

# An Assessment of the Impact of Interest Rate Deregulation in Enhancing Agricultural Productivity in Nigeria

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## Abstract

The study examines an assessment of the impacts of interest rate deregulation in enhancing agricultural productivity in Nigeria by employing robust statistical analysis, using ordinary least square method. Data from Central Bank Statistical Bulletin covering the period 1986 to 2010 were also examined and the findings from the study showed that interest rate deregulation has significant and positive impact on agricultural productivity in Nigeria within the period under review. Based on the findings, this study recommends a market determined interest rate as a stimulant in enhancing agricultural productivity. It further suggest that interest rate plays a significant role in enhancing economic activities and as such, monetary authorities should ensure appropriate determination of interest rate level that will break the double edge effect of interest rate on savers and local investors.

**Keywords:** Deregulation, agricultural productivity, Financial intermediary, Interest rate, Government intervention.

## 1. Introduction

Agriculture is among the most heavily regulated sector of the Nigeria Economy. The special interest of Government in the Agricultural sector is due to its relevance in the provision of raw materials for industries and most importantly the provision of food for the teeming population of Nigeria. Akiri and Adofu (2007) established that the agricultural sector is the only sector that is been widely deregulated. Other sectors like the banking, culture industries, oil industry, etc, have also been regulated both in developed and underdeveloped countries of the world. Banks help in enhancing financial intermediation through the transfer of funds from surplus economic Ares to less developed areas of the economy. The Agricultural sector is not left out in benefits of surplus fund from the surplus spenders in the economy.

This view is also buttressed by Anyanwu (1997) that, since investments are made out of savings, the establishment of commercial banks especially in the rural areas make savings possible hence economic development is accelerated.

The government, most often, may think it's necessary to intervene in the operation of the banking system with the intention of correcting the short comings of the price fixing mechanism to ensure that what is commercially rational for an individual bank is approximately rational for all. Socially, interest rate charged by banks could be regulated to encourage savings mobilization, ensure and foster adequate investment for rapid growth and development. Goldsmith (1969), was of the view that the financial superstructure of an economy accelerates economic performance to the extent that it facilitates the migration of funds to the best user, that is, to the place in the economic system where the funds yield the highest social return.

Deregulation which is supposed to bring about healthy competition; as Fergusson and Stephen (1995) noted, is a misnomer. Sustainable competition instead of arousing competition, has now become a tool of exploitation and dragging the market forces to the background. Moreover, in countries where the financial marketers are repressed (that is, interest rate control, compulsory public debt placement; and control on external capital flows) given a fixed nominal interest rate, fiscal deficits raise inflation, resulting in a repressed and even negative real interest rates as observed in world Bank (1993).

Prior to the introduction of Structural Adjustment Programmes (SAP) in Nigeria in 1986, the Nigerian financial sector was characterized by rigid exchange rate and interest rate controls, mandatory sectoral allocation of bank credit to the private sector, all of which engendered distortion and inefficiencies that results to low direct investment. Funds were inadequate, the Nigeria currency was overvalued and the monetary and credit aggregate moved rather sluggishly such that the economy was sort of engulfed with a general lull. The introduction of SAP led to some financial regulations like; interest rate, exchange rate and other deregulations (Ogwuma, 1993; Ojo, 1993). However as a reversal policy, the government in January 1994 expressly introduced some measure of regulation into interest rate management owing to wide variations and unnecessarily high rate under the complete deregulation of interest rates.

It is pertinent to know that under the deregulated interest rate system, the market forces of demand and supply plays a very prominent role in the determination of interest rate, that is, banks and their customers are free to negotiate to arrive at a suitable interest rate on both deposit and loans. This study attempts to:

1. To find the possible impact of interest rate deregulation on Agricultural Productivity in Nigeria, and
2. To examine how interest rate relates to investment as cost of capital.

