An Econometric Analysis of the Determinants of Private Domestic Savings in Nigeria (1981 -2012)

Imoughele, Lawrence Ehikioya.
Main Library, Ambrose Alli University
Ekpoma, Nigeria.

Ismaila, Mohammed
Department of Economics
Ambrose Alli University
Ekpoma, Nigeria.

Abstract

This paper empirically evaluates the determinant of private savings in Nigeria (1981- 2012). The study used co-integration and Error Correction Mechanism to determine the relationship between private savings and internal and external factors. The result was robust. Our results show that income per capital, inflation rate, term of trade and financial deepening are significant determinants of private savings in Nigeria. The study recommended that there is need for proper financial market development and government should retain tight monetary and fiscal policies in order to fight inflation in the Nigerian economy. Finally, Government expenditure should be tied to specific viable economic projects in the economy. All non-viable projects should not be sourced through deficit financing and adequate machinery should be put in place by all sectors of government to arrest corruption and penalize those perpetrate it. This will make fiscal policy to have positive and significant impact on private savings in Nigeria.

Key Words: Interest Rate, Error Correction Mechanism, Private Savings, Co-integration

Introduction

Economic growth is a fundamental requisite to economic development. This informs why in Nigeria growth continuous to dominate the main policy thrust of government's development objectives. Essentially, economicgrowth is associated with policies aimed at transforming and restructuring the real economic sectors. Nevertheless, the lack of sufficient domestic resources, Savings and investment to support and sustained the sectors is a major impedimentto economic development in the country because of the gap between savings and investment.

Savings provides developing countries (including Nigeria) with the much needed capital for investment which improved economic growth. Increase in savings leads to increase in capital formation and production activities that will lead to employment creation and reduce external borrowing of government.Low domestic saving rates may maintain low-growth levels because Harrod Domar model suggested that savings is an important factor for economic growth. Malunond (2007) asserts that depending on foreign sources to financed investment makes the country highly sensitive to external shocks. Therefore, domestic savings will continue to be a priority as a source of investment financing in order to minimize vulnerability to international economic fluctuations.

Many empirical study studies have been carried out on the determinants of savingsacross the world. The reason has been that savings rate of many countries; particularly the less developed countries have be 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).

In Nigeria, national savings increase continuously in absolute terms from 1981 to 1994 with a continuous increased value of #6562.60million and #8062901.35million respectively (see appendix1). The value decreased to #108490.3million in 1995 and continuously increased to #8062901.35million in 2012. In terms of the growth rate, national savings has being fluctuating and declining. For example in 1982 the growth rate was 14percent and decreased to 11.28 percent in 1986.

It further soared to 34.03 percent in 1987 and decreased to 2.4 percent in 1989, it rose to 54.3percent in 1993, but it fell to -2.2 percent in 1995. The growth rate of national savings stood at 38.8 percent, 21.6 percent and 23.4 percent in 1998, 2004 and 2012 respectively (see appendix 1).

Available data also shows that the saving culture in Nigeria is very poor relative to other developing economies. For instance, during the period 1981 to 1985, domestic saving averaged 8.34 percent of GDP and decreased to average of 7.81 percent from 1986 to 1994. However, with the distress in the financial sector of the 1990s, the rate of aggregate saving declined significantly. The distress syndrome resulted in a significant fall in domestic saving in the period 1995 to 2004, with the saving to GDP ratio dropping to 5.63 percent. Obadan and Odusola (2001) asserted that the low level of savings in Nigeria is as a result of high incidence of poverty and low level of disposable income, under developed savings channels, reflecting underdeveloped capital markets, conspicuous consumption, and unfavourable economic environment characterised by high unemployment and inflation. However, the average saving to GDP ratio between 2005 to 2012 figure stood at 15.8 percent. From the foregoing, there is an urgent need to encourage Nigerians to change their current attitude towards saving. Furthermore, the right saving culture must be put in place by institutions and regulatory agents who influence the decisions of households, firms and governments. In this regard, there is need to put in place articulate economic policy which is capable of providing the much needed enabling environment that will induced domestic savings in order to provide all the funds needed to invest in various sectors of the Nigerian economy, to make it one of the twenty largest economies in the world by 2020 and to meet the Millennium Development Goals (MDGs) in 2015. The objective of this study therefore, is to identify the determinants of domestic savings in Nigeria. The rest of the paper is divided into the following sections. Section 2 is the literature review, section 3 is methodology of the study, section 4 is data analysis and presentation of result and section 5 is summary, conclusion and policy recommendations.

