

Addressing Issues in Economic Development through Banking Sector Reforms in Nigeria

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Abstract

The thrust of every banking sector reform is to achieve a sound, stable, reliable, effective and efficient financial system. But this has not been feasible in the Nigerian banking system as a result of the incessant crises in the system. In view of this, this study set out to address issues in economic development through banking sector in Nigeria. In doing this banking sector reforms were proxied by credit to private sector (CPS), financial deepening (FID) and money supply (MSS) and economic development issues considered are unemployment rate (UNE) inflation rate (INF) and poverty level (POL). It is revealed that in Nigeria, banking sector reforms have made significant impact in addressing some economic development issues such as unemployment rate, and poverty level. Specifically, money supply is found to be effective in the addressing unemployment issue than credit to private sector and financial deepening. Credit to private sector has strong influence and high tendency to reduce inflation rate and level of poverty than money supply and financial deepening in Nigeria. Based on this, we therefore conclude that the banking sector reforms, if well-conceived is capable of achieving and maintaining macroeconomic stability, which is a sine qua non for addressing economic development issues in the Nigerian economy.

Keywords: Economic Development, Banking Sector, Credit to private sector, Financial deepening, Money Supply, Unemployment, Inflation and Poverty Level.

Introduction

1. Background to the Study

Banking sector reforms can be defined as changes that are made to the banking system to alter it from a present unsatisfactory condition to an improved one in an economy. Banking sector reforms in the Nigerian economy started in 1986 with the partial market reformation through the Second Tier Foreign Exchange Market (STFEM) and the privatization programmes (Gbosi, 2012). He further observed that several of the government owned banks became partly or fully privatised. However, since 2002, the Nigerian government had embarked on more fundamental reforms. These reforms aim at reinvigorating the economy, reducing poverty, creating jobs, improving public budgeting and expenditures, restructuring the public service for greater efficiency and effectiveness and enabling the public sector to achieve greater performance and growth. Specifically, banking sector reforms aim at promoting monetary stability and a sound financial system (CBN, 2008 cited in Gbosi, 2012). Banking sector reforms in Nigeria, also, are regarded as deliberate policy measures adopted by the monetary authority in Nigeria (CBN) to promote the safety, soundness, reliability and stability of the sector, in order to be able to deliver the expected “goods” by improving the economy.

Undoubtedly and unarguably, the banking sector has undergone remarkable changes in terms of the number of institution, ownership structure depth and breadth of the financial market, money supply, credit to private sector and financial deepening. This has been achievable as a result of the various financial sectors reforms carried out in Nigeria, particularly in the banking sector. Basically, banking sector reforms centre on ensuring and achieving reliable, sound, responsible, robust, stable, competitive and transparent banking system, these expectations of the reforms arouse the interest of Soludo (2004) to point out that reforms agenda are pre-emptive and proactive measure to prevent an imminent system crisis and collapse of the banking industry and permanently stop the boom and burst cycle which have characterized the history of our banking industry.

Economic development is about enhancing the social welfare of an economy by using available economic resources to address development issues such as interest rate, unemployment rate, inflation rate, exchange rate and increase deepen credit facility, increase credit to private sector, reduce poverty, increase real GDP and remove other impediments which otherwise could lower costs and hinder investment. In order to address these economic development issues the monetary authority overtime has carried out series of reforms particularly in the banking sector. Yet the problem of unemployment, inflation and poverty still persist; hence the study is asking question on what has happened to unemployment, inflation and poverty level in Nigeria. It is on this note that this present study seeks to find out the efficacy of banking sector reforms in addressing some economic development issues such as unemployment, inflation and poverty. This forms the thrust of this study; addressing issues in economic development through banking sector reforms in Nigeria.

In the light of the above, the aim of this study is to ascertain the efficacy of banking sector reforms (proxied by credit to private and financial deepening and money supply) in addressing some economic development issues in Nigeria from 1986-2011. Specifically, this study sought to: ascertain the effect of banking sector reforms on unemployment rate, inflation rate and poverty level proxied by per capita income, and to point out the most effective banking sector reform indicator(s) that addressed any of the issues in economic development, such as unemployment, inflation and poverty. The hypotheses include; banking

sector reforms have no significant effect on unemployment rate, inflation rate and poverty level. The study covered deregulated period in Nigerian economic history dating from 1986 to 2011. Further, its structure ranged from sections 1-5. Section 1 dealt with the introduction that covered background to the study, statement of the problem, and objectives. Sections 2 and 3 addressed literature and methodological issues while section 4 treated empirical results and analyses. Lastly, in section 5, the study was concluding remarks and recommendations were given.