## **2. Conceptual Framework and Empirical Evidence**

According to Investor's Glossary (2010), deregulation is an act by which the government regulation of a particular industry (Agricultural sector) is reduced or eliminated in order to create and fosters a more efficient market place. However, the main purpose of deregulation, most at times is, to weaken the government influence and forge greater competition. Technically speaking, deregulation aims at exploring the market forces in order to determine the lending and deposit rate respectively in an economy.

Ibimodo (2005) defined interest rate, as the rental payment for the use of credit by borrowers and return for parting with liquidity by lenders. Like other prices interest rates perform a rationing function by allocating limited supply of credit among the many competing demands.

Wikipedia (2005) defined interest rates as the rate at which interest is paid by a borrower for the use of money that they borrow from a lender. It can also be said as a rate which is charged or paid for the use of money and is usually expressed as an annual undertaking.

Okopi (2008) sees the agricultural sector in the Nigerian contexts to embrace all sub- sectors of the primary industries. They include farming (which includes livestock rearing and growing crops) fishing and forestry. Agricultural production therefore, refers to the final out- put of the agricultural sector of the economy. This definition was adopted in this study.

### **2.1 Review of Related Literature**

Oni (1993), opined that the structure of Nigeria agriculture identified three distinct phases namely, the period of agricultural discrimination (1960-1970), the period of government intervention (1970-1985), and the period of the structural adjustment programme (1986- till date).

The period of agricultural discrimination was characterized by active discrimination against agriculture. This period was also marked by export restrictions and duties on food crops, all of which served as disincentives to domestic agricultural production. During the period of government intervention, agricultural policies attempted to promote rural development and enhancement of food supplies. During the period of the Structural Adjustment Programme (SAP) the policy sought to eliminate price distortion and promote market liberalization among other things, in a bid to promote healthy growth and development.

Agricultural credit enhances productively and promotes standard of living by breaking the vicious cycle of poverty. Adegeye and Ditto (1985) described agricultural credit as the process of obtaining control over the use of money, goods and services in the present in exchange for a promise to repay at a future date.

When there is a serious problem in the rate of interest and credit associated to agricultural production and development which in the long run affect this sector or quantity of problems emanating from it. However, in modern farming business in Nigeria and other developing countries, obtaining credit is not what matters most but rather how efficient such credit are utilized for the purpose for which they were obtained for in order to ensure a fostered productivity. This was further buttressed in 1987, when the then president pegged interest rate who which kicked against the aim of stimulating new investment or increasing capacity utilization of industry and hence the need for deregulation.

The need for deregulation is motivated by the Keynesian investment theory as emphasized by Mckinno and Shaw (1973). The classical economist however stipulates the rate of interest as the major determinant of savings (Olusoji, 2003; Chete, 1999; Mckinnon and Shaw, 1973). They are all of the view that the rate of interest is the factor that brings the demand for investment and willingness to save into equilibrium with one another this was also collaborated by Umoh, (2003).

Gupta (1970), in his study of personal savings in developing countries argued that high real interest rate increases savings. While a contrary view was opined by Ajayi (1978). In his study, he concludes that savings deposits rates in a deregulated regime is not significant in explaining the demand for savings. According to Afolabi et al (2005) government intervention in the form of interest rate ceilings and sectoral allocation of credits, highly concentrated market structure lending to monopolistic and / or oligopolistic tendencies as well as promoting other inefficiencies which caused distortions in the economy.

In line with the above, the empirical works by Mckinnon (1973) and Fry (1989), have shown evidence to support the hypothesis that interest rate determine investment. This pinpoints that there are two transmission channels through which interest rate tends to affect investment (1) that they relates to investment as cost of capital and (2)

that they relate to cost of capital investment as cost of capital. In their study, they also buttress, that, interest rates encourages loans which is in form of external finance. Many researchers have investigated these transmission mechanisms which correspond with interest rate policy regime articulated in Nigeria prior to and after 1986 deregulation as observed by Sanusi (2002).

