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Tax Assignment and Revenue Sharing in Nigeria: Challenges and Options  
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Perspectives on the European Monetary Union: Lessons for the Economic  
Community of West African States (ECOWAS)  
*J. E. L. Sagbama*

External Debt, Investment and Economic Growth: Evidence from Nigeria  
*Aloysius Ajab Amin & Isa Audu*

## **REVIEW/COMMUNICATIONS**

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Pension Scheme in Nigeria  
*J.S. Akuns*

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Wesso, Occasional Paper No. 18 (November 2002) of the South African  
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## Economic and Financial Review

**Volume 44**

**March 2006**

**Number 1**

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### **CONTENTS**

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- Tax Assignment and Revenue Sharing in Nigeria:  
Challenges and Options 1 - 36  
*S.C. Rapu*
- Perspectives on the European Monetary Union: Lessons  
for the Economic Community of West African States (ECOWAS) 37 - 80  
*J. E. L. Sagbama*
- External Debt, Investment and Economic Growth:  
Evidence from Nigeria 81 - 113  
*Aloysius Ajab Amin & Isa Audu*

### **REVIEW/COMMUNICATIONS**

- Matters Arising from the Introduction of the Defined  
Contributory Pension Scheme in Nigeria 114 - 123  
*J.S. Akuns*
- Broad Money Demand and Financial Liberalization in South Africa  
by G. R. Wesso, Occasional Paper No. 18 (November 2002) of the  
South African Reserve Bank 124 - 127  
*Abdurrahman Abdullahi*

# Tax Assignment and Revenue Sharing in Nigeria: Challenges and Options

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S.C. Rapu\*

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*Assignment of taxes and revenue-sharing to different levels of government are politically divisive issues in Nigeria. Although these are not peculiar to the country, but they are unique because the federation has not been able to establish a widely acceptable system, despite the various fiscal commissions since 1946. The debate is the devolution of more taxes with high revenue yields to the state and local governments. The sub-national governments contend that, the currently assigned taxes are poor in terms of their bases and, therefore, revenues are not able to meet their expenditure expectations. Typical policy responses to these agitations by the Federal Government are minor adjustments in the revenue-sharing arrangements and the introduction of non-statutory transfers. Such measures have, however not assuaged the aspirations of the sub-national governments. Rather, the demand is a complete review of the sharing formula of the federally-collected revenue that could reduce to reasonable levels the existing vertical and horizontal fiscal imbalances. Similarly, some state governments are demanding for an increase in their shares of revenues derived from their jurisdictions. Specifically, the entrenchment of reasonable weights on derivation principle in the sharing of all revenue items is the most critical issue today. This paper build on the history as well as the current legal framework of tax assignment and revenue-sharing in Nigeria to identify the challenges while also drawing from the theoretical framework for policy options which will provide for a stable federal system in Nigeria. The paper recommended among others the strengthening of states internal revenue bases, adjustments on the vertical and horizontal revenue-sharing formula, effective compliance with the allocation of the mandatory 10% of states' internally generated revenue. The paper concludes that changes to the existing tax assignment and revenue-sharing arrangements will go a long way in protecting our nascent democracy.*

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**Author's e-mail:** [scrapu@cenbank.org](mailto:scrapu@cenbank.org)

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\* Rapu is a Deputy Director in the Research and Statistics Department, Central Bank of Nigeria, Minna. The views expressed in this paper are personal and should not be regarded as the views of the Central Bank of Nigeria. The author is grateful to the several reviewers and to the Management of the Research and Statistics Department for its financial support for the final review of this paper. All remaining errors are the author's responsibility.

## I. Introduction

The federal system in Nigeria has evolved since 1946 and it is recognized by the constitutional division of administrative responsibilities and expenditure assignments to different levels of government. Each government is empowered by assignment of own taxes while that of the sub-national governments are complemented with statutory and non-statutory transfers from the federally- collected revenues by the Federal Government. However, tax assignment and revenue-sharing in the Federal Republic of Nigeria have witnessed periodic changes, following the recommendations of the different fiscal commissions established by the various regimes. For example, under the military governments, frequent changes of assignment of taxes and revenue-sharing formula through changes in decrees was a notable feature of the federal system in Nigeria. It is important to note that debates about tax assignment and revenue-sharing are not peculiar to Nigeria. Nonetheless, Nigeria's case is unique because the criteria for vertical and horizontal distribution of revenue so far used have not enjoyed wide acceptability.

Recently, agitations for a complete review of the assigned taxes to each level of government and the revenue-sharing criteria have become the main politically divisive issues. Specifically, some state governments are asking for the control of revenues of natural resources found in their domains. This has also, generated further debates that all non-oil revenue sources of the Federation Account should be shared on the basis of derivation. However, because of the wide gap in tax bases among the sub-governments and the need to achieve equal development across the country, the political actors at the centre are not pre-disposed to accede to some of these demands.

In this context, the debates suggest the need to review upwards the shares of the sub-national governments in terms of statutory transfers from the federally-collected revenue. Equally, the oil-rich states particularly and, the economically advantage states, are asking for an upward review of the weights attached to the sharing of not only revenues from natural resources but all non-oil revenue items. Similarly, current debates emphasize the need to review the horizontal-sharing indices which tend to favour the well established states (older states) and local governments to the disadvantage of the states and local governments with low per capita income. These debates are not limited to the fiscal relationships between the federal, state and local governments but also extend to the relationships between the states and their local

governments. The local governments in view of their fiscally-disadvantage positions in the federal system are also, demanding for a favourable revenue-sharing system from the revenues of state governments from assigned taxes and fees known as 'State Allocations' to complement transfers from the Federation Account and the VAT Pool Account, including assigned taxes and fees.

The objective of this paper, therefore, is to identify the challenges of tax assignment and revenue-sharing arrangements in Nigeria and proffer solutions. These policy options are aimed first, to accommodate the growing desires of some state governments wishing to acquire greater tax autonomy. Second, is to provide an overall transfer system that will ensure more funds to the sub-national governments to meet the Millennium Development Goals (MDGs) as well as achieve equalization effect across the state and local governments in the country. With this background, the rest of the paper is organized in four parts. Part two focuses on the theoretical framework on tax assignment and revenue-sharing in a federal system. Part three traces the evolution of tax assignment and revenue-sharing in Nigeria and evaluates the outcomes. Part four identifies the challenges and makes suggestions for new options. Part five summarizes and concludes the paper.

## **II Theoretical Expositions**

### **II.1 Federalism and Assignment of Responsibilities**

Federalism is defined as the amalgam of sub-units of national sovereign governments that operate independently under a constitutionally defined sphere of functional competence (Oates, 1972). It is a decentralization of responsibilities for expenditure and revenue to different levels of government that ensures that each government makes decisions and allocates resources according to its own priorities.

A number of economic arguments have been put forward to explain the adoption of fiscal federalism. One strand of the literature emphasized economies of scale in the provision of public goods, allocation and market efficiencies<sup>1</sup>. The other strand rests mainly on the idea that 'federal transfer system' could be seen as a risk-sharing mechanism against regional government's revenue shocks<sup>2</sup>. On the contrary, political arguments far enjoy higher considerations in the adoption of federalism. Thus, federalism is favoured when a country's population is not homogenous in terms of ethnic, linguistic, cultural, racial or other important national characteristics. It is

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<sup>1</sup> Casella et al, 1990; Weber et al, 2001, Cremer, et al 1994, and Tanzi, 1995

<sup>2</sup> See Persson et.al 1996; IKein et al, 1998, and Ahmad E, et al; 2003.

used to induce the sub-units to remain in the federation while maintaining their different individual characteristics. In sum, it is generally believed that fiscal decentralization strengthens democracy by increasing interest in local politics.

## **II.2 Tax Assignment and Revenue Sharing in a Federal System**

### **II.2.1 Tax Assignment**

Tax assignment indicates the level of government that should be in control of a particular tax and how this should be administered. In public finance theory, there is no ideal system of tax assignment rather it varies from jurisdiction to jurisdiction, under three options namely: the assignment of all tax bases to sub-national governments only; the assignment of all tax bases to the central government only; and the assignment of tax bases to each level of government (Martinez-Vasquez et al, 1995).

It is generally recognized that both distributional and macroeconomic management considerations argue against the type of arrangement where all tax bases are assigned to the sub-national governments only (such as practiced in the former Yugoslavia). Under this system, the centre imposes surcharges on taxes collected by the sub-national governments. Nonetheless, this arrangement cannot facilitate income redistribution through the tax system while it also deprives the central government any tax tool as fiscal policy instrument for macroeconomic management. The major advantage is that spending decisions are compatible with tax decisions and, therefore, it encourages tax competitions among the sub-national governments (Ter Minassian, 1997).

The assignment of all tax bases to the central government only is consistent with the pursuit of macroeconomic objectives, while it generates more revenues owing to economies of scale and prevents revenue losses and high costs of administration. This presupposes that the central government is obliged to transfer some of the revenue collected to the sub-national governments. However, this is most often critiqued because it separates spending authorities from revenue-raising responsibilities. Thus, the arrangement removes the links between the benefits derived from public expenditures and their prices (taxes). The third option, which is the most frequently observed, is the one which assigns own sources of revenue to each level of government with a combination of inter/intra-governmental transfers. However, the major problem with this system is the issue of overlapping of tax bases which means likely increase in the burden of the tax payers (Tanzi, 1995).

Generally, the implementation of assigned taxes to any level of government follows four methods, namely: independent legislation and administration, dual administration, surcharges on federal taxes and tax-sharing. Independent legislation and administration guarantees tax sovereignty, but sometimes inconsistent laws and administrative bottlenecks could create problems and increase the cost of administration. Dual administration means that both the centre and the units have legislative and administrative responsibilities. Tax sharing implies that the central government gives a fraction of revenue from some selected taxes collected from a sub-national government to the same government e.g. automobile taxes. Under this system, each sub-unit has latitude to choose their own rates. Surcharge implies that the lower levels of government may surcharge the central government for the taxes collected in its jurisdiction or vice-versa (Diaz-Cayeros and Mclure, 2000).

