Macroeconomic Variables And Savings Mobilization In Nigeria

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Abstract

This research work analyzed the impact of macroeconomic variables on domestic savings mobilization in Nigeria (1993-2012). Secondary data was adopted and sourced from CBN statistical bulletin. Ordinary Least Square and cointegration were used to determine the effects of the selected macroeconomic variables on savings mobilization in Nigeria. The result of the overall statistic showed that there is a positive and significant impact between the selected macroeconomic variables and domestic savings mobilization in Nigeria. But specifically, financial deepening seemed to have a greater impact on savings mobilization in Nigeria. Inflation and exchange rate revealed an inverse relationship with domestic saving mobilization in Nigeria. Augmented Dicker Fuller (ADF) unit root test and cointegration proved that the variables are stationary and there exist a long-run relationship among the variables. The study therefore recommended among others that efforts should be geared towards continuous and well-articulated fiscal and monetary policies that will sustain this growth in the financial sector. Also, Government should ensure that adequate macroeconomic policies that will be put in place to attract foreign investors, encourage export and make Nigeria an export platform where export goods could be produced, this will help to strengthen Nigeria’s exchange rate and induce domestic savings. Finally, proper measures should be put into encourages banks to open branches in the rural areas in order to mop up deposits. The rural banking policies should be revisited modified and implemented in Nigeria.

Keywords- Financial Deepening, Macroeconomic Variables, Savings Mobilization

Introduction

The mobilization of savings embraces policies designed to increase the savings propensity and also policies concerned with the rechanneling of savings to facilitate the desired allocation of investment. Capital formation through savings mobilization is an important factor in economic growth. Countries that are able to accumulate high level of capital tends to achieve faster rates of economic growth and development (Utemadu 2003)

Savings provide developing countries like Nigeria with the much needed capital for investment which improve economic growth. Increase in savings leads to increase in capital formation and production activities that will in turn lead to employment creation and reduce external borrowings of government. However, savings represents that part of income that is not spent on consumption but when applied to capital investment, output increases (Olusoji, 2003). Savings mobilization has been regarded as a key growth performance indicator. However, the correlation between savings and the rate of growth of income is not strong, nor can countries be ranked in their growth performance by their saving performance (Wiseman et al 1980)

Changes in macroeconomic variables really impact on the structure and the level of savings of the financial sector. The linkage between macroeconomic variables and savings, and economic performance becomes significant important in a developing economy like Nigeria with underdeveloped market structure. Specifically,
high rate of inflation, low disposable income and low spread of bank branches tend to put pressure on the level of savings while monetary shocks will tend to put pressure on the price level of banks’ balance sheet.

Economic conditions and policies are the key determinants of the level of savings and the stability of the financed system drives its mobilization. Financial sector fragility can impair the effective and efficient mobilization of savings which of course aid economic growth of Nigeria. For example, the low banks branch network/ spread system not only discourage savings but also impair economic growth and distorts the government aim of enhancing the banking habit of the people.

It is important to note that with sound macroeconomic environment, supported by a stable and honest government, the environment savings mobilization and its effective utilization would have been created. These pre-condition have been lacking in most developing countries and this explains the low savings capacity among these countries.

The importance of savings mobilization by deposit money banks cannot be over emphasized. The growth rate of Nigeria economy remains a challenging issue. It is because domestic savings which serves as a tool for capital mobilization towards financing aggregate investment needed for economic growth is very low. In view of this, rate of increment in savings mobilization does not synchronize with the developmental challenges encountered in economic growth and this factor mitigate against the growth of Nigerian economy.

In Nigeria, Nnanna et al, 2004 are of the view that the level of savings mobilization by banks is quite low due to a number of reasons, ranging from low savings deposit rates to the poor banking habit or culture of the people. In order to mobilize savings sufficient to improve the economic development of any economy, the deposit rate must be relatively high and inflation rate stabilized to ensures a high positive real interest rate which motivates investors to save from their disposable income. In Nigeria, the problem of mobilizing savings and deposits has always been the bone of economic growth and development.

