CPS) is 0.299102. This shows that CPS exerts a negative influence on economic growth. A unit increase in CPS leads to 0.299102 decrease in GDP. The implication of this is that bank credit has not been adequately channeled to the private sector and may cause bank distress or failure since the profitability of a bank is directly related to the credit it grants. The lending rate charged on credit by banks is on the high side which deters investors from borrowing to embark on productive activities and give room for moral hazard.

Savings and economic growth are negatively or inversely related. SAV coefficient with a value of -0.396202 implies that if savings is increased by a unit, economic growth is threatened as it makes GDP to decline by 0.396202. Savings is expected to positively impact on economic growth as suggested by McKinnon (1973) and Shaw (1973) but this finding deviates from their postulation. This can be attributed to the fact that banking reforms in Nigeria has not strategically positioned banks to adequately mobilize enough savings that would positively impact on the economy. One major cause for this is the low deposit rate. Theoretically, low deposit rate does not stimulate savings. The resultant effect of this is that it places lesser funds in the hands of banks to intermediate to investors to undertake productive activities in the economy. The volume of savings determines the level of investment in an economy which means that low deposit rate discourages savings and consequently stifles the level of investment. A positive relationship is established between inflation and economic growth. The INF coefficient is 0.247716 implying that a unit increase in INF leads to an increase in GDP by 0.247716 units. This finding maybe surprising but inflation also has its beneficial effects. Inflation has encouraged production in the various sectors of the economy because a rise in the inflationary pressure is seen as a means to reap more profits which makes the investors to expand their production base and this calls for the need to employ more hands hence, reducing the
employment level in the economy. With production increased and unemployment reduced, economic growth is fostered. However, it should be noted that all the independent variables do not conform to the ‘a priori’ expectation and are not statistically significant at 0.05 significance level, connoting that they do not play much an important role on the growth process of the economy.

CONCLUSION AND RECOMMENDATIONS

Bank are pertinent for economic growth as shown by Schumpeter (1912), therefore there is need to implement policy measures in form of banking reforms to ensure their efficient functioning. Banking reforms in Nigeria are strategies or measures introduced or implemented by the government through the Central Bank of Nigeria and other regulatory body to ensure stability and efficiency of the banking system. The main objective of this study is to examine the effect of banking reforms on the economic growth of Nigeria. Augmented Dickey-Fuller (ADF) unit root test, Johansen Co-integration test and Error Correction Mechanism (ECM) were used for the empirical examination.

The result of ADF unit root test showed that the stationarity of all the variables has been established which a pre-requisite for the co-integration test is. The Johansen co-integration test indicates the existence of co-integrating equation at 5% significance level, showing that long run relationship exist among the variables. The high coefficient of multiple determination ($R^2$) in the over-parameterized model and parsimonious model and the coefficient of the lagged error correction term suggests that banking reforms has a significant effect on economic growth. The banking reform indices in the study explains a greater proportion in changes in economic growth, however it is realized that the indices have insignificant and unexpected relationships with economic growth, thereby presaging that banking reforms has not positively and adequately impacted on the Nigerian economy. This is due to the level of economic and financial development in the country and complexity in implementing banking reforms that hinders these reforms from achieving the desired results.

Based on the empirical findings, it is necessary to make policy recommendations. It is recommended that;

- The regulatory and supervisory framework should be further strengthened to ensure stability and promote public confidence in the banking system.
- Healthy competition among banks should be promoted. Their competition raises the deposit rate which encourages savings thereby increasing capital accumulation in the economy.
- The interest rate policy should be made to stimulate savings through high real deposit rates and lending rate made reasonable in order to encourage seeker of funds particularly investors to borrow to participate in productive activities.
- The role of banks in providing credit to the private sector should be improved and the end-use of credit granted monitored to avoid non-performing loans and moral hazard.
- There is also the need to give room for more deregulation of banking activities.
- Government should always properly implement banking reforms in the correct sequence by first maintaining macroeconomic stability.
REFERENCES