2. Literature Review and Theoretical Underpinning

Banking Sector Reforms and Economic Development Issues in Nigeria

Nigerian banking system has been on an endless voyage of reforms since the restoration of democracy in 1999 (Ademola, 2011). This voyage of reforms has proportional effect on economic development issues. Evidence in literature has shown that the relationship between banking sector reforms and economic development has been receiving increasing attention than any other subject matter. Okowa (1997) observes that economic development is enhanced rate of growth of national income coupled with a fairer and more equitable distribution of the resulting output. It implies improving conditions of employment as well as increased provision of social services. In all regards, economic development which centres on the desire of an economic to be moved from a less desirable status to a more desirable status has to consider some issues that are proportionally related with the activities of the banking industry. This is because the concern of the banking industry is to ensure that in its series of reforms, development issues ought to be consciously addressed. Lending support to this, Ojo (1993) argues that since the inception of the structural adjustment programme in 1986, the financial sector (banking industry in focus) terrain witnessed dramatic changes because the new stance was to rely on market forces in the design and implementation of monetary banking and external sector policies. These policies are no doubt, geared towards improving on the economic well-being of the citizenry, who basically are the depositors that patronize the banking sector and targeted at sustaining and increasing the confidence level of the citizens. In this light, Massou and Paltillo (2003) cited in Balogun (2007) note the channels between banking sector reforms and customers' confidence as: level of inflation, unemployment, interest rate, exchange rate, poverty level, real GDP and the performance of the manufacturing sub-sector.

Following the connect between banking sector reforms and economic development issues, it becomes pertinent to relate side-by-side and identify the effects of each phase of the reforms on the issues so identified above. Anyanwu (2010) identifies five distinct phases of banking sector reforms in Nigeria. Relying on this phase it therefore behoves on this study to identify the performance of these phases of reforms of the banking industry on the issues during deregulated era for crowding in of the private sector and to avert financial distress. Liberation and universal banking models ushered in banking sector consolidation of N25 billion recapitalization base for the purpose of correcting the structural and operational weakness of Merge and Acquisition, and addressing the combined efforts of the global financial and economic crises. Improvement in the banking infrastructure, strengthen the regulating and supervisory framework.

Theoretical Framework

The theoretical proposition of the study cannot be undermined, because there is a theoretical link between banking sector reforms and economic development. Essentially, soundness, reliability stability, effectiveness and efficiency which are the consequences of banking sector reforms ensure that depositors' money is adequately safe and the rate of financial

intermediation is not compromised. This therefore requires that money should be made available for investors in order to carry our economic activities effectively. Given this scenario, the theoretical underpinning of the study herpes on the conventional Keynesian theory and policy impact of monetary policy which rest on the assumption that given a functional transmission mechanism, an efficient money market, all other things remaining unchanged, interest rate elasticity permits the allocation of funds among competing uses in an efficient way. Iganiga (2010) notes that theory suggests that economic and social development can be accelerated by an efficient, competitive financial sector. This, in turn, requires a large and diversified universe of savers and financial intermediaries and a wide range of financial instruments and issuers to provide a “critical mass” of activity to warrant the necessary actions that could cause positive changes in the social welfare of the citizens (Adams and Mistry, 1990).

3.1 Method of Study

The objective of this section is to employ a suitable method of study and formulate models that will assist in achieving our stated objectives. The research design is analytical in nature. The study made use of secondary data sourced from CBN Statistical Bulletin, National Bureau of Statistics and Debt Management Office. The data range from 1986 to 2011. The variables upon which data were sourced are: Independent Variables-Credit to Private Sector (CPS), financial deepening (FID), and money supply (MSS); and dependant variables include unemployment rate, inflation ratio, and poverty level (proxied by per capita income). In this study, banking sector reforms are proxied by credit to private sector, financial deepening and money supply. They are equally taken as the independent variables. Econometric technique was used to establish models of banking sector reforms and economic development issues. The disaggregation of economic development equation resulted into three (3) models. The ordinary least square (OLS) technique was used to avoid bias as well as obtain the exact direct association of variables measured. The models are specified thus:

(a) Unemployment Rate Equation

$$UNE = F(CPS, FID, MSS)$$

$$UNE = a_0 + a_1CPS + a_2FID + a_3MSS + U$$

Apriori Expectation:

$$a_1 < 0; a_2 > a_3 < 0$$

(b) Inflation Rate Equation

$$INF = F(CPS, FID, MSS)$$

$$INF = b_0 + b_1CPS + b_2FID + b_3MSS + U$$

Apriori Expectation: $a_1 - a_3 < 0$

(c) Poverty Level Equation

$$POL = F(CPS, FID, MSS)$$

$$POL = K_0 + K_1CPS + K_2FID + K_3MSS + U$$

Apriori Expectation: $K_1 < 0; K_2 < 0; K_3 < 0$

4.1 Reporting of Results and Interpretation

In this study, the results of short run of ordinary least square are presented and analysed, followed by the results of the ADF unit root result of the fine equations, the co-integration, parsimonious and grander causality test results. Starting from the static regression results of unemployment equation to that of poverty level equation.

Table 1: Short Run Regression Result of Unemployment Equation (Model I)

UNE	=	5.977040	-4.54E-06CPS	+0.033264FID	+5.71E-06MSS
Std Error		(1.659003)	(1.34E-06)	(0.110273)	(1.09E-06)
t-stat		(3.602791)	(-3.622122)	(0.301648)	(5.241522)
R ² = 0.889028, Adjusted R ² 0.873175, DW = 0.937430; F-stat = 56.07925; F-tab (3.30) = 2.92.					
Table 2: Static Regression Result of Inflation Equation (Model II)					
INF	=	24.41539	- 1.14E - 0.6CPS	+ 0.1196FID	-1.08E-0.6MSS
Std Error		(12.885.77)	(2.42E-06)	(0.934965)	(2.09E-06)
t-Stat		(1.894756)	(-0.471935)	(0.127931)	(-0.514414)
R ² = 0.106962, Adjusted R ² = -0.014815; DW = 0.809733; F-Stat = 0.878341, F-tab (3.30) = 2.92					
Table 3: Short Run Regression Result of Poverty Level Equation (Model III)					
POL	=	80.38551	+ 2.12E-05CPS	- 4.542960FID	+ 1.09E-0.5MSS
Std Error		(17.69357)	(3.32E-06)	(1.283810)	(2.88E-06)
t-stat		(4.543204)	(6.374913)	(-3.538655)	(3.798293)
R ² = 0.902829, Adjusted R ² = 0.889579; DW = 1.022804; F-Stat = 68.13514, F-tab (3,30) = 2.92					

4.2 Interpretation of Static Regression Results of the Five Equations

Table 1 (Unemployment Model) documents the short run regression result using the E-view computer software version 3.1. The result shows R² of 0.889028, which means that 89% of changes in unemployment are attributed to credit to private sector (CPS), financial deepening (FDI) and money supply MSS, while the remaining 11% is caused by other exogenous factors that are not captured in the model but covered by the error term. The model's estimates are generally robust except for the lower value of DW, which depicts the presence of positive serial autocorrelation. Also, the overall model is statistically significant at 5% confidence level as shown by the F-statistic calculated of 56.07925 which is greater than the value of F-tab; suggesting the rejection of the null hypothesis and acceptance of the alternative hypothesis which states that banking sector reforms have significantly impacted on unemployment rates in Nigeria between 1986 to 2011. The low value of DW necessitates the testing for long run relationship in subsequent table.

Table 2 contains the short run regression result of model II (inflation equation) with R² of 0.106962. This implies that about 11% variation in inflation is explained by the proxied variables of banking sector reforms which are CPS, FID and MSS, while the outstanding is caused by some factors other than CPS, FID and MSS, which are not captured in the model but covered by the error term. The DW calculated of 0.809733, is very far from 2, thus depicting the presence of positive serial autocorrelation. This requires the testing of long run relationships in the dynamics of co-integration. The value of F-statistic (0.878341) is < F-tab (2.92) and also requires the acceptance of the null hypothesis. Therefore, banking reforms have no significant effect on inflation in Nigeria from 1986 to 2011. CPS and MSS are rightly signed; hence, a negatively relationship exists between them which confirms to apriori expectation while FID is wrongly signed and does not align with the theoretical expectation.