From the foregoing, it is clear that an understanding of the nature of aggregate domestic savings behavior is critical in designing policies to promote savings, investment and growth (Umeh, 2003). Accordingly, for an efficient and effective savings mobilization, it is important to understand and identify the core macroeconomic variables/aggregates that influence savings in Nigeria. This study therefore investigates the more leading indicators savings in Nigeria.

The main purpose of this study is to examine the impact of macroeconomic variables on savings mobilization on Nigeria, and the specific objectives include;

i. To examine the magnitude and determinant of savings mobilization in Nigeria
ii. To determine the effectiveness of domestic savings mobilization on Nigeria economy
iii. To identify the effects of branch banking in savings mobilization in Nigeria

In the course of this study, certain questions naturally emerged

i. What are the core determinants of savings mobilization in Nigeria?
ii. How efficient is financial intermediation process (savings mobilization) in Nigeria?
iii. What are the effects of branch banking in savings mobilization in Nigeria
Therefore, the study hypothesizes:

- Macroeconomic variables have no significant impact on savings mobilization in Nigeria.
- There is no significant relationship between number of bank branches and saving savings mobilization in Nigeria.

**Conceptual, theoretical and Empirical Reviews**

To Nkah (1997), savings is seen as the amount of income per time that is not consumed by economic units. Accordingly, Samuelson at el (1998) defined savings as income minus consumption following from the above, savings can be made by individuals (personal or private saving) or by corporate organizations such as firms (corporate savings or retained savings). Personal savings is that part of disposable income that is not consumed, while corporate saving is that part of firm’s profit that is not distributed as dividends to shareholders. Therefore, for a country, the total supply of available savings is simply the sum of domestic savings and foreign savings. Smith (1976) recognized the importance of savings when he observed that capital is increased by parsimony and diminished by prodigality and misconduct. Prior to 1936, the classical economists propounded their theory on the savings, and asserted that a negative relationship existed between savings and interest rate is the equilibrating force between savings and investments, and the decision to save or invest, depend solely on the rate of interest. Thus, at any particular level of income, the amount saved will increase with any rise in the rate of interest.

Following McKinnon (1973) and Shaw (1973) argued that for the typical developing country, the net impact of a change in real interest rate on saving is likely to be positive. This is because, in the typical developing economy where there is no robust market for stocks and bonds, cash balances and quasi-monetary assets usually account for a greater proportion of household saving compared to that in developed countries. In addition, in an environment where self-financing and bank loans constitute the major source of investment funds, accumulation of financial saving is driven mainly by the decision to invest and not by the desire to live on interest income. Given the peculiarities of saving behaviour, in addition to the fact that the bulk of saving comes from small savers, the substitution effect is usually larger than the income effect of an interest rate change.

Lewis (1955) noted that people would save more if saving institutions were nearer to them than if they were farther. As a result, a negative relationship is assumed to exist between population per bank branch and household financial saving. However, whether increased financial intermediation itself significantly increases the overall propensity to save depends also on the degree of substitution between financial saving and other items in the household’s asset portfolio.

The total supply of available savings is simply the sum of domestic savings and foreign savings. However domestic savings) could be further broken into two components, which include government or public sector savings and private domestic savings.

Government savings originates from the surplus budgeting, but very few countries make part of their public sector savings from savings or profit of the government owned enterprises. There are also two aspects of private domestic savings. These include corporate savings and household savings. Again, foreign savings also come into two basic forms such as; official foreign savings or foreign aid, and private foreign savings.

Therefore, the taxonomy of savings is stated as thus,
S=Ds+Fs
Where Ds = Gs+Ps and Fs = Ofs+PFS
Where:
S = Savings
DS = Domestic Savings
FS = Foreign Savings
GS = Government Savings
PS = Private Savings
OFS = Official Foreign Savings
PFS = Private Foreign Savings

According to Keynes (1936), the major determinant of both country's level of consumption and savings, is that country's national income. He therefore opined that the higher the income, the high the level of consumption and saving. He equally maintained that even at the individual level, a person's income daily determines to a large extent his consumption and savings. Keynes recognized this when he found a positive relationship between consumption and person's disposable income. That is,

\[ C = F(Yd) \]
\[ S = Y - C \]

Where:
C = Consumption
Yd = disposable income
Y = consumer's level of income.