Three basic considerations which determine the type of taxes allocated to each level of government are: administrative efficiency; the objective of the tax and the mobility of the tax base (Shar, 1998). Following these broad principles, there is a general consensus in the public finance theory, on the types of taxes that should be assigned to the different levels of government (May, 1996).

- progressive re-distributive taxes are centralized e.g. personal income tax, corporate tax;
- taxes for economic stabilization are collected centrally e.g. import and export taxes;
- taxes on mobile factors of production are centralized e.g. capital gain taxes;
- residence-based taxes such as sales, excise and retail taxes can be decentralized;
- destination-based taxes are also subject to central collection -Value Added Tax;
- benefits tax/user charges are assigned to the level of government that provides the services such as toll fees, hospital and school fees, motor licenses etc.;
- taxes distributed on unequal basis to jurisdictions are administered by the central government e.g. taxes on natural resources; and
- tax on immobile factors of production such as land and buildings are assigned to the local jurisdictions e.g. property taxes are assigned to municipal councils.

### **II.3 Revenue-Sharing in a Federal System**

Many federal systems attempt to achieve equity through revenue-sharing between the central and regions/local bodies and among the regions/local bodies. This reflects the fact that most times the high-yielding revenue types are assigned to the central government while substantial and growing expenditures are devolved to the sub-national governments, reflecting the presence of vertical fiscal imbalance. A vertical fiscal imbalance is measured by the extent to which a tier of governments' expenditures is financed by own assigned taxes (Marcelo et al, 2000). There is also the horizontal fiscal imbalance, since the revenue-raising capacities of each of the sub-national government vary and they face different costs, revenue-shocks and demand pressures as they attempt to meet their assigned expenditures. In this context, a horizontal fiscal imbalance is measured by the portion of which a sub-national governments' expenditures is financed by the assigned revenues compared to their counterparts. Thus, revenue-sharing in a federal system to a large extent is aimed at not only to re-distribute resources within the nation but also to effectively control the borrowing capacities of the regions/local councils (Broadway and Hobson, 1993)

Revenue-sharing in a federal system is implemented usually, through two main options, namely: a tax-to-tax sharing system or pooling the entire tax receipts before sharing. Tax-to-tax revenue sharing system (as practiced in Germany, Argentina, and Brazil) has some problems. The system could provide incentives for the central government to concentrate efforts more on those taxes that are either not shared or to a lesser degree shared and those, which can achieve its stabilization policies. When these happen, the entire national tax system may be distorted. For these problems, many federations are attracted to a sharing system whereby, the entire proceeds are paid into one account and the pooled resources distributed to all tiers of government through agreed vertical and horizontal sharing procedures.

The procedures for the distribution of central revenue among the tiers of government are enforced through approved laws or by the constitution, reflecting the formula/indices for both vertical and horizontal sharing procedures. Thus, the formula-based system provides for the predictability of revenue particularly, by the sub-national governments, which is an essential ingredient for budget planning. It also, removes the intensive lobbying associated with revenue-sharing when the formula/indices are not specified and also, erases the fear of domination by the minorities.

### **III Historical Background**

#### **III.1 Evolution of Tax Assignment and Revenue-Sharing Formula in Nigeria**

Federalism was adopted in Nigeria in 1946, when the Richards Constitution came into existence, thus, recognizing the regional governments (North, West and East). The Phillipson Fiscal Commission (1946) assigned direct taxes (personal income tax), licenses and mining rents to the regions while taxes such as import and export duties, excise duties, company income taxes were assigned to the Federal Government. In recognition of the need to give the regions the right incentives for revenue mobilization, the principle of derivation was given high priority for the distribution of federally-collected revenue (Ahmad and Singh, 2003).

The adoption of the Macpherson Constitution in 1951 offered another opportunity to re-visit the issues of tax assignment and revenue-sharing in Nigeria. Thus, the Hicks-Phillipson Fiscal Commission (1951) was set up to review the existing tax assignment and revenue-sharing procedures. To broaden the revenue base of the regions, the commission recommended additional taxes, namely: sales tax on motor spirits, excise tax on tobacco, and entertainment tax. The recommended revenue-sharing formula adopted three principles: derivation, population and needs. Also, special grants for police and education were transferred to the regions. Each of the regions was satisfied with the new fiscal arrangements- the west was satisfied with the principle of derivation, the north with the principles of population and needs while the east liked the special grants.

In 1953, the Louis Chicks Fiscal Commission was established to fashion out new fiscal arrangements based on the Lyttleton Constitution of regional self-government. The Commission made a strong case for an upward review of the financial strength of the Federal Government. Against this backdrop, mining rents and royalties, and personal income taxes were brought under the purview of the Federal Government. The proceeds were shared between the federal and the regional governments. Derivation principle was again applied in the sharing of these resources but the major impediment was the difficulty experienced in establishing the statistical data for the distribution of these resources among the regions, hence, there were several complaints (Ashwe, 1986).

As the country approached independence, the Raisman Fiscal Commission (1958) reviewed the existing tax assignment and revenue-distribution. The Commission

expanded the regional tax base and subsequently, allowed them the full share of the proceeds from export taxes as well as excise duties and the Federal Government received the share attributable to consumption in Lagos. The marketing boards were, however, regionalized while the regions were empowered to fix producer's price, impose sales tax on the export commodities and retain the operational surpluses of the boards. In addition, the administration and retention of proceeds from personal income tax were reverted to the regional governments. It established the Distributable Pool Account (DPA) into which the shares of federally-collected revenue for the regions were deposited. Thus, the federally-collected revenue was 70 percent shared to the Federal Government while 30 percent was paid into the DPA. The proceeds of the DPA were distributed to the regions on the principles of derivation, population and needs using the formula of 40, 31, 24, and 5 percent for the Northern, Eastern, Western regions, and the Southern Cameroon, respectively (CBN, 2000).

Nigeria became a sovereign state in 1960; subsequently, the revenue-sharing formula of the proceeds of the DPA was adjusted in 1961, following the pulling out from the federation by the Southern Cameroon. The new adjustment allocated 42, 32.6, and 25.6 percent to the Northern, Eastern, and Western regions, respectively. A further adjustment was made in 1963, as a result of the creation of the Mid-Western region. Thus, the share of the Western region was divided between it and the Mid-Western region at a ratio of 18.9 and 6.3 percent for the Western and the Mid-Western regions, respectively. The Federal Government in 1964 commissioned the Binns Fiscal Commission with the mandate to recommend a widely acceptable tax assignment and revenue-sharing systems. Following those recommendations, the share of DPA from federally-collected revenue was increased to 35 percent while that of the Federal Government was reduced to 65 percent. Soon after, tensions were generated as the report of the Commission abandoned the principle of derivation and adopted internal revenue generation efforts, and needs. The tensions generated by the report later became a serious political crisis, culminating into a military intervention in 1966.

The military take-over laid to rest the confusion, as the Federal Military Government suspended the constitution and other related political activities. With decrees, the Federal Military Government made frequent adjustments to tax assignment and revenue-sharing formula. Thus, it retained most of the taxes such as company income tax, petroleum profit tax, and excise duties. Others were the sharing of excise duties on sale of tobacco and petroleum products and import duties on motor spirits equally between the federal and the DPA; export duties on the basis of 3:2 by the state of

origin and the DPA; and the introduction of uniform tax structure on personal income and sales taxes in 1975. The Federal Government replaced the regional marketing boards with commodity boards and, thus, assumed the control of the operations of the boards. In 1971, with Decree No.9, it retained all the off-shore oil revenue while Decree No. 6 (1975) channeled all revenues to be shared by the states through the DPA, except for the 20 percent of on-shore mining rents and royalties due to the states of origin on the principle of derivation ((Okunroumu, 1996).

Following the transition program, the Aboyade Fiscal Committee (1977) was set up to review the fiscal arrangements in Nigeria. The committee renamed the DPA as 'Federation Account'; however, most of the recommendations were considered too technical and radically different from the past and, therefore, were rejected. The Okigbo Fiscal Commission (1980) was established by the new civilian administration. It accepted the earlier recommendation that all federally-collected revenue should be transferred into the Federation Account, except those classified as Federal Government independent revenue (Nigeria FR, 1980).

Since then, the revenue-sharing procedure has followed generally, the provisions of the 1981 Revenue Allocation Act, except for minor changes in the shares of the different tiers of government, including additional beneficiaries. Thus, between 1980 and 1986, the share of the Federal Government was 55 percent, the state governments, 34.5 percent while that of the local governments increased from 8.0 percent in 1980 to 10.0 percent in 1986. In 1987, further amendments were made in the shares of the state governments from 34.5 percent in 1986 to 32.5 percent. This boosted the share of special funds, specifically, the Oil Mineral Producing Areas Development Commission (OMPADEC) and general ecology (Table 1).

Another amendment to the revenue-sharing formula was made by the Federal Military Government in 1990. Consequently, the federal and the state governments lost some percentages in their shares in favour of the local councils and special funds. The shares of the local councils and the special funds were raised to 15 and 5 percent, respectively. Further amendments in 1993, increased the shares of the local councils and special funds to 20 and 7.5 percent, respectively while that of the federal and state governments declined to 48.5 and 24.0 percent, respectively. These amendments came through the recommendations of a central finance commission established in 1989 namely: National Revenue Mobilization, Allocation and Fiscal Commission (NRMAFC). While the previous fiscal commissions were ad-hoc, the NRMAFC is a

permanent central fiscal commission of government. The 1993 amendment remained in force until 2002 when the Supreme Court judgment of April 2002 made some fundamental changes (Nigeria FR, 2002).

