AGRICULTURAL CREDIT ON THE GROWTH OF THE NIGERIAN ECONOMY

BY

OKOSODO, L.A. (PH.D)

ECONOMICS DEPARTMENT,
AMBROSE ALLI UNIVERSITY,
EKPOMA.

ABSTRACT

This research examined agricultural credit on the growth and development of the Nigerian economy. This research examined banking policy on agricultural credit development in Nigeria between 1980-2014. The data used in this research are obtained mainly from secondary sources. The research technique employed in this research is the recent bounds testing cointegration approach, unit root test and error correction mechanism. The study reveals that there is long run relationship between agricultural sector and economic growth in Nigeria. The study also reveals that Government expenditure in Agricultural sector contribute moderately to the growth of the Nigerian economy. It is therefore recommended that the federal government should encourage commercial bank to give adequate credit facility to Agricultural sector and also reduce the bank lending rate to encourage most farmers in Nigeria.

Key world: Agricultural sector, Agricultural credit, Government, Expenditure, Economic growth, Policy

INTRODUCTION

Nigeria is endowed with huge expanse of fertile land, rivers, streams, lakes, forests and grasslands, as well as a large active population that can sustain highly productive and profitable agricultural sector which can ensure self-sufficiency in food and raw materials for the industrial sector and as well provide gainful employment for the teeming population and generate foreign exchange for the economy. Ironically, the reverse is the case. Several factors accounted for the poor performance of the agricultural sector in Nigeria; these include virtual neglect of the sector, poor access to modern inputs and technology, and lack of optimum credit supply. (Enyim, Ewno & Okoro, 2013). Aside the problem of poor access to modern technology, the major bane of agricultural development in Nigeria is low investment finance. (Salami & Arawomo, 2013).

According to Udih (2014) Bank credit is expected to impact positively on the investible sectors of the economy through improved agricultural production of goods and services. He opined that sufficient financing of agricultural projects will not only promote food security, but also enhance the entrepreneurship performance of our young investors. Concluding that, this is borne out of the expectation that a good match between adequate bank credit and agricultural entrepreneurship will ensure massive agricultural productivity.

However, from available statistics from commercial banks total sectoral credit distribution in Nigeria, the allocation to the agricultural sector, given the importance of the sector, is insignificant. For instance, credit allocation to the sector fluctuated between 6.9% and 10.66% in 1985; between 10.66% and 16.15% in 1985 to 1990; between 16.15% and 17.5% in 1990 to 1995. It declined sharply to 8.07% in 2000, 2.46% in 2005, 1.67% in 2010, and fluctuated between 1.67% and 3.44% in 2010 to 2013 (CBN Statistical Bulletin, 2013).

Wikipedia (2010) defined agriculture as the cultivation of land, raising and rearing of animals for the purpose of production of food for man, animals and industries. Agriculture comprises of crop production, livestock, forestry, fishery, processing and marketing of these agricultural products.

According to Olaniyan (2005) the development of agriculture in Nigeria has been slow inspite of the various agricultural policies. The government recognizes the unhealthy condition of Nigeria agricultural sector since 1970, and has tried to formulate and introduce a number of programmes and strategies aimed at remedying the situation. This measure includes the setting up of large scale mechanized farm by states and federal government.

Ahor (2004) opines that a breakdown of the agricultural production into various component parts reveals the problems in the sector. He further asserts that during the period, food production recorded only marginal increase, while export crops production declined sharply. The inadequate domestic food production is reflected in Nigeria's massive food importation, especially in the 1970s and 1980s till

2015 precisely to augment domestic supply within this period. Nigeria became a net importer of groundnuts and cotton to supplement domestic consumption. Palm-oil was also imported into the country.

Umo (2001) states that the performance of the agricultural sector in the 70's and 80's was undetermined mainly by its neglect coupled with a drain of disincentives created by the oil boom.