However, according to Macklinon (1973), savings is not determined by income as postulated by Keynes (1936), but, it is determined by real interest rate. In his analysis, he viewed low interest rate as a cause of low savings, which means that firm business enterprises, are discouraged to invest funds through the formal banking system. He equally admitted that high real interest rate is seen as a strengthening factor to both market institution and the level of savings.

Many empirical study studies have been carried out on the determinants of savings across the world. The reason has been that savings rate of many countries; particularly the less developed countries have been declining. In addition the role of investment (via Savings) in economic growth and development has induced many researchers to continuous to investigate the factors that influence savings (Gobna and Nurudeen, 2009).

Amongst other things, Savings serve as the main source of financing investment and related economic activities. Igbatayo and Agbada (2012) noted that higher level of national Savings leads to higher investment and consequently higher Output. This is so because the level of Savings determines the magnitude of capital accumulation. On the other hand, the magnitude of total earnings depends on the level of total Output, thus Output also determines the level of Savings (capital accumulation) and investments by households and entrepreneurs.

Nwachukwu and Egwaikhide (2007) postulated that the life-cycle hypothesis is the principal theoretical underpinning that has guided the study of savings behaviour over the years. Each of the determinants of saving is articulated in the context of the life-cycle hypothesis which hypothesizes that the determinant of savings behaviours include income, growth of income, interest rate, inflation and macroeconomic stability, fiscal policy, external debt, term of trade and financial development. While Anyanwu and Oaikhenan (1995) opined that the level of income, the rate of interest, inflation rate and expectations about inflation rate, interest rate arid income and the availability of savings facility such as commercial bank are the factors that determines savings.
Many studies have been carried out to examine the determinants of savings. For example, Ahmad and Mahrnood (2013) examine the determinants of national savings in the process of economic growth. Using Autoregressive Distributed Lag Model (ARDL) bound test approach for co-integration techniques to check the robustness for long run relationship and Error Correction Mechanism (ECM) for short run dynamics during the 1974-2010. They found that the per capita income inversely related with national saving rate, both in long run and as well in short run significantly.

The exchange rate and inflation rate have a negative impact on national saving but lagged exchange rate has significantly impact. Because of floating exchange rates and the decrease in capital controls, the volume of international capital flows in a country, has increased significantly. Ahmad and Asghar (2000) noted that in less developed countries most of the savings are done by the household. Using ordinary Least Square estimation techniques to estimate the house hold savings behaviour in Pakistan for the period 1998/99 and finds that wealth employment status, education, age and dependency ratio are factors that influenced household savings.

In Namibia, Ipumbu and Gerson (1999) employed cointegration and error correction modeling (ECM) econometrics techniques to determine the long arid short-term impacts of determinants of saving and investment. The results revealed that private saving in Namibia is only significantly influenced by real income, while bank deposit rates exerts little, if any, influences. Furthermore, factors such as real lending rates, inflation, and real income and government investments are important determinants of investments in Namibia. It is also revealed that Namibia savings level has been satisfactory by international standards, but the investment performance has been disappointing, resulting in a slower economic growth than expected.

Davis (2013) employed Co-integration approach to explore the determinants of private savings in Ghana using the Phillips and Ouliaris (1990) residual-based tests for co-integration to determine the long run relationship between private savings and its determinants. Financial liberalization, per capita income and inflation were found to have a positive and significant relationship with private savings. The study also showed positive and significant coefficient of the fiscal deficit variable confirmed the Ricardian Equivalence hypothesis and concluded that there is a strong willingness to save but the capacity to save is not very robust.

Ayalew (2013) investigated the determinants of domestic saving in Ethiopia using time series annual data from 1970/71-2010/11, Using an ARDL bounds testing Approach and Error correction model (ECM) to capture both short run and long run relationships. The overall findings of the study underlined the importance of raising the level of income in a sustainable manner, minimizing the adverse impacts of budget deficit and inflation rate and creating competitive environment in the financial sector.