Transfers to states and local governments from the Federation Account used the following indices: population (30 %); land mass/terrain (10 %); equality of states (40 %); internal revenue generation efforts (10 %); and social development indicators (10%). The social development indices uses six factors namely: primary school enrollment (24% of 10 %); direct number of students enrolled in secondary schools (8% of 10%); and inverse number of students enrolled in secondary schools (8% of 10%); number of hospital beds (30% of 10 %); index of access to clean water (15% of 10%); and the quantity of rainfall (15% of 10%). However, there have been several complaints on the statistical data for the revenue transfers.

An assessment of the inter-governmental fiscal relationship at the state governments level showed that sharing of the state internally-generated between each state government and the local governments was also, institutionalized. Each state government was required by law to allocate 10.0 percent of its own internally-generated revenue from assigned taxes to the local governments in that state. The formula for the distribution of the allocation across the local governments varies from jurisdiction to jurisdiction.

An important change in tax assignment during the military interregnum was the replacement of states' sales tax with value-added tax (VAT) in 1994, while the Federal Government assumed the administrative responsibility. VAT proceeds are kept in the VAT Pool Account and shared among the three tiers of government. Initially, the Federal Government received only 20 percent of the VAT proceeds to cover administrative costs while state and local governments received 50 and 30 percent, respectively. In 1995, the Federal Government's share was increased to 50 percent while state and local governments received 30 and 20 percent, respectively. Again, the vertical distribution was adjusted in 1996 to 35, 40, and 25 percent to the Federal, State and Local Governments and later amended to 15, 50, and 35 percent to the Federal, State and Local Governments, respectively, in 2000. Transfers to states and local governments used the following indices: derivation (20%), Equity (50%) and Population (30%). Similarly, in 1995, the Federal Government through Decree No.7 introduced the education tax. It stipulates the purpose and the distribution procedure and established a National Trust Fund Board. The Board is entrusted with the

administration and disbursement of the proceeds while the Federal Inland Revenue Service (FIRS) is charged with the collection (Table 2).

Table 1: Federation Account's Revenue Allocation Formula (Per cent)

Years	Federal Govt.	Region/State Govt.	Local Govt.	Special Funds				
				FCT	Derivation	OMPADEC	Gen. Ecology	Statutory
1960	70.0	30.0	-	-	-	-	-	-
1963-67	65.0	35.0	-	-	-	-	-	-
1980	55.0	34.5	8.0	2.5	-	-	-	-
1982	55.0	34.5	10.0	-	-	-	-	0.5
1987	55.0	32.5	10.0	-	-	1.5	1.0	-
1990	50.0	30.0	15.0	1.0	1.0	1.5	1.0	0.5
1993	48.5	24.0	20.0	1.0	1.0	3.0	2.0	0.5
1995-98	48.5	24.0	20.0	1.0	1.0	3.0	2.0	0.5
1999	48.5	24.0	20.0	1.0	1.0	3.0	2.0	0.5
2000-02	48.5	24.0	20.0	1.0	13.0	0.0	2.0	0.5

Notes:

1. 1960 to 1976 Local Governments were funded through the Regional Governments.
2. The 13 percent derivation is on mineral oil revenue only

Sources: Approved Budgets of the Government of the Federal Republic of Nigeria.

TABLE 2: VAT Revenue Allocation Formula (Percent)

	1994	1995	1996	1997	1998	1999-2004
Federal Government	20	50	35	35	25	15
State Governments & FCT	50	30	40	40	45	50
Local Governments	30	20	25	25	30	35
Total	100	100	100	100	100	100

Sources: Approved Budgets of the Government of the Federal Republic of Nigeria

## III.2 Evaluation of Tax Assignment and Revenue-Sharing Performances in Nigeria

### III.2.1 Tax Assignment Performance in Nigeria

Between 1948/49 and 1966/67 fiscal years, owing largely, to the favorable decentralization of taxes, particularly with those taxes having high revenue-yielding qualities to the regions, such as excise, export duties, etc., the regional governments generated more of their revenues that covered own expenditures from internal

sources. For instance, the share of internally-generated revenue by the regions in total income of the government sector increased from an average of 15.9 percent in 1948/49 to 41.0 percent in 1966/67 fiscal years. On the contrary, the share of the Federal Government revenue generated declined persistently, from an average of 84.2 to 59.0 percent during the same period.

Beginning from 1967/68 financial year, as a result of the military intervention and the subsequent adjustments in tax assignment, which concentrated all the high-yielding government revenue sources in the hands of the Federal Government, there was a general decline in the sub-national government shares of the total government income. Thus, the shares of the state and local governments' internally-generated revenue in total government income declined consistently from an average of 12.3 percent between 1967/68 and 1979/90 fiscal years to an average of 3.9 percent between 2000 and 2004. This was contrary to the extensive list of taxes and fees assigned to them but with generally small value of bases and relatively high administrative costs. Conversely, the shares of revenue generated by the Federal Government increased substantially to an average of 96.1 percent by 2000-2004 periods. Contrary to the proportion of the regional governments' revenues before the military intervention, from 1967/68 fiscal year, the sub-national governments became heavily reliant on the statutory transfers from the Federal Government (Table 3).

TABLE 3: Tax Decentralization in Nigeria

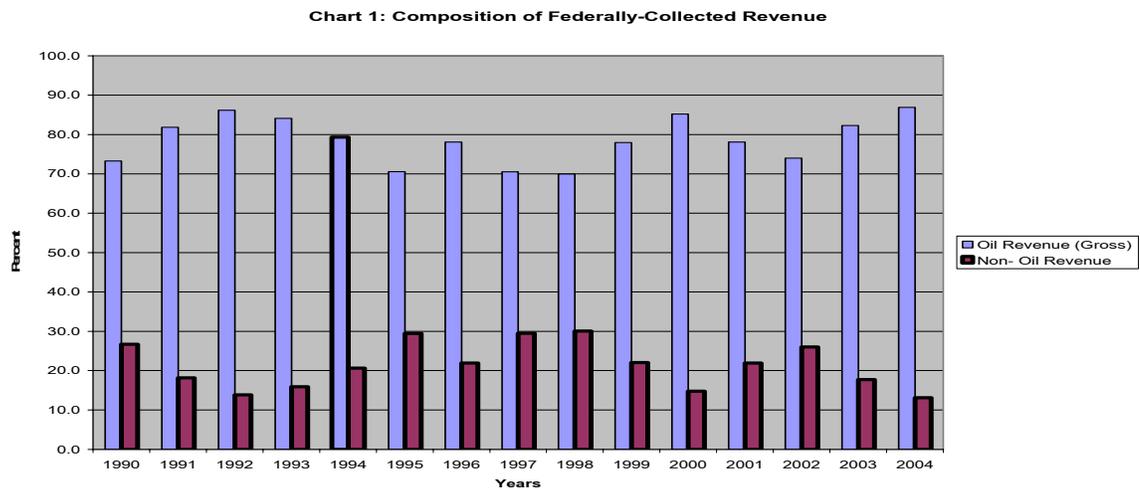
Commissions	Years	Federal	Regions/ States	Local Govts.
Phiiipson	1948/49-1951/52	84.2	15.9	n.a
Hicks-Phillipson'	1952/53-1953/54	72.5	27.5	n.a
Chicks	1954/55-1958/59	57.7	41.9	n.a
Raisman	1959/60-1963/64	62.1	38.1	n.a
Binns	1964/65-1966/67	59	41	n.a
Military Govts.	1967/68-1979/80	87.7	12.3	n.a
Civilian Govt.	1980-1983	99.2	0.8	n.a
Military Govts.	1984-1999	94.5	5.1	0.4
Civillian Govt.	2000-2004	96.1	3.4	0.5

Source: Derived from Government Budget Estimates and CBN Annual Reports

### III.2.2. Revenue -Sharing Performances in Nigeria

Revenue-sharing from the Federation Account was financed mainly by oil revenues,

proceeds from company income tax, and customs and excise duties. Specifically, the oil revenue accounted for 78.5 percent of total federally-collected revenues between 1990 and 2004 while its share in total revenue by 2004 was 86.9 percent (Chart 1).



*Source: Derived from CBN Annual Reports.*

In contrast to the previous procedures in revenue-sharing, from 1989, first line charges were introduced by the Federal Government in the transfer of revenue from natural resources to the Federation Account. The composition of these special charges depended on the economic priorities of the Federal Government. First it was named 'stabilization fund' which was meant to cushion the negative impact of oil price variations in the international oil market. In other words, it served as national savings against likely revenue drought and was intended to maintain stability in government expenditures when oil price falls.

Beginning from 1990, several other charges were introduced against oil receipts (such as NNPC Priority Projects<sup>3</sup>; National Priority Projects; PTF<sup>4</sup>, and External Debt Service Funds). These first line charges were deductions which serviced specific expenditures of the Federal Government. Ordinarily, these expenditures were supposed to be financed from the Federal Government shares of the national income. Subsequently, in addition to the stabilization fund, 'excess oil revenue' was introduced. This was charged against oil exports earnings, petroleum profit tax and oil royalty revenue while the modality for the charges was the difference between the budget price and the realized price. Like the stabilization fund, it was a compulsory

<sup>3</sup> NNPC refers to the Nigeria National Petroleum Corporation.

<sup>4</sup> PTF refers to the Petroleum Trust Fund which was created to handle infrastructural development arising from the gains associated with the increase in domestic pump prices of petroleum products.

savings designed for macroeconomic management and was usually drawn down at regular intervals and shared among the tiers of government according to the existing revenue-sharing formula.

Thus, between 1989 and 2004, an average of 65.7 per cent of the federation account revenues was distributed while the balance of 34.3 per cent was deductions to satisfy some specific Federal Government expenditures and/or served as national savings. Of this balance, deductions in respect of some Federal Government dedicated expenditures accounted for 21.0 per cent while deductions as national savings were 13.2 per cent of the total federation account revenues. The relative share of the Federal Government in the amount distributed (including special funds and other transfers unspecified) averaged 54.5 per cent while allocations to the sub-national governments (state and local governments and allocations in respect of 13% derivation principle) accounted for 45.5 per cent in the same periods.