The short run regression result of poverty level equation (model III) shows R² of 0.902829 and R² adjusted of 0.889579. Meaning that 90% variation in poverty level (POL) is explained by CPS, FID and MSS, while 10% is attributed to other factors that are not captured in the model but taken care of by the stochastic term. F-statistic of 68.13514 > F-tab of 2.92, suggesting the rejection of the null hypothesis and acceptance of alternative hypothesis, which

holds that banking sector reforms have significant effect on poverty level in Nigeria within the period under study. Theoretically, it is expected that CPS, FID and MSS should reduce the level of poverty in Nigeria. The result shows that CPS and MSS are wrongly signed, indicating that they are positively related to POL; meaning that increase in them will bring about increase in POL.

However, FID is rightly signed. This means that it is negatively related to POL, thus increase in FID will reduce poverty level (POL) in Nigeria. The result reveals that the model's estimate is robust, except for low value of DW (1.022804), which is below 2, pointing at the presence of positive serial autocorrelation. Hence, the need for further test in order to establish a long run relationship.

Having presented and analysed the statistic regression result (Short Run OLS) there is need to test for the stationarity of the variables because most time series variables are non-stationary and using such in the model might lead to spurious regressions. It is on this basis that unit root test is conducted using the Augmented Dickey-Fuller (ADF) Test Technique.

Table 4: Unit Test Regression Results of UNE, INF, POL, CPS, FID and MSS

Variables	Order of Difference	Calculated ADF	ADF Critical at 5%	Order of Integration	Remark
D (UNE)	Level	0.460335	-2.9969	1(0)	None Stationary
	First	-4.089044	-3.0038	1(1)	Stationary
D (INF)	Level	-2.86219	-2.9907	1(0)	None Stationary
	First	-4.224009	-2.9969	1(1)	Stationary
D (POL)	Level	0.218108	-3.9907	1(0)	None Stationary
	First	-1.888017	-2.9969	1(0)	None Stationary
	Second	-4.155641	-3.0038	1(2)	Stationary
D (CPS)	Level	-0.891114	-2.9907	1(0)	None Stationary
	First	-2.506806	-2.9969	1(0)	None Stationary
	Second	-4.345282	-3.0038	1(2)	Stationary
D (FID)	Level	-2.107767	-2.9907	1(0)	None Stationary
	First	-3.326633	-2.9969	1(1)	Stationary
D (MSS)	Level	-3.561309	-2.9907	1(1)	Stationary

Source:An Extract from the Result Output

Table 4 of the study reveals that unemployment, inflation and financial deepening are stationary at first difference and integrated to order one (1(1)). Whereas poverty level and credit to private sector are stationary at second difference while money supply is stationary at level. This implies that UNE and INF are co-integrated at first difference; hence a long run relationship exists between the dependent variable (UNE, INF and FID). But POL is stationary at second difference that also indicates a long run relationship between POL and the independent variables (CPS, FID and MSS). In view of the result, a co-integration test is conducted to ascertain the direction of the long run relationship.

Table 5: Johansen Cointegration Test of Unemployment (UNE) Equation

Eigenvalue	Likelihood Ratio	5 percent Critical Value	1 percent Critical Value	Hypothesized No. of CE (S)
0.869419	82.39295	47.21	54.46	None **
0.620285	35.57038	29.68	35.65	At most 1*
0.420715	13.29870	15.41	20.04	At most 2
0.031730	0.741620	3.76	6.65	At most 3

Table 6: Johansen Cointegration Test of Inflation (INF) Equation (INF CPS FID MSS)

Eigenvalue	Likelihood Ratio	5 percent Critical Value	1 percent Critical Value	Hypothesized No. of CE (S)
0.834216	79.79101	47.21	54.46	None **
0.628533	36.66132	29.68	35.65	At most 1**
0.374624	12.89426	15.41	20.04	At most 2
0.065608	1.628617	3.76	6.65	At most 3

Table 7: Johansen Cointegration Test of Poverty Level (POL) Equation (POL CPS FID MSS)

Eigenvalue	Likelihood Ratio	5 percent Critical Value	1 percent Critical Value	Hypothesized No. of CE (S)
0.924864	93.96237	47.21	54.46	None **
0.530075	31.83944	29.68	35.65	At most 1**
0.420546	13.71508	15.41	20.04	At most 2
0.025463	0.619033	3.76	6.65	At most 3

* (**) denotes rejection of the hypothesis at 5% (1%) significant level
 L.R. Test indicates 2 cointegrating equation (s) at 5% significance level.