In Nigeria, studies on the determinants of savings are plenteous. In a study of Nwachukwu and Egwaikhide (2007) use an error correction to investigate the determinants of savings in Nigeria. The estimation results indicated that the level of per capita income, terms of trade changes, public saving rate, external debt service ratio has positive and significant influences on domestic saving while real interest rate and growth rate of income have a negative impact on the saving rate. They supported the hypothesis that both the change in the rate of income growth and the change in income levels are powerful determinants of changes in the private saving rate. Uremadu (2007) investigated the core leading determinants of financial savings in Nigeria using ordinary least square (OLS) econometric framework. The results shows positive and significant influence of gross domestic product per capita, interest rate spread, broad money supply, and debt service ratio on savings while real interest rate and domestic inflation rate have negative influence on the level of savings.
Gobna and Nurudeen (2009) employed error correction analysis to ascertain the long run determinants of savings in Nigeria during the period 1981 to 2007. The findings showed that financial deepening; real interest rate, inflation and real income per capital are the major determinants of savings in Nigeria.

Wafure (2012) used co-integration and Error Correction Mechanism to determine the relationship between financial sector reforms and private savings. The estimated results showed that lagged value of private savings, consumer price index, savings deposit rate, income per capita showed a significant and inverse impact on private savings while financial liberalization and income growth have direct and significant impact on private savings but wage rate and foreign savings were insignificant. Olayemi and Jolaosho (2013) empirically assessed the impact of real interest rate on savings mobilization in Nigeria. The Vector- Auto Regression (VAR) was employed, using the time series data from 1980 to 2008. They concluded that there is need for government in Nigeria to bridge the existing gap between the lending and savings rates and increase per capita income level of the populace, to stimulate savings for investment and economic growth and also efforts should be geared towards reducing domestic inflation rate to arrest its negative impact on real rates in Nigeria.

Methodology, Analysis and Findings

The study will cover the period of 1993-2012. Regression analysis based on the classical linear regression model, otherwise known as Ordinary Least Square (OLS) technique is chosen by the researcher. The researcher’s choice of this technique is based not only by its computational simplicity, but also as a result of its optional properties, such as linearity, unbiasedness, minimum variance, zero mean value of the random terms (Gujaratis, 2004). In addition, the sate art of econometric tools analysis are employed:
- Unit root test
- Cointegration test
- Granger Causality test
In order to test for unit root and the order of integration of the variables in our data set, we employed the Augmented Dickey Fuller (ADF) test. The ADF test for unit root indicates whether an individual series is stationary or not. Existence of unit roots in a series denotes non-stationarity.

Basically, ADF tests are used to test for the stationarity of the series so as to be sure that we are not analyzing inconsistent and spurious relationships. The basic idea behind cointegration is that if, in the long-run, two or more series move closely together, even though the series themselves are trended, the difference between them is constant. A lack of cointegration suggests that such variables have no long-run relationship.

In addition, the Granger causality test will be applied in this study as a means of ascertaining causality among the two variables- savings mobilization on one hand and macroeconomic variables on the other hand. Basically Granger measures precedence and information content.

Model Specification

Since the main focus is to have a better understanding of the impact of macroeconomic variables on domestic savings in Nigeria. The thrust of this research is to thoroughly investigate the impact of macroeconomic variables on savings mobilization in Nigeria. Therefore, the model for this research is specified thus;
Dsav = (INF, DER, EXR, NOB, PCI, FDE) ........ (1).

DSV = \alpha_0 + \alpha_1 INF + \alpha_2 DER + \alpha_3 EXR + \alpha_4 NOB + \alpha_5 PCI + \alpha_6 FDE + U

....................................................(2)

Where;
DSA = Domestic Saving
INF = Inflation Rate
DER = Deposit Rate
EXR = Naira/Dollar Exchange Rate
NOB = Number of Bank Branches
PCI = Per Capital Income
FDE = Financial Deepening Variable
U = Error Term
\alpha_0 = Intercept, \alpha_1, \alpha_2, \alpha_3, \alpha_4, \alpha_5, \alpha_6 are parameter to be estimated.