A breakdown of the financial statement showed that between 1989 and 1993, the share of the proceeds of the revenue actually distributed was 58.8 per cent. This increased to 59.9 per cent during 1994 to 1999 periods and since 2000 it has increased further to 79.5 per cent. This was attributed to the improved transparency in revenue-sharing by the civilian administration; implementation of the 13.0 % derivation and the landmark judgment of the Supreme Court in April 2002. Subsequently, the shares of the Federal Government in the amount distributed from the Federation Account declined from an average of 57.5 per cent in 1989-1993 fiscal years to 56.4 and 49.3 per cent in 1994-1999, and 2000-2004 periods, respectively. Conversely, the shares of the sub-national governments increased from 36.6 per cent in 1989 to 52.6 per cent in 2004. On the other hand, since the inception of VAT in 1994, the sub-national governments have enjoyed higher shares and accounted for 69.1 per cent of the total proceeds in the VAT Pool Account (Table 4).

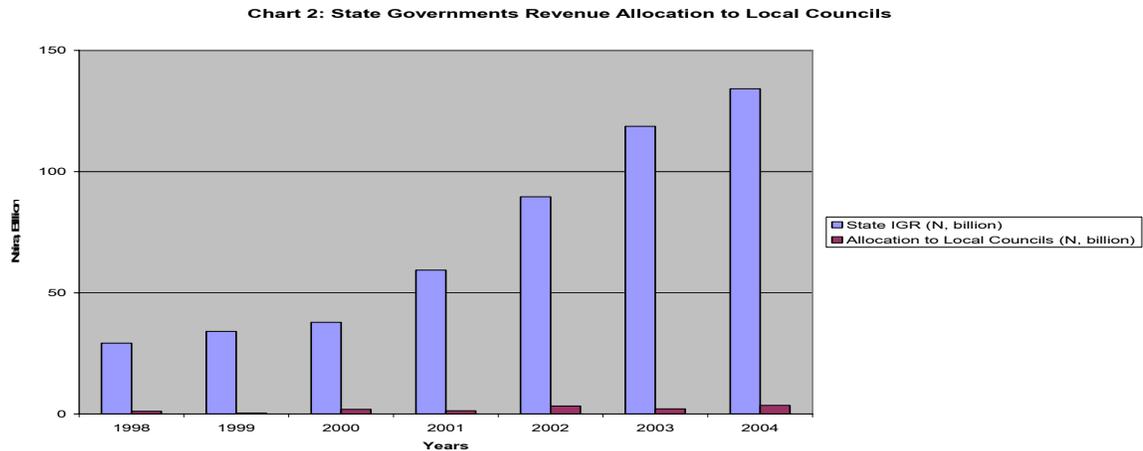
Another important assessment of the performance of revenue-sharing is the evaluation of the rate of compliance to the mandatory 10 % allocation by the state governments to the local governments. For example, between 1998 and 2004, an average of 2.9 per cent of total internally-generated revenue by the state governments was allocated to the local councils across the country, indicating a shortfall of 7.3 per cent. This showed that consistently, the state governments have not honored the required lawful obligations to the local councils (Chart 2).

However, there are variations of compliance across the state governments. The long-term implication of these variations is that the achievement of decentralization in different states will occur at different times and nationally, could be delayed. Nonetheless, recent actions of the Federal Government over withholding of local councils allocations from the distributable revenue in some states is another landmark in the fiscal relationships between the federal and state/local governments in Nigeria.

Table 4: Composition of the Distribution of Centrally-Collected Revenue

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
	In Billion Naira															
Federal Account Revenue	49.3	83.5	98	185.6	187.2	190.7	294.2	343.6	364.7	347.3	712.4	1478	1703	1478	1964	3249
Less:																
First Charge 2/ of which	10.2	38	44	96.2	80.3	76.6	123.6	165	157.5	103	265.9	489	568.2	58.6	143	808.3
Stabilization/Excess Funds	10.2	21.3	21.6	47.5	24.4	5.1	18.6	35	35	0	93	291.5	179.5	12.4	143	808.3
Others	0	16.7	22.4	48.7	55.9	71.5	105	130	122.5	103	172.9	197.5	388.7	46.2	0	0
Federal Account: 3/	39.1	45.5	54	89.4	106.9	114.1	170.6	178.6	207.2	244.3	446.5	989.3	1135	1419	1821	2441
	In Percent															
Federally -Collected Rev.(net) 1/	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Less:																
First Charge 2/ of which	20.7	45.5	44.9	51.8	42.9	40.2	42	48	43.2	29.7	37.3	33.1	33.4	4	7.3	24.9
Stabilization/Excess Funds	20.7	25.5	22	25.6	13	2.7	6.3	10.2	9.6	0	13.1	19.7	10.5	0.8	7.3	24.9
Others	0	20	22.9	26.2	29.9	37.5	35.7	37.8	33.6	29.7	24.3	13.4	22.8	3.1	0	0
Federal Account: 3/ of which	79.3	54.5	55.1	48.2	57.1	59.8	58	52	56.8	70.3	62.7	66.9	66.6	96	92.7	75.1
Federal Government 4/	63.4	56.7	56.7	55.9	54.9	57.7	56	56	56	56.9	55.6	51.8	44.7	52	50.4	47.4
State,Local Govts.&Derivation 5/	36.6	43.3	43.3	44.1	45.1	42.3	44	44	44	43.1	44.4	48.2	55.3	48	49.6	52.6
	In Billion Naira															
VAT Pool Account 7/ (Naira Billion)	0	0	0	0	0	7.3	20.8	31	34	36.9	47.1	58.5	91.8	1.8.6	136.4	159.5
Distribution:																
Federal 8/	0	0	0	0	0	2	7.4	10.8	12.3	9.6	7.6	8.3	13.4	15.5	20	23.8
State	0	0	0	0	0	5	6.3	11.2	13.8	16	28.7	30.6	44.9	52.6	65.9	96.2
Local	0	0	0	0	0	0.3	3.6	4.6	6.8	9.2	9.6	13.9	20.1	18.7	39.6	46
	In Percent															
Distribution:																
Federal 8/	0	0	0	0	0	27.4	35.6	34.8	36.2	26	16.1	14.2	14.6	14.3	14.7	14.9
State	0	0	0	0	0	68.5	30.3	36.1	40.6	43.4	60.9	52.3	48.9	48.4	48.3	60.3
Local	0	0	0	0	0	4.1	17.3	14.8	20	24.9	20.4	23.8	21.9	17.2	29	28.8

Source: Derived from CBN Annual Reports.



Source: Derived from CBN Annual Reports.

## IV Challenges of Tax Assignment and Revenue-Sharing in Nigeria

### IV.1. Current Legal Framework for Fiscal Federalism in Nigeria

The fiscal chapter of the 1999 Constitution of the Federal Republic of Nigeria stipulates the inter-governmental fiscal relations. The constitution maintains an erstwhile division of functions between the various levels of government. However, the state governments, out of its own powers and responsibilities, assign certain functions and duties to the local councils while the constitution gives to the state legislatures the prerogative to create councils. In tandem, the constitution assigns to the Federal Government the power to legislate and collect revenues from company income tax, custom and excise, education tax, custom levies/surcharges, value-added tax and other independent revenue. The National Assembly also, legislates on matters concerning personal income tax but the state governments have administrative responsibilities and, therefore, retain the proceeds which they collect, except for personal income taxes of the personnel of the armed forces and residents of Abuja, FCT.

The constitution assigns to the state governments with the proceeds of the federal tax on motor vehicle licenses and other powers to set rates and retain proceeds on some other minor taxes including stamp duties, business registration fees and lease fees of state lands. Taxing power on properties is assigned to the local governments, in addition to some other minor taxes (Table 5).

Table 5: Nigeria's Tax Jurisdiction 1999

Federal Government	State Government	Local Government
1. Companies Income Tax	Personal Income tax (on residents of the State)	Tenement rate
2. Petroleum Profits Tax	Capital Gains Tax (on individuals only)	Shop and Kiosk Rates
3. Value Added Tax	Stamp Duties (on individual only)	Liquor Licence Fees
4. Education tax (on Companies only)	Road taxes e.g. vehicle licenses	Slaughter slab fees
5. Capital Gains Tax (on Corporate Bodies and Abuja Resident)	Betting and Gumming Taxes	Marriage, Birth and Death Registration Fees
6. Stamp Duties (on Corporate Bodies)	Business Premises and Registration levy	Street name Registration Fees (excluding state and capital)
7. With-holding Tax (on Companies)	Development levy (Max of N100 per annum on taxable individuals only)	Market/Motor Park Fees (excluding State-owned markets)
8. Personal Income tax (on personnel of the Armed Forces, Police, External Affairs Ministry and Residents of Abuja)	Street Name Registration Fees (State Capital Only)	Domestic Animal Licence Fees
9. Mining rents and royalties	Right of Occupancy Fees (State capital only)	Bicycle, Trucks, Canoe, Wheelbarrow, Carts and Canoe Fees
10. Customs Duties (i.e. import Duties and Export Duties)	Market fees (where market is financed by State Government)	Right of Occupancy fees (excluding State Capital)
11. Excise Duties	Miscellaneous revenues e.g. rents on property)	Cattle Tax
12. Miscellaneous revenues (e.g. Farming from Oil states. Rents on property etc –Largely Independent Revenue of the Federal Government.		Merriment fees
		Radio and TV license fees
		Vehicle Parking Fees
		Public Convenience, Sewage and refuse Disposal Fees
		Burial Ground and Religious places permit fees
		Signboard and Billboard Advertisement Permit Fees.

Source: Federal Ministry of Finance

The constitution mentions revenue sharing in Chapter 4, Part C, Section VI, and Paragraph 162. It establishes the "Federation Account" while it describes all federally-

collectible revenue except those classified as 'independent revenue' of the Federal Government as Federation Account revenues. The National Assembly makes laws for the distribution of the proceeds from that account. In addition, the 1999 Constitution maintains that not less than 13 percent of mineral revenues should be transferred to the states on the basis of derivation.