Khat and Bathia (1993) used non- parametric method in their study of the relationship between interest rates and other macro- economic variables, including savings and investment. He grouped (64) sixty- four developing countries including Nigeria into three bases on the level of their real interest rate policy. He also goes further and computed economic rate among which were gross savings, income and investment for countries. Applying the mannwhitny test, he found that the impact of real interest was not significant for the three groups. However, his method of study was criticized by Balassa (1989) that a relationship has been established by the use of regression analysis.

Agu (1988) reviewed the determinants and structure of real interest rates in Nigeria between 1970 to 1985. He demonstrated the negative effect of low real interest rate on saving and investment using the usual Makinnon financial respression diagram. His main conclusion was that the relationship between real interest rates, savings and ivestment is inconclusive. He further pinpointed that the central bank is faster than its shadow in its aim to induce the achievement of its objectives through the ongoing Structural Adjustment Programme (SAP) which gave both to the recommendation of deregulation of the economy. He is of the view that the central bank embarked on deregulation in other to kill a lot of industries most especially the standard and medium scale industries because interest rate deregulation will lead to a very high leading rate which the small and medium scale industries would not be able to afford due to their limited capital and production base. The CBN on its part increased its lending rate from 11 to 15% in situations where they feel that naira is undervalued. Sequel to the above the commercial banks increased their lending rate to between 17 and 22% as opined by Adofu et al (2010). Although this rates was later increased following the new policy of the CBN in March, 2009 to between 22 and 24% at the maximum including other charges as opined by Williams (2009).

In line with the above, Williams (2009) further buttressed that, the mandatory interest rate policy will result to a near shut down in lending rate volume to any bank with major credit concerns because the new policy ensures that only the highest quality borrower have access to new bank credit within the year.

Both Ani (1988) and Ojo (1988) respectively are of the view that money awaiting remittance to the second tier foreign exchange profit and petroleum subsidies is significant to the working of economic activities' and as a result concluded in their studies that the fixing of interest rates at such a high level does not give Nigerian businesses any chance of competition with their foreign counterparts especially those from countries where interest rates are low compared to that of Nigeria. And that if interest rate is not controlled it might lead to increase in cost of capital which in turns discourages investment.

Nwankwo (1989), however, belives that interest rate deregulations will definitely lead to more efficient allocation of financial resources because interest rate will now reflect scarcity and relative efficiency in different use. That is , only efficient investors will have access to scare financial resources. With the subsistence nature of agricultural production in Nigeria, it therefore becomes difficult for the sector to access the resources.

Abiodun (1988) has a two- way opinion that, deregulation of interest rate will mar or stimulate the economy. He adduced that deregulation of interest rate will lead to an increase in interest rate which tends towards a positive effect, as saving will be increased. He further buttressed that high interest rate will not result to cost push inflation due to the fact that borrower will transfer high cost of borrowing to customers by the means of including it in the cost of production. Also he further emphasized that; high cost of borrowing/ lending will slow down investment, because borrowing will be greatly reduced. Therefore, investment in new businesses will reduce while existing ones may not be able to compete adequately for scare financial resources due to high cost of borrowing. He further opined that, free market should serve as checks and balances and that some measure of control on interest rate will be beneficial if only investment can be deliberately channeled into the preferred sectors such as Agriculture, Manufacturing, etc.

**Table 1:** Output of major Agricultural commodities, Interest rate, Exchange rate, and Agricultural credit in Nigeria between 1986- 2010.