The expected signs of coefficient or apriori expectation are \alpha_1 < 0; \alpha_2 > 0; \alpha_3 > 0; \alpha_4 > 0; \alpha_5 > 0; \alpha_6 > 0.

Analysis and Discussions of Results

Table 1: Result of the ordinary least square – OLS

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRT</td>
<td>12182.40</td>
<td>115787.6</td>
<td>0.105213</td>
<td>0.9178</td>
</tr>
<tr>
<td>FDE</td>
<td>0.140253</td>
<td>0.042820</td>
<td>3.275390</td>
<td>0.0060</td>
</tr>
<tr>
<td>INF</td>
<td>-1177.948</td>
<td>16265.92</td>
<td>-0.072418</td>
<td>0.9434</td>
</tr>
<tr>
<td>NOB</td>
<td>462.5017</td>
<td>376.7708</td>
<td>1.227541</td>
<td>0.2414</td>
</tr>
<tr>
<td>PCI</td>
<td>71.97428</td>
<td>36.68795</td>
<td>1.961796</td>
<td>0.0716</td>
</tr>
<tr>
<td>EXR</td>
<td>-11022.24</td>
<td>8411.014</td>
<td>-1.310453</td>
<td>0.2127</td>
</tr>
<tr>
<td>C</td>
<td>-1006965.</td>
<td>1452035.</td>
<td>-0.693485</td>
<td>0.5002</td>
</tr>
</tbody>
</table>

R-squared | 0.972216 | Mean dependent var | 2009693. |
Adjusted R-squared | 0.959393 | S.D. dependent var | 2580767. |
S.E. of regression | 520057.2 | Akaike info criterion | 29.43048 |
Sum squared resid | 3.52E+12 | Schwarz criterion | 29.77899 |
Log likelihood | -287.3048 | Hannan-Quinn criter. | 29.49851 |
F-statistic | 75.81590 | Durbin-Watson stat | 2.045282 |
Prob(F-statistic) | 0.000000 |

Here R^2 is 0.972 that means the dependent variable in the model can predict 97.2% of the variance in dependent variable. This is a very good fit.
Specifically, R^2 reveals the explanatory variables accounted for 97.22% of the variables in volume to determine the savings mobilized in Nigeria within the period under review. The Durbin Waston statistic (2.045) shows the absence of auto correlation which make the estimate unbiased, consistency and reliable for policy formulation.
The F-statistic (75.81590) compared to p-value (0.0000000) at 5% significance level reveals that the explanatory variables (inflation, per capita income, financial deepening, exchange rate, deposit rate, number of bank branches) are jointly significant in explaining the changes in domestic savings mobilization in Nigeria. In line with the apriori expectation, inflation, per capita income, number of bank branches, deposit rate, financial deepening and exchange rate are super significant at 95% confidence level in influencing savings mobilization in Nigeria.

\[ DSA= -1006965 - 1177.948INF + 12182.40DER - 11022.24EXR + 462.5017NOB + 71.97428PCI + 0.140253FDE \]

The first hypothesis made by this study that states Macroeconomic variables have no significant impact on savings mobilization in Nigeria.

<table>
<thead>
<tr>
<th>Variables</th>
<th>t-statistic</th>
<th>P-value</th>
<th>Observation</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>DER</td>
<td>0.105213</td>
<td>0.9178</td>
<td>p-value &gt; 0.05</td>
<td>Accept null</td>
</tr>
<tr>
<td>EXR</td>
<td>-1.310453</td>
<td>0.2127</td>
<td>p-value &gt; 0.05</td>
<td>Accept null</td>
</tr>
<tr>
<td>FDE</td>
<td>3.275390</td>
<td>0.0060</td>
<td>p-value &lt; 0.05</td>
<td>Reject null</td>
</tr>
<tr>
<td>INF</td>
<td>-0.072418</td>
<td>0.9434</td>
<td>p-value &gt; 0.05</td>
<td>Accept null</td>
</tr>
<tr>
<td>NOB</td>
<td>1.961796</td>
<td>0.2414</td>
<td>p-value &lt; 0.05</td>
<td>Accept null</td>
</tr>
<tr>
<td>PCI</td>
<td>1.961796</td>
<td>0.5002</td>
<td>p-value ≥ 0.05</td>
<td>Accept null</td>
</tr>
</tbody>
</table>

This sub-section presents the result of hypothesis testing. Null hypothesis to be tested is that the explanatory variables (inflation, per capita income, deposit rate, financial deepening and number of bank branches and exchange rate) used in the model has no significant impact on domestic savings mobilization in Nigeria. If the t-statistic of any explanatory variable is less than p-value at 5% significance, such variable is said to have significant impact on savings mobilization, and if otherwise it has no significant impact.