Literature Review

According to the Oxford Dictionary of economics (2002), savings is defined as the excess of income over consumption and concluded that this is the way of acquiring asset for the whole economy. Ayanwuand Oaikhenan (1995) defined savings as the amount of income per capital time period that is not consumed by economic units. For the house hold, it represented that part of disposable income not spend on domestically produced or imported consumption goods and services. For the firm, it represents undistributed business profits. Savingsisa flow variable being measure over time. Concisely, Savings may be defined as after tax income not spent. It may rightly be referred to or presumed 'deferred consumption', being income left over for future consumption on capital investment or for precautionary and speculative motives. Succinctly, Savings is summed as 'disposable income less consumption'. In developing countries and Nigeria in particular, private Savings constitutes the main source of capital accumulation for investment purposes. From theoretical literatures, total Savings of households, entrepreneurs and corporate entities in an economy has positive correlation with Output. Amongst other things, Savings serve as the main source of financing investment and related economic activities**.** IgbatayoandAgbada (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 hypotheses 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 Ayanwu and Oaikhenan (1995) opined that the level of income, the rate of interest, inflation rate and expectations about inflation rate, interest rate and 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 Mahmood (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. Trade openness is positive associated with national savings in Pakistan because trade openness cause to increase the income and welfare of the society in through market economy. Money supply positive linked with national saving due to seigniorage effect. The growth of the income level has negatively related with national savings. They concluded that Keynesian and permanent income hypothesis of income and savings is not valid for Pakistan because per capita income and income growth invers function of savings at national level.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.

Gilles and Denise (2000) examined the long-run determinants of the personal savings rate in Canada over the 1965–96 period and concluded that that the real interest rate, expected inflation, the ratio of the all-government fiscal balances to nominal GDP, and the ratio of household net worth to personal disposable income are the most important determinants of the trend savings rate in Canada. In Namibia, Ipumbu and Gerson(1999) employed co-integration and error correction modeling (ECM) econometrics techniques to determine the long and 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.

Aktas, Guner, Gursel and Uysal (2012) evaluate the Structural Determinants of Household Savings in Turkey from the 2003 to 2008.Using Household Budget survey, the results indicated that dependency ratios of households are important determinants of savings. Lower shares of dependent children or dependent elderly in the household imply higher saving rates. Also female labour force participation has significant effects, i.e. households with higher shares of working females, have higher saving rates as well. The authors reported that households in which the head is self-employed or an employer have higher saving rates. Moreover, households with where pension payments constitute a larger share of income save less and concluded that the findings of the study shows strong evidence of precautionary savings.

Touny (2008) analysed the determinants of domestic savings in Egypt during the period 1975-2006. Using co-integration and error correction methodology the result of the study provides evidence that domestic savings in Egypt is determined by the following factors. First, the growth of per capita income is found to have positive influence on domestic savings, especially on the long-run. Second, budget deficit ratio appears to have a negative effect on domestic saving ratio and that higher government savings partially crowd out private savings, and thus does not provide support of the existence of full Recardian Equivalence. Third, the development of financial market as proxied by the increase in the M2/GNP ratio shows a positive and significant effect on domestic savings. Fourth, the real interest rate, and inflation rate prove to have positive and significant impact on the level of domestic savings. Finally, current account deficit recorded a negative and statistically significant effect on both the short run and the long run, which imply that external saving may tend to act as a substitute to domestic private saving. In USA Kim (2008) investigated the relationship between personal saving and a number of internal and external variables that may affect it. Using time series data which spanned 1950 between 2007. The author reported that personal saving is highly depend on personal income, tax, credit outstanding and status of employment, while dependency ratio, current real estate loan, real interest rate, and status of economic performance are indeterminate and concluded that the personal saving rate is more sensitive to changes in internal variables than changes in external variables.