Third Schedule, Part N establishes the central finance commission - Revenue Mobilization, Allocation and Fiscal Commission (RMAFC), with a major change in the scope of the tasks compared with the past. Therefore, the commission is not only to concern itself with the distribution of the divisible revenue but to suggest ways of augmenting the revenue from other sources. In summary, it will examine the entire gamut of issues concerning tax assignment and revenue-sharing in the country.

The constitution provides for the establishment of the state finance commission known as the 'State Joint Local Government Accounts Committee'. It requires that allocations to the local councils from the Federation Account are to be paid in that same account while the States' Houses of Assembly make laws for the distribution across local councils. The constitution stipulates that each state government pays a specified percentage of its internally-generated revenue into the Joint Account. The National Assembly is assigned with the power to specify the percentage of the state allocation to the councils from own internal taxes and fees. However, the state legislatures make laws for the sharing of the state allocation among the local councils.

Current allocations from the Federation Account are: Federal Government (52.68 %); state governments (26.72%) and the local governments (20.60%). Indices for transfers to the states and local governments have remained the same as in the 1981 Revenue Allocation Act. It is important to note that the constitution made no mention of the VAT Pool Account and the Education Trust Fund. Rather it assumes that proceeds from the two sources form part of the Federation Account. In addition, the law makes it mandatory for the state governments to allocate 10% of its internally-generated revenue to the local councils. The sharing formula varies from state to state depending on the laws of the state legislatures (Nigeria, FR,2005).

## **IV.2 Challenges of Tax Assignment and Revenue Sharing in Nigeria**

### **IV.2.1 Fiscal Imbalances- Vertical and Horizontal Fiscal Imbalances**

#### ***Assessment of Vertical Fiscal Imbalance in Nigeria***

The Federal Government initially generates roughly about 96.1 percent of the total general government income. As a result a large vertical fiscal imbalance exists among the tiers of government. For instance, in 1980- 2004 periods, the state and local governments' internal revenues only financed 12.1 percent of their expenditures. In other words, about 87.9 percent of expenditures on the average were financed from statutory and non-statutory transfers from the Federal Government. However, a steady improvement was recorded between 2000 and 2004 periods. Thus, the sub-national government's total expenditure was financed to the tune of 9.9 percent from its own internal revenue sources compared with 1.5 percent during 1993-1999 financial years (Table 6).

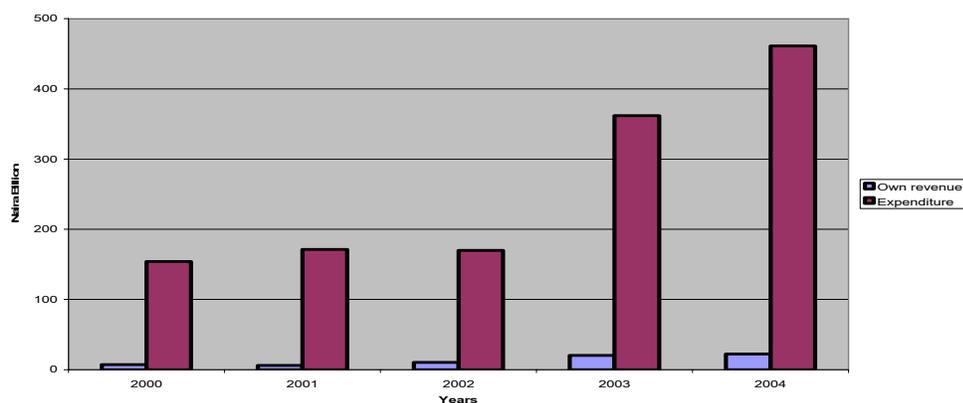
Similarly, studies on local government finance point out that that level of government's internally-generated revenues are able to meet minuscule portion of the total expenditures, which is anywhere between 0.4 and 0.6 percent. In other words, the administration of local taxes is unsatisfactory, reflected in low collections of taxes and fees, and the inability of the local councils to periodically adjust the property values, tax rates, and user charges. The implication is a wide gap between revenue generated and expenditure, which explains a large vertical fiscal imbalance when compared with other levels of government (Chart 3).

Table 6: Assessment of Vertical Imbalances in Nigeria

Years	Expenditure			Own Revenue Generated		Vertical Fiscal Imbalance	
	General Govt.	Federal	Sub-National Govts.	Federal Govt.	Sub-National Govts.	Federal Govt.	Sub-National Govts.
	₦'Billion	₦'Billion	₦'Billion	₦'Billion	₦'Billion	%	%
1980	24.6	15	9.6	15.8	0.1	105.6	1
1981	26.2	11.4	14.7	15.3	0.1	134	0.7
1982	26.3	11.9	14.3	12.1	0.1	101.5	0.7
1983	24.5	9.6	14.9	11.1	0.1	115.2	0.7
1984	19.4	9.9	9.5	11.8	0.1	118.9	1.1
1985	20.9	13	7.9	15.9	1.6	121.9	20.2
1986	24	16.2	7.8	13	1.9	80.1	24.4
1987	33.1	22	11.1	25.5	2.2	115.8	19.8
1988	42.2	27.7	14.5	27.8	2.4	100.2	16.6
1989	58.4	41	17.4	51.3	1.9	125	10.9
1990	87.2	60.3	26.9	68.6	3.5	113.8	13
1991	102.8	66.6	36.2	81.6	3.9	122.6	10.8
1992	142.5	92.8	49.7	195.4	6.1	210.6	12.2
1993	254.9	191.2	63.7	198.4	6.7	103.8	10.5
1994	235.8	160.9	74.9	206	11.9	128	15.9
1995	349.1	248.8	100.3	480.7	18.7	193.2	18.6
1996	444.1	337.4	106.7	524.1	21	155.3	19.7
1997	550.8	428.2	122.6	591.5	29.5	138.1	24.1
1998	674.4	487.1	187.3	475.6	31.4	97.6	16.8
1999	1176	947.7	228.3	969.9	37.6	102.3	16.5
2000	1214.7	701.1	513.6	1945.2	43.9	277.5	8.5
2001	1786.4	1018	768.4	2276.8	68.3	223.6	8.9
2002	1912.5	1018.2	894.3	1799.9	100	176.8	11.2
2003	2509	1226	1283	2629.3	139	214.5	10.8
2004	2964.5	1377.3	1587.2	3941.3	156.6	286.2	9.9

Source : Derived from CBN Annual Reports

Chart 3: Assessment of Vertical Fiscal Imbalance By Local Governments (2000-2004)



Source: Derived from CBN Annual Report, 2004.

***Assessment of Horizontal Fiscal Imbalance in Nigeria***

The wide disparities in tax bases available to each state produce large differences in internal revenue efforts across the state governments. This is attributed to the differences in resource endowments, expenditures, infrastructures and efficiency of tax administration among the states. Thus, it accounts for the large horizontal fiscal imbalance observed in the federation. The financial statements of the state governments showed that only Lagos State generated internal revenue that was able to cover an average of 48.4 percent of its expenditure (recurrent and capital expenditures) in 2001-2004. Of the remaining 35 states, only 9 had internal resources that covered 10 percent of total expenditures on the average in the same period while the rest had revenues that were only able to cover less than 10 percent of expenditures (Table 7).

The major challenge, therefore, is how to design a good inter-governmental transfer system that can reduce the vertical and horizontal fiscal disparities without a threat to secession or break-up being considered. A review of the constitutional responsibilities of the different levels of government with taxes assigned shows a great divergence. The assigned responsibilities to the state and local governments were mainly social services in nature requiring huge financial outlays (Table 8).

Analysis of the consolidated general government social sector expenditure showed that, on the average, the sub-national governments accounted for 61.3 percent of the total in 1998-2004. Apart from 1998 and 2002 fiscal years, the shares of the Federal Government expenditure on social services were lower than that of the sub-national governments in all other years under review (Table 9).

This reflects a huge burden on the sub-national governments if the country is to achieve the Millennium Development Goals (MDGs) by the year 2015. In summary, they will require additional resources either as statutory transfers from the federally-collectible revenue or they should be assigned with some of the high-yielding taxes.