Sources:An Extracts from the Result Output

Using Johansen cointegration approach to test for the long run relationship between the variables, tables 5 to 7 document the results. Specifically, in table 5, the likelihood ratios at 5% and 1% in the levels of “none” and “at most 1”, therefore the postulated hypothesis in unemployment equation is rejected at 5% (1%) significant level; thus a long run relationship exists at that level. In table 6, the Johansen cointegration test of inflation equation shows that the critical values at 5% and 1% level of significance at the corresponding Eigenvalues of 0.834216 and 0.628533. This therefore suggests the rejection of the null hypothesis; hence a long run relationship exists at the first and second co integration equation.

Table 7 reveals that in the Johansen cointegration test of poverty level equation there are 2 cointegrated equations (None ** and At most 1*) where the likelihood ratios are greater than the critical values at 5% and 1% significance level. This denotes rejection of the hypothesis at 5% (1%) significance level. Therefore, a long run relationship exists between the variables. Based on the foregoing results, we therefore proceed to the correction of error that is inherent in time series data, with the use of Parsimonious Error Correction Model (ECM) in all the equations.

Table 8: Parsimonious Error Correction Model for Unemployment, Inflation and Poverty Level Models

Unemployment Model				Inflation Model				Poverty Level Model			
Variables	Coefficient	Std Error	t-sta	Variables	Coefficient	Std Error	t-stat	Variable s	Coefficient	Std Error	t-stat
C	1.648286	1.370613	1.202590	C	8.093273	9.720569	0.832593	C	1.636510	4.852473	0.337253
D(UNE(-1))	-1.090172	1.171578	-0.930515	D(INF(-1))	0.445276	0.467986	0.951472	D(POL(-1))	0.044442	0.389704	0.11403
D(UNE(-2))	-0.682923	0.798478	-0.855282	D(INF(-2))	0.036103	0.376591	0.095869	D(POL(-2))	0.507105	0.388956	1.30376
D(UNE(-3))	0.086803	0.393090	0.220821	D(INF(-3))	0.070663	0.467420	0.151177	D(POL(-3))	-0.068603	0.430739	-0.15926
D(CPS)	1.11E-06	8.72E-06	0.127304	D(CPS)	8.84E-05	7.49E-05	1.179483	D(CPS)	-2.78E-05	1.50E-05	-1.85108
D(CPS(-1))	5.06E-07	5.80E-06	0.087140	D(CPS(-1))	-7.49E-05	8.26E-05	-0.90705	D(CPS(-1))	1.85E-05	1.88E-05	0.98310
D(CPS(-2))	1.21E-05	1.51E-05	0.796982	D(CPS(-2))	0.000152	0.000131	1.165984	D(CPS(-2))	-8.48E-05	2.91E-05	-2.91232
D(CPS(-3))	-1.23E-05	1.66E-05	-0.743478	D(CPS(-3))	-0.00028	0.000256	-1.10222	D(CPS(-3))	8.67E-05	5.73E-05	1.51206
D(FID)	0.167939	0.141195	1.189409	D(FID)	-0.54810	2.965973	-0.18479	D(FID)	-0.447258	0.557642	-0.80205
D(FID(-1))	-0.046658	0.184126	-0.253405	D(FID(-1))	1.447792	1.888949	0.766454	D(FID(-1))	-0.290036	0.697889	-0.41559
D(FID(-2))	-0.093602	0.219366	-0.426692	D(FID(-2))	0.533845	2.402573	0.222197	D(FID(-2))	0.655502	0.591285	1.10860
D(FID(-3))	0.034423	0.159254	0.216148	D(FID(-3))	-0.09235	1.939357	0.047623	D(FID(-3))	-0.053816	0.601675	-0.08944
D(MSS)	3.93E-06	3.92E-06	1.002531	D(MSS)	-4.14E-05	3.75E-05	-1.10610	D(MSS)	1.79E-05	9.95E-06	1.79961
D(MSS(-1))	6.66E-1	3.19E-06	0.208609	D(MSS(-1))	-2.50E-05	3.75E-05	-0.66587	D(MSS(-1))	1.91E-06	1.13E-05	0.16963
D(MSS(-2))	-5.14E-06	1.17E-05	-0.440174	D(MSS(-2))	-2.89E-05	6.53E-05	-0.44260	D(MSS(-2))	1.65E-05	1.40E-05	1.17956