Ajax (2001) posits that there was a review of the 1988 National Agricultural Policy by the National Council on Agriculture and they derived a policy documents as follows:

i. The National Policies on integrated Rural Development
ii. Rural Development Strategy for Nigerians.

The policy documents were approved by the Federal Executive Council that was lunched by the then President of Nigeria Chief Olusegun Obasanjo in December, 2001.

Ogun (2003) observes that the participation of foreign and multilateral agencies in the funding of agricultural production in Nigeria over the years has positively affected the sector considerably. Some of this assistance came from mobile Nigeria limited partnership in rice production, the World Bank and African Development Bank.

Therefore, the objective of the study is the examination of the impact of agricultural credit on the growth of the Nigerian economy.

LITERATURE REVIEW

INTRODUCTION

In this section, the review of related literature is undertaken. This review is done under the following headings: (a) agriculture in the Nigerian economy. (b) the contribution of agriculture to the economic growth of Nigeria (c)Agricultural credit and economic growth in Nigeria.

AGRICLUTURE IN THE NIGERIAN ECONOMY

According to Enebong (2003) Agriculture has been the backbone of the Nigerian economy in providing employment and source of livelihood for the teeming population. It accounts for over half of the GDP of the Nigerian economy before and after independence in 1960. However, the role it plays in the regional and economic development in Nigeria has diminished over the years due to the dominant role of the crude oil sector in the economy. With the increasing food demand in Nigeria, there is need for the country to increase crop production towards meeting the nutritional requirement for the increasing population. Therefore, the source of nation's wealth is essentially agriculture.

Development economists have focused on how agriculture can best contribute to the overall economic growth and modernization. Todaro and Smith (2003) posited that underdevelopment economy consisted of two sectors. These sectors are the traditional agricultural sector characterized by zero marginal labour productivity and the modern industrial sector. Rostow (1960) states five stages of economic growth. These are traditional society, pre-conditions for take-off, Take-off, drive to maturity and Age of high mass-consumption.

Stewart (2000) asserts that the agricultural sector has the potentials to be the industrial and economic springboard from which a country's development can take off. Indeed, more often than not, agricultural activities are usually concentrated in the less-development rural areas where there is a critical need for rural transformation, redistribution, poverty alleviation and socio-economic development.

According to Parente and Rogerson (2002) agriculture has a strong hold in an economy, for without it a country will always depend on foreign countries for its populace.

Thirtle, Lin and Piesse (2003) posited that agriculture contributes to the economic growth and development through five inter-sectorial linkages. The sector are lined via (i) supply of surplus labour to firm in the industrial sector, (ii) supply of food for domestic consumption, (iii) provision of market for industrial output, (iv) supply of domestic savings and industrial investment and (v) supply of foreign exchange from agriculture export earnings to finance import intermediate and capital goods. In addition to these five direct market-based linkages, Timmer (1995) observes that agriculture indirectly contributes to economic growth via its provision of better caloric intake by the poor, food availability, food price stability and poverty reduction.

THE CONTRIBUTION OF AGRICULTURE TO THE ECONOMIC GROWTH IN NIGERIA

Ukeje (2003) opines that Notwithstanding Nigeria's rich endowment in black oil and other mineral resources, the wellbeing of her economy still largely depends on the agricultural sector. Alli (2008) asserts that the Nigeria economy essentially depends on agriculture in terms of national output and employment generation. It is the largest contribution to Gross Domestic Product (GDP) (average 38% in the last 8 years) with crops accounting for 80%, forestry 3% and fishery 4%. It provides employment for about 65% of the adult labour force and the food and fiber needs of a large and increasing population. The agro-industrial enterprises depend on the sector for raw material whilst 88% of the non-oil exports earnings come from the sector. The sector contributes a great deal to the development of the economy in various ways.

Agriculture contributes significantly to national food self-sufficiency by accounting for over 90% of total food consumption requirement. It helps to maintain a healthy and peaceful population and also a source of food and nutrition for households. Furthermore the ultimate objectives of interest of economists in productivity should be to find ways of increasing output per unit of input and attaining desirable inter-firm, intra-firm and inter sector transfer of population resources thereby providing the means for the standard of living of the people.