Table 7: Assessment of Horizontal Fiscal Imbalance in Nigeria

State	Internal Revenue (N'Billion)			Total Expenditure (N'Billion)			Horizontal Fiscal Imbalance (Percent)			
	2001	2002	2003	2001	2002	2003	2001	2002	2003	Average
Abia	2.2	0.8	0.8	16.1	14.6	17.0	13.7	5.5	4.7	7.9
Adamawa	0.5	0.4	0.7	11.9	7.1	23.7	4.2	5.6	3.0	4.3
Akwa-Ibom	0.6	2.6	3.9	28.2	32.5	56.7	2.1	8.0	6.9	5.7
Anambra	0.6	1.6	2.4	10.8	26.2	23.7	5.6	6.1	10.1	7.3
Bauchi	0.9	0.7	0.7	13.3	11.9	13.4	6.8	5.9	5.2	6.0
Bayelsa	0.3	0.5	0.5	22.6	34.1	28.0	1.3	1.5	1.8	1.5
Benue	1.6	0.7	0.7	12.6	14.4	16.4	12.7	4.9	4.3	7.3
Borno	0.8	0.7	0.9	15.5	20.6	23.1	5.2	3.4	3.9	4.2
Cross River	0.8	2.2	1.2	14.0	21.6	14.5	5.7	10.2	8.3	8.1
Delta	8.2	6.0	6.3	57.2	63.0	67.2	14.3	9.5	9.4	11.1
Ebonyi	0.2	0.2	0.3	12.0	16.9	15.5	1.7	1.2	1.9	1.6
Edo	0.2	-	1.5	10.5	-	17.3	1.9	-	8.7	3.5
Ekiti	0.2	1.4	0.4	8.1	18.3	10.4	2.5	7.7	3.8	4.7
Enugu	2.2	1.4	1.9	11.8	12.3	17.7	18.6	11.4	10.7	13.3
Gombe	0.5	0.7	1.6	11.7	8.6	17.9	4.3	8.1	8.9	7.1
Imo	1.2	1.2	1.9	16.9	22.4	31.2	7.1	5.4	6.1	6.2
Jigawa	1.1	1.1	0.4	11.5	24.3	16.1	9.6	4.5	2.5	5.5
Kaduna	1.7	1.3	7.1	15.7	24.6	39.9	10.8	5.3	17.8	11.3
Kano	4.3	7.4	2.9	25.3	39.7	44.4	17.0	18.6	6.5	14.1
Katsina	1.1	2.4	1.1	13.6	18.6	12.4	8.1	12.9	8.9	10.0
Kebbi	0.2	0.7	0.5	9.8	14.7	7.6	2.0	4.8	6.6	4.5
Kogi	0.6	1.2	2.0	11.0	19.5	26.0	5.5	6.2	7.7	6.4
Kwara	1.5	0.6	2.2	13.3	16.5	17.7	11.3	3.6	12.4	9.1
Lagos	12.5	29.4	48.4	35.4	58.2	81.5	35.3	50.5	59.4	48.4
Nassarawa	0.9	0.3	0.8	11.3	9.8	13.2	8.0	3.1	6.1	5.7
Niger	0.5	-	0.6	10.7	-	14.8	4.7	-	4.1	2.9
Ogun	2.2	2.6	2.7	17.4	15.6	17.6	12.6	16.7	15.3	14.9
Ondo	1.1	1.1	3.1	21.2	20.1	38.8	5.2	5.2	8.0	6.2
Osun	1.8	2.3	2.0	11.5	18.9	14.2	15.7	12.2	14.1	14.0
Oyo	1.5	1.9	3.5	12.7	10.1	18.9	11.8	18.8	18.5	16.4
Plateau	0.7	1.8	3.2	13.1	19.9	24.4	5.3	4.0	13.1	7.5
Rivers	3.3	12.6	8.8	29.2	37.9	70.2	11.3	33.2	12.5	19.0
Sokoto	0.5	0.8	1.4	11.0	13.1	15.5	8.2	6.1	9.0	7.8
Traba	0.4	0.4	0.5	12.4	10.7	13.8	3.2	3.7	3.6	3.5
Yobe	0.3	0.5	0.5	12.9	11.5	16.0	2.3	4.3	3.1	3.3
Zamfara	0.9	1.2	1.4	10.1	12.2	15.1	8.9	9.8	9.3	9.3

For one thing, the current horizontal revenue-sharing formula favors those states that already have economic and social infrastructures in place. For example, the number of hospital beds and school enrolments are positively related to individual state's stage of development. Certainly, there is no basis for comparison in terms of the number of hospital beds and schools enrolment in Jigawa State with that of Kano State, from where the former was carved out. The revenue-sharing based on internally-generated revenue, population and land mass, again, tend to also favor the well-established states with good economic infrastructure, higher population, and bigger land areas.

Thus, apart from those state governments' allocations influenced by allocations under derivation principle on natural resources revenue, allocations to the well-established states are much higher than the fiscally-disadvantaged state governments. In a nutshell, the existing horizontal revenue-sharing indices cannot achieve the equalization effect across states and local governments as anticipated by the Federal Government. The overall effect is the increasing disparities and uneven development across states and local governments in the country (Chart 4).

Table 8: Assignments of Responsibilities in the 1999 Constitution

EXCLUSIVE LEGISLATIVE LIST	CONCURRENT LIST	RESIDUAL LIST*
Federal Government	State Governments	Local Governments
Accounts of the Federation	Allocation of revenue	Sewage Disposal
Arms, Ammunition, Defence and National Security	Antiquities and monuments	Environmental Sanitation
Aviation, Railways, Federal Trunk Roads and Maritime matters	Archives	Maintenance of Feeder Earth Roads
Immigration & Internal Affairs	Collection of taxes	Primary Education
Financial laws, and currency Issue & Exchange Control	Electoral Law	Payment of Salaries
Census, National Honour & Citizenship	Electric power	Market Stalls
Foreign Affairs and International Treaties	Exhibition of cinematograph films	Rural Health
Creation of States & regulation of political parties National and State elections	Industrial, commercial	Crafts and Small Scale Industries.
Mining & National Parks	Or agricultural development	
Labour, and Public service of the federation	Scientific and Technological Research Statistics	
Patents & trademarks	Trigonometrical, cadastral and topographical surveys	
Legal Proceeding between governments in the federation	University, Technological and Post Primary Education	
Establishment of federal agencies		
Telecommunications		
Public debt of the Federation		
Management of territorial waters		
Weights and Measures		
International trade and commerce		
Formulation, annulment and dissolution of manage		
Nuclear Energy		
Stamp Duties		

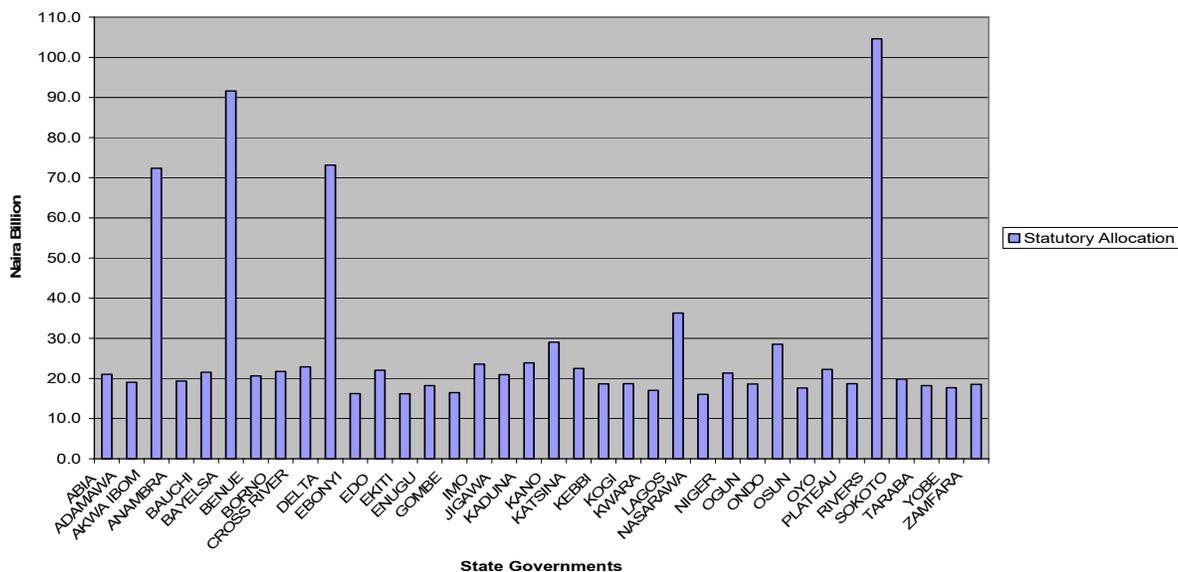
\*Derived from the residual list for states.

Table 9: Social Sector Expenditure Profile in Nigeria

	1998	1999	2000	2001	2002	2003	2004
Capital Exp. On Soc. Service (N Billion)	44.7	51.2	77.7	176.3	416.1	491	497.6
Share of Federal Govt. (percent)	52.3	33.8	36	30.2	53.3	32.2	33.1
Share of State/Local Govt. (percent)	47.7	66.2	64	69.8	46.7	67.8	66.9

Sources: CBN Annual Reports

Chart 4: Total Statutory Allocations To State Govts. in 2005



Source: Federation Account Files January-December, 2005.

Against this backdrop, several agitations have emerged that must be addressed by the Federal Government for a stable federal system. These include:

- agitations on the control of exploitation of natural resources by the state governments as obtained before independence;
- agitations on the increase of the percentage share of the principle of derivation in the distribution of VAT proceeds;
- agitations against the use of number of local governments under the equality principle in the distribution of the shares of that tier of government from the proceeds of the Federation and VAT Pool Accounts. The arguments have been that there are wide gaps in revenue receipts among local councils by states. Thus, state governments with larger number of councils (mostly old states) receive more under the above mentioned principle compared with those states with smaller numbers of councils (new states);
- agitations on the non-distribution of other non-oil revenue sources of the Federation Account on the basis of derivation. The most important non-oil taxes except VAT include company income and customs and excise taxes. The formula for allocation of custom and excise duties, and company income tax did not give any weights to derivation;

- agitations for the inclusion of receipts of education and value-added taxes proceeds as part of the Federation Account, according to the intentions of the 1999 Constitution;
- suggestions that personal income tax administration and collection should be transferred to the Federal Government for better compliance and enhanced revenue;
- agitations by the state governments on the reviews of the vertical and horizontal revenue-sharing systems.

#### **IV.2.2. Enforcing Compliance with the Law on Allocation of 10 percent Internally-Generated Revenue to the Councils by the State Governments.**

Another major challenge of tax assignment and revenue-sharing in Nigeria is the enforcement of compliance by the state governments to allocate 10 percent of their internally-generated revenue to their local councils. The existence of vertical fiscal imbalance in respect of state governments and local governments, and horizontal imbalance across local governments has necessitated this constitutional requirement.

The local governments serve as the grassroots governments and, therefore, a lot of social services expenditure burden is placed on them. This will, therefore, require a substantial transfer of funds from the state governments to the local councils in addition to the statutory and non-statutory transfers from the Federal Government to enable them meet their expenditure expectations on the MDGs. Evidence has shown that the state governments over the years have continued to flout this requirement. Hence, the task before the Federal Government is on how to ensure compliance with the constitutional provision and the law

#### **IV.2.3. Modality for the Sharing of Transfers from Federation Account to Local Councils by the State Governments**

Recent developments point to the confusion emanating from the constitution in terms of the sharing of the allocations from the statutory accounts among the local governments in the states. Whereas the constitution grants the state legislatures the powers to make laws for the distribution of these transfers, the Federal Government is insisting that the transfers are exclusively, meant for those local councils created before the 1999 Constitution. This controversy emerged as a result of the unprecedented creation of local governments by the state governments. Meanwhile, the state governments are invoking their powers in the constitution to create local councils.