D(MSS(-3))	-1.28E-05	1.01E-05	-1.268718	D(MSS(-3))	9.74E-05	9.87E-05	0.987296	D(MSS(-3))	1.93E-05	2.32E-05	0.83498
ECM(-1)	0.915458	1.219031	0.750972	ECM(-1)	-0.63028	0.473552	-1.33096	ECM(-1)	0.094245	0.260163	0.36225
R² = 0.865294; DW = 2.348919, F-Stat = 1.605898				R² = 0.586369; DW = 1.700498; F-stat = 0.443004				R² = 0.967574; DW = 2.181774; F-stat = 9.324682			

Source: An Extract from the Result Output

As presented in table 8 (unemployment model), the short run dynamics of Parsimonious Error Correction shows R^2 of 0.865294. This means that about 87% variations in unemployment rate is attributed to CPS, FID and MSS while the remaining 13% is caused by other factors not contained in the model but covered by the error term. The observed DW value of 2.34819 depicts the presence of negative serial autocorrelation because it is greater than 2. This also implies that the error is corrected at that point.

The estimated coefficients of CPS are wrongly signed at current and past (lag 1 to 2) thereby suggesting a positive relation between UNE and CPS, while at past (lag 3) it is rightly signed therefore a negative relationship between UNE and CPS. This only agrees with relevant economic theory at past (lag 3) that as deposit money banks grants potent credit facilities to the private sector, there is bound to be creation of more employment opportunity that would reduce the rate of unemployment in the economy. In specific terms therefore, if credit to private sector increases by 100% unemployment rate will reduce by 1.23 percent in Nigeria. The t-statistic of -0.743478 is however not significant at 5 percent level of significant which is consistent with the foregoing. This also conforms the rejecting of the null hypothesis.

The estimated coefficient of financial deepening (FID) appears with the wrong sign at current and past (lag 3), but rightly signed at past (lag 1 and 2), meaning that increase in financial deepening will bring about decrease in unemployment rate. This is in agreement with the theoretical expectation of the study. This in economic sense means that as money gets more circulated in the real sector of the economy there is a high tendency that unemployment rate will reduce. In numeric terms, if financial deepening increases by 100% unemployment rate is most likely going to reduce by 0.093602 percent in both the short run and long run.

The estimated coefficient of money supply (MSS) is wrongly signed at current and past (lag 1). However, it appears with the right sign at past (lag 2 and 3), suggesting that increase in money supply will bring about reduction in unemployment rate, which agrees with the theoretical expectation. In specific terms, if MSS increases by 100% unemployment rate at those lagged periods will reduce by 5.14 percent, though not significant. In agreement with previous studies, Otse (2012) observes that the performance of the banking sector in Nigeria as it relates to the support to grow the economy in terms of its contribution to GDP has been very negligible; hence, has not made significant impact on economic development.

The Parsimonious Error Correction of inflation equation as reported in table 8 (inflation model) reveals that the value of R^2 is 0.586369. Implying that 59% changes in inflation is explained by CPS, FID and MSS while the remaining 41% is caused by other factors that are not captured in the model but by the stochastic term. The DW value of 1.700498 < 2 shows the presence of positive serial autocorrelation suggesting that the model is consistent with the foregoing. The F-statistic value of 0.443004 $< F$ -tab of 2.92; hence, the null hypothesis is accepted.