In Nigeria, agricultural export has played an important role in economic development by providing the needed foreign exchange earnings for other capital development project. Todaro and Smith (2003) observed that Nigerian agricultural export has enlarged to include cocoa, beans and palm kernel. Statistics indicate that in 1960 agricultural export commodities contributed well over 75% of total annual merchandise exports. In 1940's and 50's Nigeria was ranked very high in the production and exportation of major crops in the world. For instance, Nigeria was the largest exporter of palm oil and palm kernel. Second to Ghana in cocoa and third position in the exportation of groundnut.

Gollin, parente; and Rogerson (2002) posited that Nigeria export earnings from major agricultural crops contributed significantly to the Gross Domestic Product (GDP), Bola (2007) posits that in terms of employment, the sector is still leading in economic activities. It remains the leading employment sector of the vast majority of the Nigerian population as it employs two third of the labor force.

Olatunji (2002) observes that in Nigeria today, farming still remains the source of employment of majority of the adult population and its productivity is the most important single factor influencing the standard of living of both rural and urban centres.

Agriculture indeed has remained the major source of income to the economy. About 90% of the rural population is involved in activities related to the crop sub-sector which provides the bulk of agricultural income. Similarly the crop sub-sector supports the processing industry by providing raw materials.

AGRICULTURAL CREDIT AND ECONOMIC GROWTH IN NIGERIA

According to Abayomi (2006) in the early 1950's and 1960's agriculture played a vital role in stimulating economic growth and development in Nigeria. It provides employment for millions of Nigerians, Over seventy percent (70%) of the labour force mostly from rural areas are employed in agriculture. In the same period, agriculture contributes over 70 percent to our export earnings (C.B.N, 2007).

Obadan (1990) asserts that as a result of this decline in the percentage contribution to CDP, there have been a lot of measures in terms of programs, strategies and polices to remedy the worsening situation in Nigeria. For example in 1976, Operation Feed the Nation (OFN) programe has launched to encourage the people to pay greater attention in mobilizing internal resources for domestic agricultural production. This programme did not make any significant impact in increasing food production and GDP. It however increased awareness on the need for increased food production. In 1980, the Green Revolution Programme (GRP) was launched to replace OFN, with the aim of food sufficiency in agricultural food production, reducing import of food and price inflation. This programme again failed to impact on GDP and could not achieve its aims and objectives.

Abayomi (2006) posits that with the introduction of structural adjustment programme in 1986, a lot of policy packages and programmes were introduced such as the World Bank-assisted Agricultural Development Project (ADP), Directorate of Food, Roads and Rural Infrastructures (DERRI), National Agricultural land Development Authority (NALDA). In addition to these programmes, a lot of schemes such as River Basin Development Authority were introduced. All these measures aimed at increasing agricultural production has little success in northern Nigeria but failed in southern part of the country. However, it was during this period of SAP that agricultural production attained the highest growth rate of 5.0 percent (CBN 2007).

Other measures aimed at increasing agricultural output in terms of credit schemes was the establishment of Nigerian Agricultural Cooperative Bank in 1973, establishment of Rural Banking programme in 1977. These entire credit schemes were made to allocate more funds to rural farmers with the intention of increasing food supply. Still on this scheme, Central Bank of Nigeria (CBN) recommended different lending rates for agricultural sector with lower interest rate enjoyed by farmers. In the year 2004, the president of Nigeria together with some African countries' leaders launched New Partnership for African's Development (NEPAD) whose objective was to reduce hunger and poverty. Agriculture is seen as engine of growth to propel African economy out of hunger and poverty. The main instrument for achieving this was a Comprehensive African Agricultural Development Programme (CAAP). This programme aimed at achieving higher growth through increase in farm output. It equally aimed at encouraging private public participation in agricultural production. For example Isedu (2008) exposes Ondo State Governor's willingness to attract foreign investment in the area of agriculture by collaborating with foreign firm in Thailand and Republic of China. This collaboration was in the areas of establishing rice and cassava processing plants in the state. The indications are that other state government are making more to attract foreign investors into agriculture.