This impasse has resulted in most of the cases, the withholding of the shares of the councils from the centrally-distributable revenue in some of the states. The development, therefore, does not augur well for the good governance at the level of the councils and could delay the decentralization process. In this regard, the major challenge for the Federal Government is to find a permanent solution to this problem in the interest of the local government administration and finances.

#### **IV.2.4. Establishment of a Good Statistical Base for the Horizontal Revenue-Sharing Across State and Local Governments**

Good revenue-sharing arrangements without an acceptable statistical base for calculating the indices for each sub-national government, for the purpose of determining each government share, could also generate tension and confusion. This was a major impediment in the implementation of the fine recommendations of Louis Chicks Fiscal Commission of 1953. Thus, the current task before the Federal Government is on how to generate a good data for the horizontal distribution of federally-collectible revenue to the sub-national governments.

### **IV.3 Policy Options for Reforms of Tax Assignment and Revenue-Sharing Arrangements in Nigeria**

#### **IV.3.1. Increasing the Fiscal Capacities of the States and Local Governments**

The current debate is that, sub-national governments in Nigeria, lack the financial capacities to carry out some of the assigned responsibilities and, therefore, the suggestion is to trim down these responsibilities. However, this will move Nigeria towards a unitary system of government. With this regard, the option is to improve the sub-national governments' fiscal capacities through partly, modifications of assigned taxes and introduction of other more reliable taxes as follows.

The introduction of state excise taxes on alcoholic beverages and tobacco products is a good example for new tax assignment to the state governments. This form of tax would be politically acceptable as a means of financing state governments' expenditures on health care services. The new tax system is expected to be a residence-based tax and does not eliminate excise tax by the Federal Government (such as practiced in Mexico)<sup>5</sup>.

In particular, personal income taxes form a major component of tax assignment to

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<sup>5</sup> See Walsh C., 1996 pg 115

the state governments. Evidence over the years has shown that yields from the personal income have been low. Consequently, in view of the performance of VAT compared with the former sales tax, there are new suggestions that the Federal Government should be encouraged to takeover the administration of personal income tax. However, we differ with this suggestion, rather we proffer that the powers to set rates, in addition to the existing administrative responsibilities should be transferred to the state governments. This will enable them to adjust rates, depending on their economic circumstances and revenue needs.

The constitution has recognized that property rate is intrinsically local in character and assigns it to the local governments. However, concerned with the stagnation in yields from the tax, we suggest a reform in this regard on the grounds of cost efficiency and higher compliance rate. Thus, the administration of property tax should be placed under the purview of the state governments while the proceeds should be given to the local councils, with a surcharge of not more than 10.0 percent to cover administrative costs. Thus, besides increasing revenue, it will also reduce tax evasion and avoidance. Another area in which the councils could increase their tax revenue is through entertainment tax on birthdays and burial ceremonies, taxes on advertisement in their localities, and cost recovery charges, such as tolls for use of local roads and other user charges. Again, more substantial taxes on fairs and markets or a local business license tax (as practiced in Germany) based on actual turnover could be pursued by the local councils to enhance their internal revenue base.

#### **IV.3.2 Inclusion of the Education Tax and VAT in the Federation Account**

One thing that has emerged clear with the coming into force of the 1999 Constitution is that the fate of the Education Trust Fund cannot be different from that of the Petroleum (special) Trust Fund. By extension education tax revenue is now part of the Federation Account Revenue and should be paid into that account. The VAT Pool Account should be abolished and merged with the Federation Account for simplicity and transparency as well as in conformity with the constitutional provisions.

#### **IV.3.3 Review of the Vertical Distribution Formula**

To further boost statutory transfers to the sub-national governments, the revenue-sharing formula should be reviewed. A notable feature of Nigeria's federal fiscal arrangements is the multiple channels of transfers from the Federal Government to the sub-national governments. Some are statutory transfers such as the Federation

Account and VAT revenues while others are plan transfers in the form of grants-in-aid. Plan transfers include transfers from education tax revenue and transfers in respect of Universal Basic Education (UBE), Basic Primary Healthcare and others. Therefore, considering the needs of the states and local councils to meet their different expenditure outlays, this paper considers a consolidated revenue transfers that is based on a tax-by-tax sharing system. However, the percentage allocation to each tier of government can be determined by proper bargaining, depending largely on the expenditure needs of each tier of government on social services, internal security and defense. We, therefore, suggest a sharing formula below:

Table 10: Suggested Vertical Distribution of Revenue in the Nigerian Federation (in percent)

	Federal	State	Local Councils	Derivation	Total
Oil Taxes & Revenue	52.5	32.5	15.0	20.0	100.0
Company Income Tax	50.0	50.0	-	5.0	100.0
Customs & Excise	50.5	30.0	19.5	5.0	100.0
Value -Added Tax	30.0	40.0	30.0	20.0	100.0
Education Tax	30.0	70.0	-	-	100.0
Average	42.6	44.5	12.9	-	100.0

The suggested vertical distribution in Table 10 is based on the following assumptions:

- that the funding of primary education should revert to the states while the federal and local councils participations are restricted to design and implementation, respectively. Basically, from experience over the years, the local councils lack the capacities to have this function assigned to them not only in terms of funding, but also administration;
- that the state governments' expenditure on social infrastructures will continue to rise and remain higher than that of the Federal Government;
- derivation should apply on a tax-by-tax basis and directly on the outstanding receipts before distribution. In view of this, derivation becomes a first charge on all revenue items except for education tax. This is mainly to serve as an incentive to state governments;
- this formula assumes the exclusion of special funds;
- the inclusion of education tax and VAT revenues in the federation account and the abolition of the individual taxes disbursement mechanisms;
- education tax should strictly be earmarked for the purpose except if abolished under the new tax reforms; and
- that the state governments should adjust regularly, the amount of state allocation to the councils.

The new options allocates to the Federal Government (42.6%), state governments (44.5 %), and local governments (12.9%) of total federally-collectible revenue. The objective here is to increase statutory transfers and decrease grants. This generally will remove the political-influence factors associated with federal grants in the inter-governmental transfers. Thus, the consolidation of all transfers as statutory revenue-sharing makes these transfers explicit and predictable.

#### IV.3.4 Review of the Horizontal Revenue-Sharing Formula

Revenue-sharing across the sub-national governments can be shared on a tax-by-tax basis, applying different weights and principles. The table below attempts to play down on most of the objections facilitating agitations in the horizontal revenue-sharing system. The suggested distribution profile did not recognize the principle of tax efforts while it de-emphasized the principle of geographic area (landmass/terrain). For instance, emphasis on equality principle is to help those disadvantaged sub-national governments with low per capita income compared with national standard to have more fund for infrastructural development, thereby, encouraging private investment to boost economic activities in their respective states and local councils. If the emphasis placed on the principles of equity is adopted it will achieve the equalization effect across the sub-national governments and reduce considerably the unintended advantages to the well-established states and local councils in the current distribution system.

Under the principle of social development factors, there is a recognition of the inverse of all the sub-factors and considerable weight given to them. It is believed that the implementation of this will encourage an even social development across the sub-national governments. These principles and the associated percentages are also, recommended for revenue distribution to local governments. However, the use of the number of local governments under equality of states should be abrogated since the power to create local governments has been reverted to the state governments.

Table 11: Suggested Horizontal Distribution of Revenue in Nigeria

Revenue Sources	Population	Landmass/ Terrain	Equality	Social Factor	Inverse of Social factor	Total
Oil Taxes & Revenue	20	5	60	5.5	9.5	100
Company Income Tax	10	10	60	10	10	100
Customs & Excise	30	0	60	5	5	100
Value Added Tax	25	0	60	7.5	7.5	100
Education Tax	0	0	40	30	30	100

#### IV.3.5 Compelling the State Governments to Allocate the Mandatory 10 % of their Internal Revenue to the Local Councils

The Federal Government should establish a standard format to enable it monitor this aspect of the constitution and stiff penalty stipulated in the law. For instance, it could be recommended that failure to comply, the fiscal commission should deduct the outstanding amounts from individual state government's share from the Federation Account. Thus, the States House of Assembly should endeavor to monitor the compliance of the law. In addition, the state finance commission should be properly constituted. Rather than allow the officials of the state's ministry of finance to dominate the committee, it should be made an independent body like the RMFAC. The objective of these reforms is to make the transfer system predictable, measurable and transparent. The proportion for distribution should be automatically adjustable to inflation. Although the criteria for distribution among the local councils need to vary from state to state because of differences in local situations, this should not be an impediment to the earlier achievement of decentralization in the country. Consequently, we suggest this framework below for adoption according to local conditions.

Table 12: Framework for Revenue-Sharing to LGs.

Criteria	Weights
Derivation	10%
Population	30%
Equality	30%
Own revenue efforts	10%
Geographic Area:	10%
Rural Area	-4%
Urban Area	-6%
Social Factors:	10%
Direct	-5%
Inverse	-5%

The principles underlying this framework, is that apart from the size of local governments represented by the population and geographical area (which are major determinants of the financial needs of the councils), revenue-sharing should be complemented by set of criteria, which measure efficiency by the revenue-generating efforts of local councils, and equity by the level of local income per capita. Thus, the equity principle favors the fiscally-disadvantaged councils while the former is an encouragement to those high revenue-generating councils for their efforts.

#### **IV.3.6 Constitutional Amendment on the Distribution of Proceeds from the Federation Account**

The Federal Government should pursue vigorously the amendment of the constitution in the area of the power of the state legislatures to create local councils. Thus, the National Assembly can be given the confirmation authority based on the available resources. The main implication of the excessive creation of councils is that, the available funds will be spent on mere administration rather than on economic and social infrastructures. Thus, there is the need to amend the chapter of the constitution dealing with the creation of local councils for a proper decentralization in Nigeria.