Taking a look at the estimated coefficient of credit to private sector (CPS), a wrong sign appears of current and past (lag 2) while right sign appears at past (lag 1 and 3). This means that at the right sign a negative relationship exists between CPS and INF, therefore increase in CPS will bring about decrease in INF. In numeric terms, a 100% increase in CPS will necessitate a 7.49 decrease in inflation rate in the Nigerian economy. The estimated coefficient of financial deepening (FID) shows that at past (lag 1 and 2) is wrongly signed; however, it is rightly signed at current and past (lag 3), suggesting a negative relationship

between FID and inflation rate (INF) which agrees with relevant economic theory, as finance gets deepened in the economy, unemployment rate will increase, given the trade off between unemployment and inflation, there will be decrease in inflation rate. In specific term, if financial deepening increases by 100% inflation rate will reduce by 0.533845 in Nigeria.

A consideration of the estimated coefficient of money supply (MSS) shows that at past (lag 3), MSS is wrongly signed, while it appears with the right sign at current and past (lag 1 and 2) suggesting a confirmation of the theoretical expectation that increase in MSS will bring about decrease in INF, because of the negative relationship that exists between MSS and INF. In quantitative terms, if MSS increases by 100%, INF will decrease by 4.14, 2.50 and 2.89 for current and past (lag 1 and 2) respectively. The t-statistic is not significant.

Also, Iganiga (2010) notes that theory suggests that economic and social development can be accelerated by an efficient, competitive financial sector. This, in turn, requires a large and diversified universe of savers and financial intermediaries and a wide range of financial instruments and issuers to provide a “critical mass” of activity to warrant the necessary actions that could cause positive changes in the social welfare of the citizens (Adams and Mistry, 1990).

The Parsimonious Error Correction test for poverty level equation as documented in table 8 (poverty level model) shows that the value of R^2 is 0.967574. Implying that about 97 percent variation in poverty level (POL) is explained by the regressors (CPS, FID and MSS) while the remaining 3 percent is explained by other exogenous factors that are not captured in the model but covered by the error term. Further, the DW of 2.181774 confirms that error initially detected in the model is corrected because the value of DW is > 2 , depicting the presence of negative serial autocorrelation.

Specifically, CPS is wrongly signed at past (lag 1 and 3) but appears with the right sign at current and past (lag 2). This means that a positive relationship exist between CPS and POL, therefore increase in CPS will result to increase in POL. In numerical terms 100 percent increase in CPS will bring about 2.78 percent and 8.48 percent decrease in POL. Again, at past (lag 2) FID is wrongly signed but rightly signed at current and past (lag 1 and 3) which indicates that FID thus increase in FID will bring about decrease in POL. This is in agreement with the expectation of the relevant economic theory. In numerical terms, 100% increase in FID will result to 0.447258 percent decrease in POL at current and past (lag 1 and 3) though insignificant.

Further, MSS maintains a wrong sign in both short run and long run. The result is suggesting a positive relationship between MSS and POL, which does not agree with relevant economic theory; hence, the t-statistic is not significant at 5 percent level. The error correction coefficient is very low and also not significant at 5 percent level. This shows that the explanatory variable, except MSS have strong string influence on POL, though in a negative direction. Further, Granger causality test was applied in order to determine the presence of interrelationship among variables and its direction (Granger 1969). The result is documented in the following tables.

Table 9: Pairwise Granger Causality Test Result of Unemployment, Inflation and PovertyLevel Models

Unemployment Model			Inflation Model			Poverty Level Model		
Null Htpothesis	Obs	F-Statistic	Null Htpothesis	Obs	F-Statistic	Null Htpothesis	Obs	F-Statistic
CPS does not Granger Cause UNE	24	0.01305	CPS does not Granger Cause INF	24	0.51395	CPS does not Granger Cause POL	24	8.60113

UNE does not Granger Cause CPS		2.34745	INF does not Granger Cause CPS		0.48287	POL does not Granger Cause CPS		23.1859
FID does not Granger Cause UNE	24	1.71432	FID does not Granger Cause INF	24	0.03817	FID does not Granger Cause POL	24	2.99424
UNE does not Granger Cause FID		2.42876	INF does not Granger Cause FID		0.65087	POL does not Granger Cause FID		4.41569
MSS does not Granger Cause UNE	24	0.09100	MSS does not Granger Cause INF	24	0.68716	MSS does not Granger Cause POL	24	2.81816
UNE does not Granger Cause MSS		0.56219	INF does not Granger Cause MSS		0.14993	POL does not Granger Cause MSS		6.77792