As earlier observed, the F-statistic proved that variables entered have the capacity to determine the level of savings mobilization in Nigeria. However, we will go on and test for individual contributions of each of this variables. From the table 2 above, it can be observed that deposit rate, exchange rate, per capita income and number of bank branches do not significantly contribute to savings mobilization in Nigeria while financial deepening significantly contributes to savings mobilization in Nigeria.

Comparing the t-statistic value to p-value of each independent variable, it can be seen that only one independent variable is significant at 5% critical level—Financial deepening. This finding is consistent with the life cycle hypothesis and that of Uremadu (2007).

The second hypothesis states that “There is no significant relationship between number of bank branches and saving savings mobilization in Nigeria”.

Here, p-value is greater than 5% (0.2414) from the table above. We thereby accept the null (Ho) hypothesis and reject the alternative hypothesis (H1) and conclude that number of bank branches do not significantly contribute to savings mobilization in Nigeria. This finding does not agree with the findings of Lewis (1995).
ADF Unit Root Result

Table 3 Summary of ADF Unit Root Result

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>ADF @LEVEL</th>
<th>McKinnon 5% Critical Value</th>
<th>ADF @ 1st DIFF.</th>
<th>Order of Integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSV</td>
<td>-1.689563</td>
<td>-3.029970</td>
<td>3.630884</td>
<td>I(0)</td>
</tr>
<tr>
<td>DER</td>
<td>-2.785124</td>
<td>-3.081002</td>
<td>-9.130872</td>
<td>I(1)</td>
</tr>
<tr>
<td>EXR</td>
<td>-2.185177</td>
<td>-3.040391</td>
<td>-4.805502</td>
<td>I(1)</td>
</tr>
<tr>
<td>FDE</td>
<td>-2.291538</td>
<td>-3.040391</td>
<td>-4.95432</td>
<td>I(1)</td>
</tr>
<tr>
<td>INF</td>
<td>-2.254453</td>
<td>-3.040391</td>
<td>-4.044779</td>
<td>I(1)</td>
</tr>
<tr>
<td>NOB</td>
<td>0.859027</td>
<td>-3.040391</td>
<td>-4.949801</td>
<td>I(1)</td>
</tr>
<tr>
<td>PCI</td>
<td>-0.372797</td>
<td>-3.040391</td>
<td>-4.321162</td>
<td>I(1)</td>
</tr>
</tbody>
</table>

From the table above, time series for deposit Rate (DER), Exchange rate (EXR), Financial Deepening (FDE), Inflation (INF), Number of bank branches (NOB) and Per Capita Income (PCI) are stationary at first difference, since the ADF at the first difference is greater than the McKinnon 5% critical values concluding that the variables are integrated of order 1 i.e. 1(1). But Domestic Savings (DSV) is only stationary at level, since ADF value of the variable at level is greater than the McKinnon 5% critical value concluding that the variable is integrated at level i.e.1 (0).

Johansen Cointegration Test Result

Table (4)
Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

<table>
<thead>
<tr>
<th>Hypothesized No. of CE(s)</th>
<th>Trace Statistic</th>
<th>0.05</th>
<th>Prob.**</th>
</tr>
</thead>
<tbody>
<tr>
<td>None *</td>
<td>0.979506</td>
<td>150.7324</td>
<td>69.81889</td>
</tr>
<tr>
<td>At most 1 *</td>
<td>0.844996</td>
<td>80.75510</td>
<td>47.85613</td>
</tr>
<tr>
<td>At most 2 *</td>
<td>0.758623</td>
<td>47.19757</td>
<td>29.79707</td>
</tr>
<tr>
<td>At most 3 *</td>
<td>0.592515</td>
<td>21.61245</td>
<td>15.49471</td>
</tr>
<tr>
<td>At most 4 *</td>
<td>0.261357</td>
<td>5.452921</td>
<td>3.841466</td>
</tr>
</tbody>
</table>