year	Agric.Commodities (ooo Tonnes)	Interest rate	Exchange rate	Agric. Credit
1986	32512.0	10.50	3.3166	73964.3
1987	37106.0	17.50	4.1916	108780.8
1988	47015.0	16.50	5.3530	126346.9
1989	52772.0	26.80	7.6500	134066.7
1990	55964.0	25.50	9.0010	103395.2
1991	67581.0	20.01	9.7545	80859.6
1992	75085.0	29.80	19.6609	93391.8
1993	78691.0	36.09	22.6309	81273.8
1994	81802.0	21.00	21.8861	106901.0
1995	84286.0	20.18	21.8861	166645.1
1996	86080.0	19.74	21.8861	227664.5
1997	90817.0	13.94	21.8861	242028.3
1998	93401.0	18.29	21.8861	220288.5
1999	96769.0	21.32	92.6981	241839.0
2000	102649.0	17.98	102.1052	361449.0
2001	88268.8	18.29	111.9433	728545.4
2002	91927.5	24.40	120.9702	1050982.3
2003	96588.4	20.48	129.3565	1151015.0
2004	104695.3	19.15	133.5004	2083744.7
2005	111780.7	17.85	134.3201	9493854.5
2006	115773.9	17.26	128.6516	4262430.3
2007	118664.8	16.94	125.8331	4425461.5
2008	252469.7	15.14	118.5669	6497958.9
2009	267179.7	18.36	148.9017	8328565.8
2010	282049.7	17.59	150.2980	6567356.6

Source: CBN Statistical Bulletin 2006 (Vol.17), and 2010 (Vol.21).

**3. Model Specification:** This study use agricultural output as the dependent variable while interest rate (lending rate), exchange rate and agricultural credit are used as independent variables. The model is therefore specified thus;

$$AGCOM = \beta_0 + \beta_1 INTRATE + \beta_2 AGCR + \beta_3 EXRATE + \mu$$

Where;

AGCOM: Agricultural Commodities

$\beta_0$ : Intercept

$\beta_1$ : Parameter estimate of interest rate

INTRATE: Interest rate

$\beta_2$ : Parameter estimate of agricultural credit

AGCR: Agricultural credit

$\beta_3$ : Parameter estimate of Exchange rate

$\mu$ : Stochastic error term

**3.1 Estimate of the Model:**

$$AGCOM = 67879.19 + 97.47902 INTRATE + 0.019079 AGCR + 0.024848 EXRATE + u_i$$

(1.732883)      (0.054891)      (5.853011)      (0.740356)

R<sup>2</sup> = 0.640551

DW = 0.970228

T- Values in parenthesis

**4. Result and Interpretation**

The parameter estimate of Agricultural credit is 0.019079. The calculated t- value for the parameter estimate of agricultural credit is 5.853011 and the tabulated t- value is 1.717. The calculated t- value for agricultural credit is

greater than the tabulated value. It shows that there is a positive relationship between agricultural credit deregulation and agricultural production in Nigeria between the periods under review.

The coefficient of determination for the estimated equation is 0.640551. It shows that 64.05% of the variation in agricultural output was explained by the variation in the independent variables.

The Durbin Watson d- calculated is 0.97022, while from the table it is ( $d_l=1.12$ ,  $d_u=1.66$ ). The decision rule says that if  $d^*$  is less than  $d_l$  and  $d_u$ ; we conclude that there is a presence of positive autocorrelation in the regression model. Therefore there existed in the model positive autocorrelation.

The aim of this study is to see the effect of interest rate deregulation on agricultural productivity in Nigeria. The regression coefficient of interest rate is 97.47902. This shows that a unit increase in interest rate will increase Agricultural productivity by that unit increase. Also it shows that given the t- statistics value for interest rate coefficient is 0.54891 which indicated an insignificant contribution of interest rate towards Agricultural productivity, we can then conclude that the contribution of interest rate deregulation is insignificant in the growth of Agricultural productivity in Nigeria.

The Agricultural credit coefficient at 0.019079 shows a positive relationship between Agricultural Credit and Agricultural Productivity in Nigeria. This shows that interest rate deregulation has no control of how Agricultural credit is disembarrassed, as most Agricultural credits are not in line with the deregulated interest rate system that is prevalent in the money market. Infact interest rate system being practice in agricultural sector is highly regulated. This can be seen in numerous subsidies, interest rate holiday low interest rate programmes practiced in the Agricultural sector.