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 form 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 Estimated results revealed that growth rate of income, budget deficit ratio and inflation rate were statistically significant in short run and long run determinants of domestic saving. But, depositing interest rate, current account deficit ratio and financial depth were found to be statistically insignificant determinants in the long run. 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, and the inflation rate 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. Victorious and Abiola (2004) found that the variable that influence aggregate savings in Nigeria include lagged savings – income ratio and dummy variable that captures financial liberation.

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, bank density, real interest rate inflation and real income per capital are the major determinants of savings in Nigeria.Orji (2012)investigated the determinants of bank savings in Nigeria as well as examined the impact of bank savings and bank credits on Nigeria's economic growth from 1970- 2006. He adopted two impact models; Distributed Lag-Error Correction Model (DL-ECM) and Distributed Model. The empirical results showed a positive influence of values of GDP per capita, Financial Deepening, Interest Rate Spread and negative influence of Real Interest Rate and Inflation Rate on the size of private domestic savings. 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. The author reported that real interest rate has negatively impacted on the level of savings mobilization in Nigeria. 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

Since the main focus is to have a better understanding of the determinants of private savings in Nigeria, the method of analysis is inferential in nature. A quantitative testing of the hypotheses highlighted above shall be used. In this case, an econometric model will be formulated and adequate econometric techniques adopted. These techniques include; unit root test, co-integration test and error correction mechanism.

Statement of Hypotheses

Fadiya (2010) asserted that hypothesis testing has become the building block of any scientific research. To this end, it would be appropriate to test the following hypotheses in respect of determinants of private savings in Nigeria from 1981 through 2012.

H_O: Budget Deficit ratio GDP, Financial Deepening, Deposit Interest Rate, Gross Domestic Per Capital, Population, Inflation Rate and Term of Trade are insignificantdeterminants of private domestic savings in Nigeria.

H$_1$: Budget Deficit ratio GDP, Financial Deepening, Deposit Interest Rate, Gross Domestic Per Capital, Population, Inflation Rate and Term of Trade are significantdeterminants of private domestic savings in Nigeria.

Model Specification

In order to test the hypotheses above, an econometric model is formulated. The life cycle model provides the frame work of this study which hypotheses that individuals spread their lifetime consumption over their lives by accumulating savings during earning years and maintaining consumption levels during retirement. This implies that economic agent has negative savings during young and old age because he earns low income but saves during the productive age.

Furthermore, Both theoretical and empirical work on savings, have consistently delineated the major potential determinants of savings that can be grouped under the headings of government policy variables, financial variables, income and growth variables, demographic variables, uncertainty measures, and external variables Ozcan, Gunay and Ertac (2002). Main thrust of this study is to empirical evaluating the determinants of private domestic savings in Nigeria. Therefore, the model for this study is specified thus.

TPS = f (government policy, financial, income, demographic, uncertainty, external variables) --------------------(1)

LTPS/GDP = (BD/GDP, M2/GDP, INT, GDPPC, POP, INF, TOT) ---------- (2)

This can be specified in operational form and including logarithm as:

LTPS/GDP = β$_0$ + β1LBD/GDP + β2LM2/GDP + β3LINT + β$_4$LGDPPC + β$_5$LPOP + β$_6$LINF + β$_7$LTOT + U$_t$-- (3)

Where:
TPS/GDP = Total private domestic savings ratio GDP at current market prices.
BD/GDP = Budget Deficit ratio GDP
M2/GDP = Financial Deepening
RINR = Real Interest Rate
GDPPC Gross Domestic Per Capital
POP = Population
INF = Inflation Rate
TOT = Term of Trade
β$_i$= Parameters to be estimated
U$_t$= Error Term

A prior Expectation

β1, β2, β4, β5, >0; β3, β6 β3<0

Sources of Data

The data set for this study is mainly secondary data. The secondary data comprises annual time series spanning 1981 through 2012. The variables of interest are: , Budget Deficit ratio GDP, Financial Deepening, Deposit Interest Rate, Gross Domestic Per Capital, Population, Inflation Rate and Term of Trade. These data are sourced from the Central Banks of Nigeria, African Development Bank publication and from the internet.