RESEARCH METHODS AND THEORETICAL FRAMEWORK

THEORETICAL FRAMEWORK

According to Pekka (2005) the new theory of financial institution to agricultural credit is based on three observed phenomena; banks earn substantial profits from off-balance sheet activities and services, which they take into account in their lending decisions. Secondly, the critical point in the agricultural firm relation is the loan decision, the probability of the agricultural firm staying with the bank is a function of the loan extended each time one is applied for. Thirdly, what is at stake in the loan decision is the expected value of the entire agricultural firm relation, which is the probability times the present value of expected future profits.

RESEARCH METHODS

The data on Gross Domestic Product, credit facility from commercial Bank, Government Expenditure on Agricultural Sector and lending rate in this research are subjected to Dickey-Fuller and Augumented Dickey-Fuller (ADF) test of stationarity. Also co-integration unit root test is employed in this study.

Many empirical researchers used the ordinary lest squares (OLS) technique of statistical analysis in their investigations, but spurious results are usually obtained especially with time-series data (Montial 1994, Ndiyo 2003, Ndiyo and Ebong 2004).

MODEL SPEICIFICATION

GDP = f(ACOB, GEOA, BLR) where
GDP = Gross Domestic Product
GEOA = Government Expenditure in Agricultural Sector
BLR = Banking Lending Rate
The model specified above is stated in operational form as follow:
GDP = $a_0 + a_1$ ACCB + a_2GEOA + a_3BLR + Чt
a_0 = intercept, $a_1 = a_3$ = parameters
Чt = Error term

UNIT ROOT TEST

The stationarity of the selected time series data on the above model is tested to determine the order of integration using the Augmented Dickey Fuller test. This is to ensure that variables used are not stationary at an order of 1 (2) in contravention of the provision of Pesaran et al (2001) that the computed F- Statistics are valid only when the variable are 1 (0) and 1 (1).

Table 1 Augmented Dickey-Fuller Unit Root test for Agricultural Credit

Variable	First difference	At Level	Order of Integration	Remark
GDP	-None	-3.7962	1(0)	Stationary
ACCB	None	-4.8649	1(0)	Stationary
GEOA	None	-5.4828	1(0)	Stationary
BLR	-9.07059	-2.5047	1(1)	Stationary

Critical Value

1% = -3.64639
5% = -2.95402
10% = -2.61582

In the table, only one variable is stationary at first difference while the other two variables are stationary at level. In other words, only one variable exhibit unit root.

Co-integration Results

The results presented in the above table suggest the existence of co integration equations based on the trace statistic at 5 percent significant level. The trace co integration results indicate two co integrating equations which indicate a long run relationship among the variables.

Error Correction Mechanism (ECM)

The coefficient of the error correction model (ECM) estimate is negative as expected and it is significant. This shows that the model is stable. It also implies that about 54 percent of the previous year disequilibrium in agricultural output is adjusted for in the following year.

F-statistic 84.86

$R^2 = 0.7288$

- The Johnasen (1991) Error Correction Mechanism (ECM) estimation technique is also used in this research.

All the estimated variables has the expected signs. However, Gross Domestic Product, Agricultural Credit from commercial Bank and Government expenditure in Agricultural sector are significant. This shows that in the long-run, Agricultural Credit from Commercial Bank provide credit facility to Agricultural sector. This to a large extent contributes to the growth and development of the Nigerian economy. The Government spending on Agricultural sector though not substantial, it still contributes to the growth of the economy. However, the bank lending rate in Nigeria is on a high side and it is because of this farmers in Nigeria found it difficult to obtain credit facility from banks hence the slow growth rate in the Agricultural sector which is supposed to be the backbone of the Nigerian economy.