The result of granger causality test shows that the values of F-statistic (0.01305 and 2.34745) > the value of F-tab; 3,30 (2.92); hence, the null hypothesis is accepted. Therefore, CPS does not granger cause. UNE; and UNE does not granger cause CPS. Hence, neither a bi-directional nor a uni-directional causality exists between the variables. Similarly, FID does not granger cause FID; and MSS does not granger cause UNE and UNE does not granger cause MSS. This is because their respective F-statistic values are less than the F-tab (2.92), and there is no bi-directional or uni-directional causality among them. This also agrees with the foregoing results which imply that banking sector reforms which is proxied by CPS, FID and MSS have not really and significantly impacted on the economy by way of addressing some developmental issues in Nigeria.

The result of the report shows that CPS does not granger cause INF does not granger cause CPS; FID does not granger cause INF, and INF does not granger cause FID, and MSS does not granger cause INF, and INF does not granger cause MSS. This is confirmed by the F-statistics values of 0.51395 and 0.48287, 0.3817, at 0.65087, and 0.68716 and 0.14993 are less than the F-tab of 2.92 (3,30). The result further reveals that there is no bi-directional or uni-directional causality between the dependent variable and the regressors. This in economics sense means that those regressors have not been able to significantly address the developmental issue of inflation in Nigeria, within the period under study.

Table 9 of the study documents the result of pairwise granger causality test result for poverty level equation. The result shows that CPS granger causes POL, and POL granger causes CPS. This is because the F-stat values of 8.60113 and 23.1889 are > F-tab value of 2.92. The null hypothesis is rejected, while the alternative accepted. Therefore, a bi-directional causality relationship exists between CPS and POL in Nigeria. In a similar manner, the F-stat values (2.99424 and 4.41569) of FID and POL are greater than the F-tab (2.92). This implies that the null hypothesis is rejected, therefore, FID granger causes POL, and POL granger causes FID; thus a bi-directional causality relationship exists between FID and POL. However, MSS does not granger cause POL, while POL granger causes MSS. This is as a result of the fact that F-stat value of 2.81816 < F-tab value of 2.92, while the F-stat value of POL (6.77792) > F-tab (2.92); hence a uni-directional causality relationship exists between MSS and POL.

5.1 Concluding Remarks and Recommendation for Policy Options

Banking sector reforms in Nigeria, like any other economy, whether advanced developing or underdeveloped, have far reaching consequences on macroeconomic variables and economic development issues. In this piece of academic task, banking sector reforms in Nigeria are proxied by some independent variables such as credit to private sector (CPS), financial

deepening (FID) and money supply (MSS), while economic developmental issues on the other hand are unemployment rate (UNE) inflation rate (INF) and poverty level (POL). The study spanned from 1986 to 2011.

From the empirical evidence of the study, it is revealed that in Nigeria, banking sector reforms have made significant impact on some economic development through macroeconomic indicators such as unemployment rate and poverty level. However, the reforms have not impacted significantly on inflation rate. This is not unconnected with economic theory that goes a reasonable extent to portray the signification of the “trade-off” between unemployment and inflation rates. This therefore suggests that within the periods of study, the banking sector reforms have been found to be moderately efficient and effective in addressing economic developmental issues in Nigeria. Specifically, money supply is found to be effective in addressing unemployment issue than credit to private sector and financial deepening. Credit to private sector has strong influence and high tendency to reduce inflation rate and level of poverty than money supply and financial deepening in Nigeria. The result also reveals that unemployment rate, inflation rate and financial deepening are stationary at first difference, while others are stationary at level and second difference. Based on this, we therefore conclude that the banking sector reforms, if well conceived is capable of achieving and maintaining of macroeconomic stability which is a *sine qua non* for addressing developmental issues in the Nigerian economy.

It is recommended that some variables such as domestic credit and fiscal deficit should not be made to grow excessively since, as we discovered in the study, were the major causes of inflation during the period, 1980 – 2010. The various instruments of monetary policy such as open market operation, cash reserve ratio, bank rate etc, should be effectively deployed by the monetary authority to check inflation and minimize its negative influence on the economy. The apex bank should work with AMCON in order to realize AMCON’s objective of creating liquidity in the banks, the AMCON bond should lead to liquid cash, even if it is in part. Finally, the agricultural sector as a medium of reducing unemployment in Nigeria should be harnessed.

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