The exchange rate coefficient shows a positive impact and relationship between exchange rate and agricultural productivity. This shows that there is a positive relationship between exchange rate level and Agricultural productivity such that if exchange rate increases agricultural output increases. The t- statistics for exchange rate is 0.740356 while it t-tab (at 5% LOS and N-K degree of freedom) is 1.717, showing that there is insignificant contribution of exchange rate system to agricultural productivity. This is because most foreign investors in Nigeria are more interested in our oil and gas sector, communication industries than in our unattractive Agricultural sector.

Finally, our results did not agree with some of the work reviewed in our study like the work of Mackinnon (1973); Shaw (1973); and Fry (1995) that the deregulation of interest rate stimulate investment in agriculture through increase savings and hence investment demand.

The regression coefficient of interest rate is 97.47902. The calculated t- value for the regression coefficient of interest rate is 0.054891 while the tabulated t- value is 1.717. The calculated t- value for interest rate is less than tabulated value. It shows that there is a negative relationship between interest rate deregulation and agricultural productivity. It also shows that interest rate is not statistically significant at 5% level of significant. This shows that although interest rate deregulation has a positive impact on Agricultural deregulation, the impact is however not significant.

## 5. Conclusion and Recommendation

The study investigates the effect of interest rate deregulation on agricultural production in Nigeria. In the process of the research work, it was also discovered that agricultural credit has an effect on agricultural production in Nigeria and hence the introduction of agricultural credit as one of the independent variables. It was observed at the end of the study that the variation in agricultural output was accounted for by changes in the independent variables (Interest Rate, Agricultural Credit and Exchange Rate).

Interest rate plays insignificant role in enhancing economic activities. High interest rate attracts domestic savings, but at the same time it discourages local investors. Monetary policy should therefore ensure appropriate determination of interest rate level that will break the double edge effect of interest rate on savers and local investors. Only the interest rate policy that can attract savings mobilization and encourage domestic investment will help the economy.

There is a need for the authorities to improve the macro- economic indicators such as inflation, income level, level of investment and so on. The significant of the level of income to increased investment cannot be over emphasized as the level of income determines the level of savings level of investment that can be made to increase agricultural production in Nigeria.

The authorities also, should put in place policy thrust that will help reduce the rate of inflation in Nigeria. High level of inflation reduces the rate of interest and thus discourages people from saving. Inflation enhances consumption and total disregard to savings habit is eventually developed.

The study also recommends that deregulation should be carried out with some measure of checks and balances to frustrate the negative effect of interest rate deregulation on real term deposit rate which makes savings benefit insignificant.

## References

Abiodun, (1988). Cited in Adofu and E.S. Akiri, (2007). *Interest Rate Deregulation and Investment in Nigeria*. J. Econ. Manage. Stud, 2(1).

Adegeye, A.J., & Ditto, (1985). *Essentials of Agricultural Economics*. New Edn, Impact Publishers, Ibadan, Nigeria.

Adofu, I.M., Abula & Audu, S.I. (2010). *An Assessment of the Effects of Interest Rate Deregulation in Enhancing Agricultural Productivity in Nigeria*. Curr. Res. J. Econ.Theory, 2(2): 82-86.

Afolabi, E. (2005). *Nigerians Debt is Looming; Which Way Forward*. Punch Nigerian Newspaper. Retrieved from: <http://www.punchnewspaper.com>, (Accessed on: 6, October).

Agu, C.C. (1988). *Interest rate policy in Nigeria an attendant distortion*. Sav.Dev. J, 12(1).

Ajayi, E.A. (1988). *Nigeria Debt Management Experience*. Central Bank Nigeria J., 13(2)  
Anyanwu, J.C., Oyefusi, A., Oaikhanan, H., & Dimowo, F.A. (1997). *The Structure of Nigerian Economy (1960-1997)*. Joanee Educational Publishers, Joanee Onisha ISBN: 10-9782784176.

Ani, (1988). Cited in Akiri & Adofu, (2007). *Interest Rate Deregulation and Investment in Nigeria*. J.Econ. Manag. Stud, 2(1).