Data Analysis and Presentation of Result

Unit Root Test

Theoretically, if time series variables are non -stationary, all regression results with these time series will differ from the conventional theory of regression with stationary series.

That is, regression coefficients with non-stationary variables will be spurious and deceptive.To get over this problem, we test for stationarity of the time series.In order to test for stationarity of the data used in this study, the Augmented – Dickey Fuller (ADF) test will be used. The first step is to test for stationarity at level, without constant and trend. If the variables are non – stationary, then the next step is to difference and test for the stationarity of differenced variables. If the variables become stationary after first difference then it is concluded that the variables are integrated of order one i.e. I (1). The results of the unit root test are presented below.

Table 1: Augmented Dickey Fuller (ADF) test (Constant and Trend Included)

Variables	ADF calculated value at Level	ADFcalculated valueat 1ST Difference	McKinnon 5% Critical value	Order of integration
L BD/GDP	-3.352	-	-2.959	1(0)
LM2/GDP	-0.496	-4.712	2.963	1(1)
LINT	-2.689	-7.720	2.963	1(1)
LGDPPC	-1.263	-7.986	-2.963	1(1)
LPOP	-1.651	-3.823	-2.963	1(1)
LINF	-4.561	-	-2.963	1(0)
LTOT	-1.062	-6.051	-2.963	1(1)

Sources: Authors Computation.

From the table above, Time series of financial deepening, real interest rate, gross domestic per capital, population and term of trade are stationary at first difference, since the ADF value of each variable at first difference is greater than the McKinnon 5% critical values concluding that the variables are integrated of order one i.e. I (1).while total private domestic savings ratio GDP, budget deficit ratio GDP and inflation rate are stationary at level, since the ADF value of each variable at level is greater than the McKinnon 5% critical values concluding that the variables are integrated at level i.e. I(0).

Johansen Co-integration Test Result

Since the unit root test shows that the variables are stationary at level 1(0) and first order difference 1(1), we therefore test for co-integration among these variables by employing the Johansen co-integration test. The result of the test is shown in table 4 below. The result shows that there exist three (3) co-integrating equations at 5% level of significance. This is because the likelihood ratio is greater than critical values at 5%. This shows that there is long run relationship between Nigeria private domestic savings and all the explanatory variables. The result indicates that, in the long run; the dependent variables can be efficiently predicted using the specified independent variables. Hence, error correction model can be estimated.

Table: 5. Johansen Co-Integration Test

Eigen Values	Likelihood ratio	5% percentage Critical value	1% Percent Critical Value	Hypothesized no of CE (s)
0.928	198.046	124.24	133.57	None**
0.792	119.266	94.15	103.18	At most 1 **
0.709	72.194	68.52	76.07	At most 2*
0.396	35.197	47.21	54.46	At most 3
0.309	20.065	29.68	35.65	At most 4
0.248	8.988	15.41	20.04	At most 5
0.014	0.425	3.76	6.65	At most 6

* (**) denotes rejectionof hypothesis at 5% (1%) significant.

L.R test indicates 3 co-integrating equation (s) at 5% significant.

Source: Authors Computation

Presentation of Regression Result: The result of error correction model is presented below.

Table 4: Parsimonious Error Correction Mechanism for the Determinants of Private Savings in Nigeria's Economy

Variable	Coefficient	Std Error	t-statistic	Probability
C	3.175	1.762	1.801	0.084
DLTOT	-0.356	0.131	-2.721	0.012
DLRINT	0.306	0.332	0.922	0.366
DLPOP	-1.641	2.029	-0.809	0.427
DLM2/GDP(-1)	1.867	0.383	2.265	0.033
DLINF(-1)	-0.280	0.046	-2.614	0.016
DLGDPPC(-1)	2.631	1.259	2.090	0.046
DLBDGDP(-1)	-0.106	0.093	-1.142	0.265
ECM(-1)	-0.711	0.170	-6.923	0.000

R^{-2} = 0.696; F = 5.061; D.W = 2.387

Source: Computed by the Authors

The result from table 5 above shows that the variables accounts for 69.6 percentage changes in private savings. The Durbin Watson Statistic (2.387) shows the absence of auto correlation which make the estimate unbiased, consistency and reliable for policy formulations. The F statistic (5.061) reveals that the explanatory variables are jointly significant in explaining changes in private savings. The results also show lagged value of budget deficit has a significantly negative impact on private domestic savings. A one percentage increase in budget deficit in the previous one year leads to 0.106 percentage decrease in private savings.