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

<table>
<thead>
<tr>
<th>Hypothesized No. of CE(s)</th>
<th>Max-Eigen Statistic</th>
<th>0.05</th>
<th>Prob.**</th>
</tr>
</thead>
<tbody>
<tr>
<td>None *</td>
<td>0.979506</td>
<td>69.97727</td>
<td>33.87687</td>
</tr>
<tr>
<td>At most 1 *</td>
<td>0.844996</td>
<td>33.55753</td>
<td>27.58434</td>
</tr>
<tr>
<td>At most 2 *</td>
<td>0.758623</td>
<td>25.58513</td>
<td>21.13162</td>
</tr>
</tbody>
</table>
The result from both Trace statistic and Max-eigen statistic indicate four cointegrating equations in each case. This suggests a long-run equilibrium relationship among the variables in the model.

**Granger Causality Test**

<table>
<thead>
<tr>
<th>Table 5. RESULTS FOR GRANGER CAUSALITY TEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXR does not Granger Cause DER</td>
</tr>
<tr>
<td>18 7.62971 0.0064</td>
</tr>
<tr>
<td>DER does not Granger Cause EXR</td>
</tr>
<tr>
<td>0.45885 0.6419</td>
</tr>
<tr>
<td>FDE does not Granger Cause DSV</td>
</tr>
<tr>
<td>18 9.78641 0.0026</td>
</tr>
<tr>
<td>DSV does not Granger Cause FDE</td>
</tr>
<tr>
<td>1.12091 0.3555</td>
</tr>
<tr>
<td>PCI does not Granger Cause DSV</td>
</tr>
<tr>
<td>18 11.3960 0.0016</td>
</tr>
<tr>
<td>DSV does not Granger Cause PCI</td>
</tr>
<tr>
<td>9.15525 0.0033</td>
</tr>
<tr>
<td>NOB does not Granger Cause PCI</td>
</tr>
<tr>
<td>18 1.98170 0.1773</td>
</tr>
<tr>
<td>NOB does not Granger Cause PCI</td>
</tr>
<tr>
<td>9.36195 0.0030</td>
</tr>
</tbody>
</table>

From table (5) above shows there is unidirectional causal relationship of financial deepening and per capita income to domestic savings in Nigeria. Also exchange rate granger causes bank deposit rate as well as number of bank branches granger causes per capita income.

**Conclusion and Recommendations.**

This research work examined the impact of macroeconomic variables on savings mobilization in Nigeria. It was revealed that financial deepening has significant impact on savings mobilization in Nigeria. Also the number of bank branches and per capita income has impact on savings mobilization in Nigeria due not significant. Furthermore, inflation and exchange rate have inverse relationship with saving mobilization in Nigeria. In view of the findings of the research, the financial deepening is the core determinant of savings mobilization in Nigeria. The study showed that an increase in financial growth is very crucial as it leads to increased savings mobilization which is needed for investment that will encourage economic development.

**Recommendations.**

In view of the findings emanating from this study, the following recommendations are made:

1. Efforts should be geared towards continuous and well articulated fiscal and monetary policies that will sustain this growth in the financial sector.
2. Government should ensure that adequate macroeconomic policies that will encourage foreign direct investment inflow and make Nigeria an export platform where export commodities could be manufactured, this will help to strengthen Nigeria’s exchange rate and induce domestic savings.

3. There is greater need for government to retain tight monetary and fiscal policies in order fight inflation in the Nigeria economy. Since inflation has negative and significant influence on domestic savings in Nigeria.

4. Finally, proper measures should be put into encourages banks to open branches in the rural areas in order to mop up deposits. The rural banking policies should be revisited modified and implemented in Nigeria.

References


Nkah O. (1997) “Introductory Macroeconomic for Higher Education”Onitsha,Levrene Publisher


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