Akiri, E.S., & Adofu, I. (2007), *Interest rate deregulation and Investment in Nigeria*. J. Econ. Manag. Stud, 2(1).

Balassa, B. (1989). *The effect of Interest Rate on Savings in Developing Countries*. World Bank Working paper No. 56.

CBN Statistical Bulletin, (2006). Vol 17 Dec, Retrieved from:  
<http://www.cenbank.org/OUT/PUBLICATIONS/STATBULLETIN/RD/2008/STABULL-2006>. PDF (Accessed; 5 June, 2008).

Chete, L.N. (1999). *Macroeconomic Determinant of Private Savings in Nigeria*. NISER Monograph, series No 7, pp 1-4.

Fergusson, M., & Stephen, R.P. (1995). *What Constitutes Evidence of Discrimination in Lending?* J. Finance, 5: 739-748, Reprinted in the Economic of Housing, London Edward Publishing 1997.

Fry, M.J. (1995). *Money Interest and Banking Economic Development*. 2<sup>nd</sup> Edn, Johns, Hopkins University Press, Baltimore MD.

Goldsmith, R.W. (1969). *Financial Structure and Development*, New Haven, CT. Yale University Press.

Greenwood & Jovanovic, (1990); Ibimodo, (2005); Abiodun, (1988), (cited in Akin E.S and Adofu, (2007) *Interest Rate Deregulation and Investment in Nigeria*. J. Econ. Manag. Stud, 2(1).

Gupta, K.L. (1970). *On Some Determinant of Rural and Urban Household Saving Behaviour*; The Economic Record. The Society of Australia, 46(116): 378-383.

Khat, K.D.R & Bathia, F.J. (1993). *Financial Entrepreneurial Development*, the African

Experience. IMF Staff Paper, Vol. 27.

Mackinnon, R. (1994). Cited in Akiri E.S., & Adofu, I. (2007), *Interest Rate Deregulation and Investment in Nigeria*. J. Econ. Manag. Stud, 2(1).

Mackinnon, R. (1973). *Money and Capital in International Development*, The Brokenness Institution Washington. DC.

Nwankwo, G.O (1989). Nigerian Financial System. Macmillan Publishers Ltd.

Ogwuma, P.A (1993). *Recent Development in Nigerian Financial Service Industry; Problems and Challenges*: An Address at an Annual Dinner of the Chartered Institute of Bankers, Lagos, November.

Oni, S.A. (1993). *Nigeria Agricultural Policies during the Third Republic*. Managing the Nigerian Economy in the Third Republic.

Ojo, M.O (1988). *Agricultural Performances and Policy under Structural Adjustment Programme in Nigeria*. A Paper Presented at the 1988 Annual Conference of the Nigeria Economic Society at Obafemi Awolowo University, Ile Ife, Nigeria.

Olusoji, M.O. (2003). *Determinants of Private Savings in Nigeria: An Error Correction Approach* NDIC Quarterly Publication, 13 September.

Okopi, H.A (2008). *The Impact of Interest Rate Deregulation on Agricultural Production in Nigeria*. Unpublished B.Sc Project Department of Economics, K.S.U. Anigba.

Sanusi, J.O. (2002). *The Evolution of Monetary Management in Nigeria and its Impact on Economic Development*. CBN Bulletin, 26(1):1-19.

Shaw, E.S. (1973). *Financial Deeping in Economic Development*. Oxford University Press Oxford.

Umoh, O.J. (2003). *An Empirical Investigation of the Determinants of Aggregate National Savings in Nigeria*. J. Monetary. Econ. Integr, 3(2):113-132.

Wikipedia on Answers.com, (2005). *Definition of Term*. Retrieved from:

<http://www.wikipedia.com>, (Accessed on: November 24, 2010).

Williams, E. (2009). *The Return of Interest Rate Caps*. Business World Publication, May 17.

World Bank (1993), World Bank Policy. Res. Bull, 4(3) May- July.

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