The value of R-squared shows that the explanatory variables explained 73% of the dependent variable. This means that the explanatory variables contribute 73% to GDP of the country.

Conclusion

Conclusively, the study concluded that there is low relationship between Agricultural Credit from Commercial Bank, Government expenditure on Agricultural sector and Economic Growth in Nigeria. The high lending rate from Commercial Bank retards the growth and development of the Nigerian economy especially as it affects Agricultural sector. Therefore, the Nigerian government should formulate policies that will encourage commercial banks to give loans to farmers at a concessionary interest rate.

References

Abayomi F. (2006). An Overview of Nigerian Agricultural Sectors. Journal of Agricultural Economics, 8 (3): 7-16.

Ahor, R.O. (2004). 'The Determinants of Agricultural Productivity in Nigeria, *Nigeria Journal of Economic and Social Studies (NJESS)*, Vol. 42 (1): 95-111.

Ajax, L.S. (2001). Linking FDI and Technology Development for Capacity Building and Strategic Competitiveness. Transnational Corporations, 11:3.

Alli, F. (2008) Nigeria: 9 years of Manufacturing with Tears, - any Hope in Sight? Vanguard (Lagos). Available from: http://allafrica.com/stories/200805290133.html?page=2.

Bola, O. (2007). Nigeria Agricultural Sector. Oxford University Press.

Central Bank of Nigeria, (2007). Annual Report and Statement of Account.

Enebong, A. (2003) Manufacturing Association of Nigeria (MAN) Nigeria's Imperative in the New World Trade Order, Workshop Report. African Economic Research Consortium (AERC). Nairobi, Kenya and Trade Policy Research and Training (TPRTP). Department of Economics, University of Ibadan: Ibadan.

Gollin, D., Parente, S.L. and Rogerson, R. (2002), "The Role of Agriculture in Development" *American Economic Review* 92(2): 160-164.

Isedu M., (2008), The Contribution of Non-oil Sector to the Nigerian Economy. African Review, 7 (2): 79-86.

Obadan, M.I. (1990). Agricultural Development Strategies and Performance in Nigeria: from OFN to OFFRI IRORO. Journal of Arts and Social Sciences, 3 (1 & 2): 3-11.

Olatunji, M.D., (2002), The State of Nigeria Economy: Imprint Service, Oshodi, Lagos.

Pekka Ahtiala (2005). The New Theory of Commercial Banking and Bank Lending Behavior. Scottish Journal of Political Economy, Vol. 52, No. 5, Pp. 769-792, November 2005.

Rostow W.W. (1960). The Stages of Economic Growth: A Non-Communist Manifesto Cambridge.

Salami, A. and Aransomo, D.F. (2013). Empirical Analysis of Agricultural Credit in Africa: any role for Institutional Factors? Trinis, Trinisa, Africa Development's Hoork Paper Series 192.

Stuwart, D. (2000). "The Rise and Fall of the Rural Non-Farm Economy: Poverty Impacts and Policy Options", Development Policy Review, 19 (4): 491-505.

Thirtle, C, Lin, L and Piesse, J. (2003). "The Impact of Research-Led Agricultural productivity Growth on Poverty Reduction in Africa, Asia and Latin America" " *World Development* 31(2): 1959-1975.

Todaro, M.P. and Smith, S.C. (2003), *Economic Development 8th* Edition, Singapore: Pearson Education.

Udih .M. (2014). Bank Credit and Agricultural Development: Does it promote Entrepreneurship Performance? International Journal of Business and Social Science, 5 (11), 102-107.

Ukeje, R.O. (2003), Macroeconomics: An Introduction, Port Harcourt Davidson Publication.

Umo .P. (2001) Determinants of FDI and its Impact on Economic Growth in: Journal of Economic Development, 19:137-163.

Wikipedia (2010) Agricultural Productivity. www.wikifoundation.