Inflation rate is statistically significant in explaining private savings; one percentage increase in Inflationary rate in the previous one year leads to reduction in private saving. This is notconforming to the apriori expectation because once there is inflation; money will lose its purchasing value and the quality of it as a store of value will be reduced. Furthermore, the result reveals that financial deepening is statistically significant in explaining Nigeria domestic private saving. A one percentage increase in financial deepening leads to 0.867 percentage increase in private saving. This finding is in line with the apriori expectation. This implies that financial development has impact on   Private Savings in Nigeria.

The result shows that interest rate has direct and insignificant influence on private savings such that a one percentage increase in interest rate will leads to 0.306 percentage increase in private savings. This is in line with the sign but the insignificant of this variable is as a result of poor interest rate policy and the dominants of informal sector in granting credit facility to economic agent. The demographic variable which is the population has inverse and insignificant impact on private savings this is not right with the apriori expectation. A one percentage increase in population will leads to 1.641 percentage decrease in private savings. Thenegative nature of the variable point to the fact that income is not equitably distributed among the population in Nigeria.

The results also reveal that income per capita has a positive and significant effect on private saving. A one percentage increase in income per capita will leads to increase in private saving by 2.631percentages.The result shows that the coefficient of error correction mechanism (ECM) is negative -0.711 and significant at 0.05 per cent critical level. This shows that about 71 per cent disequilibria in Nigeria's private savings in previous year are corrected for in the current year. The significance of the ECM is an indication and a confirmation of the existence of a long run equilibrium relationship between Nigeria private savings and all the explanatory variables.

Test of Hypotheses

This sub-section presents the result of hypothesis testing. Null hypothesis to be tested is that explanatory variables used in the model are not determinants of private savings in Nigeria. If the calculated t ratio of an explanatory variable is greater than table value from zero, such variable is said be a significant determinant of private savings. The table t-statistic with 23 as degree of freedom at 5 percent critical level is 2.069**.** Comparing the table t-statistic value with calculated t-statistic value of each independent variable, it can be seen that only four explanatory variables are significant at 5 percent critical level.

These variables are term of trade, financial deepening, inflation rate and gross domestic product per capital, and error correction parameter.Therefore, from the findings above, we conclude that term of trade, financial deepening, inflation rate and gross domestic product per capital are significant determinants of private savings in Nigeria.

Summary of Findings, Conclusion and Policy Implications

In this study, we investigate the determinants of private savings in Nigeria between 1981 through 2012. The study was conducted with view to identifying those internal and external factors that can promote private savings Nigeria. In order to achieve the objective of the study, an econometric model was formulated. Private savings was regressed on financial deepening, real interest rate, gross domestic product per capital, population, term of trade, budget deficit and inflation rate. These variables were included in our econometric model based on review of past studies.

The study used error correction mechanism to estimate the literacy rate and all independent variables after conducting stationarity and co-integration test. The result from co-integration test showed presence of long run relationship between dependent and all explanatory variables in the model.

The major findings of the study are summarized below:

   i. There exist a positive but insignificant relationship between interest rate and private savings in Nigeria. The implication of this study is as a result of poor interest rate and the dominants of informal sector in granting credit facility to various economic agents. The positive effect of real interest rate shows that high interest rate will encourage people to savings more since they will earn higher return in feature all things been equal.
  ii. The result also shows that gross domestic per capital income is a significant determinant of private savings in Nigeria. The implication of this result is that the higher the economic position of the household, the higher the level of savings. This is consistent with Gobna and Nurudeen (2009) findings.
 iii. The result shows that population has negative but insignificant relationship with private savings in Nigeria. This result indicates that increase in population has not improved Nigeria domestic savings.
  iv. The result also shows that budget deficit is negative and insignificant determinant of private savings in Nigeria. This result stresses that fiscal consolidation in not the best policy instruments to raise the private savings in Nigeria.
   v. The result shows that inflation rate has inverse and significant relationship with Nigeria private savings. This is consistent with the apriori expectation. This findings conform to Olusuji (2007); Uremadu (2007) and Gobna and Nurudeen (2009) who reported that inflation rate has inverse and significant effect on savings in Nigeria.
  vi. Financial deepening has direct and significant relation with private domestic savings in Nigeria. This finding implies that the various initiatives adopted by the Nigeria Central Bank in the last few years to strengthen and further develop financial markets and institutions contribute to an increase the private savings. This finding is in line with Wafore (2012) who reveal that financial liberalisation has impacted on macroeconomic variable such as private savings in Nigeria.
 vii. The result shows that term of trade has inverse and significant influence on Nigeria private savings. Our finding is inconsistent with the international evidence in showing that the external terms of trade have a positive impact on private savings. This implies that international trade has not impacted on private savings in Nigeria.

Conclusively, the general lesson that emerges from this study is that income per capital, inflation rate, term of trade and financial deepening are the major determinants of private savings in Nigeria during the study period and to induced private savings in the Nigerian economy, and the study makes the following policy recommendations.

   i. Government should ensure that adequate macroeconomic policies that will open up the economy are put in place to encourage foreign direct investment inflow and make Nigeria an export platform, where export commodities could be manufactured for establishedinternational market; this will help to Strengthen Nigeria's term of trade and induce private savings.
  ii. There is need for proper financial market development. The financial sector should be deregulated. This would enable the sector to function properly, thus rising up to the challenge of building a strong, virile and competitive sector that would be able to meet the saving needs of the surging business world.
 iii. Greater efforts should be made to make available, short, medium and long term loans to productive investments like small scale industries/businesses as they constitute an integral part of the growth and transformation process of an agro based economy like that of Nigeria this will induce employment and income ofthe various economic agent which will have a spillover effect on private savings.
  iv. There is need for the government to retain tight monetary and fiscal policies in order to fight inflation in the Nigeria economy. Since inflation have negative and significant influence on private savings in Nigeria.
   v. Finally, Government expenditure should be tied to specific viable economic projects in the economy. All non-viable projects should not be sourced through deficit financing and adequate machinery should be put in place by all sectors of government to arrest corruption and penalize those perpetrate it. This will make fiscal policy to have positive and significant impact on private savings in Nigeria.

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Appendix 1: The Performance of Nigeria Gross Domestic Savings (1981-2012)

years	Gross Domestic Savings (#, Million)	Growth rate of Gross Domestic Savings (%)	Gross Domestic Savings/Gross Domestic Product *100
1981	6562.6	-	6.96
1982	7514.4	14.5	7.44
1983	9443.9	25.68	8.58
1984	10988.1	16.35	9.45
1985	12521.8	13.96	9.3
1986	13934.1	11.28	10.35
1987	18676.3	34.03	9.65
1988	23249	24.48	8.83
1989	23801.3	2.376	6.23
1990	29651.2	24.58	6.27
1991	37738.2	27.27	6.92
1992	55116.8	46.05	6.3
1993	85027.9	54.27	7.8
1994	110966.8	30.51	7.93
1995	108490.3	-2.23	3.73
1996	134503.2	23.98	3.34
1997	177648.7	32.08	4.24
1998	200065.1	12.62	5.01
1999	277667.5	38.79	5.93
2000	385190.9	38.72	5.74
2001	488045.4	26.7	7.08
2002	592094	21.32	7.6
2003	655739.7	10.75	6.61
2004	797517.2	21.62	6.99
2005	1316957	65.13	9.01
2006	1739637	32.1	9.37
2007	2693554	54.83	13.04
2008	4118173	52.89	16.95
2009	5763511	39.95	23.25
2010	5954260	3.31	17.52
2011	6531913	9.701	17.46
2012	8062901	23.44	19.89

Source: Central Banks of Nigeria statistical (CBN) Bulletin (2012)

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