The Federal Government through the RMFAC should establish a good and acceptable statistical base for the purpose of revenue-sharing across the sub-national governments. This is in terms of derivation, population, and geographic area. This should also, be reviewed at regular intervals through independent surveys.

### **V Summary and Conclusion**

The paper described the basis of tax assignment and revenue sharing in a federal system. The evolution of tax assignment and revenue-sharing arrangements in Nigeria were also discussed. The result of the review indicates that in the earlier periods of the Federation, fiscal decentralization was encouraged by granting high revenue-yielding taxes to the regions. However, with the coming of military rule in 1966 marked the beginning of the erosion of the taxing powers of the sub-national governments and the concentration of national financial resources in the hands of the Federal Government. Consequently, from 1967/68 fiscal year, a notable feature has been the growing vertical and horizontal fiscal imbalances in the Federation in terms of fiscal capacities of the various levels of government and across the federating units. These have generated debates threatening the existence of the nation and suggesting a likely break-up.

The introduction of democratic rule in 1999 has generated new issues namely: inadequate fiscal autonomy for the states and local governments, poor federation account distribution formula, lack of fairness in the distribution of non-oil federal taxes, the control of the exploitation of natural resources, etc. Options were proffered for reforms in the financial transactions and the fiscal relationships in the Federation. These suggestions include: the strengthening of state internal revenue bases through the introduction of state excise taxes on alcoholic beverages and tobacco products,

etc; adjustments on the vertical and horizontal revenue-sharing formula; adoption of a tax-by-tax sharing system; entrenchment of the derivation principle in the distribution of all revenues collected centrally; the transfer of education tax to the federation account and the merging of VAT revenue with the same account; effective compliance with the allocation of the mandatory 10 % of state governments' internally-generated revenue; the amendment of the constitution to reduce the powers of the state legislatures to create local governments; and the establishment of an acceptable statistical base for revenue distribution across state and local governments.

The paper concludes that changes to the existing tax assignment and revenue-sharing arrangements will go a long way in protecting our nascent democracy. It will also reduce agitations and tensions in the system while it will facilitate the stable provisions of public services across the sub-national governments.

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# Perspectives on the European Monetary Union: Lessons for the Economic Community of West African States (ECOWAS)

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J. E. L Sagbamah\*

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*The attainment of the European Monetary Union (EMU) under the auspices of the European Union (EU) was a product of effective planning and sequencing of programmes. The establishment of political institutions such as the European Council, Assembly, Court of Justice and, particularly, the European Commission provided the general framework and direction for the achievement of the EMU. In addition, specialized institutions such as the Sectoral Commissions, European Monetary Institute (which was later transformed into the European Central Bank) and the European System of Central Banks provided technical support for driving the EMU project. These institutions nurtured and fostered the political, social, market, financial, infrastructural, production, economic and monetary sectors of integration. The EU experience had significant integration implications for currency, money market, capital market, foreign exchange market, reserves management and economic policy. It also had implications for the non-EMU members referred to as the derogation countries. The overall EU experience has profound and important lessons for the Economic Community of West African States (ECOWAS) in its drive to provide the needed political will, social enlightenment campaign and mobilization for the acceptance of integration, as well as the provision of standardized products and financial markets. It also reveals the levels of basic infrastructure, production and overall economic structure that are needed to be in place, before transiting into a monetary union.*

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**Author's e-mail:** [jelsagbamah@cenbank.org](mailto:jelsagbamah@cenbank.org)

## I. Introduction

**F**or about 30 years of its existence, the Economic Community of West African States (ECOWAS) has been saddled with the task of integrating the economies of member countries. The initial programme envisioned for ECOWAS integration was to achieve a common market, a much higher level of integration than a free trade area or a customs union.

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\* The author is a Senior Economist with the Monetary Policy Department, Central Bank of Nigeria. The views expressed herein do not represent the views of the institution to which the author is affiliated. The author acknowledges the comments and suggestions of anonymous reviewers. All remaining errors are the author's responsibility

However, the ultimate ambition of the founding fathers was to transit further from a common market to an economic and monetary union, the highest level of integration. At the level of a common market, ECOWAS members were expected to dismantle tariffs, ensure free movement of goods and services, free mobility of labour and capital. These would foster the exchange of ideas, improve financial intermediation, promote technological advancement, ensure efficient resources allocation and engender higher level of production of goods and services for a larger market that will emerge in the sub-region. Such an enlarged market will provide the benefits of comparative advantage and economies of scale. These were the ideals and other basic architecture which the European Union (EU) provided before implementing the monetary union.

In the case of the ECOWAS, the progress made since its establishment through the Treaty of Lagos on May 28, 1975, has been unimpressive. For instance, the ECOWAS trade liberalization scheme intended to free trade, facilitate human and capital mobility has met with limited success. Tariffs have not been dismantled by members who have continued to administer different customs declarations and valuation methods. As such, few countries that have complied with the tariffs and customs harmonization are losing revenue. In deed, those losing revenue are not being compensated to encourage them in implementing the scheme further. Numerous check points exist on roads and ports where taxes of various descriptions are extorted from commuters. Also, the lack of transportation and telecommunications networks, linking member states, have not only impeded trade but also increased the cost of doing business. Furthermore, the non-harmonization of trade and investment policies in the sub-region has discouraged investors in establishing businesses in member states. Some member countries still pay allegiances to their colonial masters and thus, maintaining strong trade links with Europe rather than with regional members. Consequently, intra-regional trade has been limited in scope. The inefficiency of the existing clearing system, the lack of political will on the part of ECOWAS member states and the existence of other sub-regional monetary unions within the ECOWAS, have all contributed to the poor performance recorded thus far.

In the light of the above constraints to the integration process in the West African sub-region, this study provides a comprehensive review of developments in the EU and more importantly, the various landmarks on the roadmap for achieving the European Monetary Union (EMU). It also provides a comparative analysis from

which to draw lessons of experience to guide and also to inspire ECOWAS member states to attain a monetary union in the sub-region.

To achieve the objectives of this study, the paper is organized into seven parts, with this introduction as Part I. It is followed by Part 2 which provides a theoretical framework for regional integration, while Part 3 traces and highlights the evolution and institutional developments of the EU. Part 4 discusses in details the major programmes, projects and policies which led to the attainment of the EMU; Part 5 undertakes a comprehensive review of ECOWAS integration efforts, thus highlighting the historical evolution, institutional development and drawing a comparative analysis of EU's lessons of experience for the ECOWAS and also indicating the sequencing of integration. Part 6 highlights policy recommendations for the ECOWAS sub-region, while Part 7 summarizes and concludes the study.

## **II. Theoretical Framework for Regional Integration**

The term "regional integration" is an aspect of international economics, but its usage according to El-Agraa (1999), quoting Machlup (1977), was relatively unknown until 1942. Schiff and Winters (2003) however note that the practice of regional integration has been in existence for hundreds of years. For instance, in 1664, France proposed a customs union, while Austria signed free trade agreements with five neighbouring countries in the 18<sup>th</sup> and 19<sup>th</sup> centuries. Indeed, the authors asserted that preferential trade agreements were the basis for colonial empires, while customs union arrangements led to the creation of the states of Germany, Italy and the United States.

By the 1950s, the term became widely used and defined by economists as "a state of affairs or process which involves the amalgamation of separate economies into larger free trading regions" (El-Agraa, 1999). More specifically, El-Agraa defines regional integration as the "discriminatory removal of all trade impediments between at least two participating nations and with the establishment of certain elements of cooperation and coordination between them".

### **II.1 Reasons for Regional Integration**

Countries forming regional integration agreements are usually persuaded by a number of reasons which can be broadly classified under political and economic reasons.

### **II.1.1 Political Reasons for Regional Integration**

The amalgamation of countries to form a monolithic entity through a regional integration agreement creates a formidable political group governed by regional laws, rules and regulations. As a group with a large territorial boundary, market, economic opportunities and pooling of sovereignty, it commands respect between and among other nations. It could use its bloc power for negotiations and achieve better bargains than if such negotiations are undertaken by individual countries. Therefore, small countries under the regional bloc stand to benefit. This was one of the major considerations when the idea of the EU was conceived by the founding fathers. Indeed, the political unity of Europe was very paramount in the EU architecture in order to foster peace and security, strengthen their ideological perspective and also compare favourably with other large nations such as the United States of America.

Furthermore, under a cover of regional integration block, smaller countries are strengthened against any external threat or aggression. Also, following the application of common regional rules and regulations, these countries adopt democratic best practices in governance which facilitate and sustain internal peace and security. The benefits of these political factors are given higher weights when some countries enter into regional integration agreements.

### **II.1.2. Economic Reasons for Regional Integration**

For other countries, the *raison d'être* for entering into a regional integration agreement is largely economic. As a group, the region provides a large market with lots of potentials for member states than the small markets of individual countries. Apart from the large market size with inherent potentials, the security of market and access following the removal of trade barriers for member states are relative advantages they have over other countries in the rest of the world. The market size will encourage increased production, competition, enhance efficiency and thus promote trade – these, according to Schiff and Winters, are the explicit objectives in the treaties establishing some regional integration agreements. As countries increase production to meet market demands or requirements, this promotes economies of scale which leads to lowering of prices and cost of production. Other economic benefits that could arise following market competition are application of technological advances and promotion of factor mobility. The combined effects are the production of cheaper products for member states which enhance intra-regional trade and also secure improved terms of trade with third countries. Furthermore, as competition improves to take advantage of market potentials, coupled with regional

common policies and complemented by domestic policies to provide an enabling investment-friendly environment that attracts foreign investment and technology, particularly foreign direct investment (FDI), these will boost the productive capacity of countries in the region.

Under the cover of a regional group, this provides member countries the opportunity to act in concert to undertake domestic economic reforms and implement sound policies to achieve better economic management. Overall, countries will benefit from high economic growth and development, increased employment opportunities, high incomes and better standard of living for their citizens.

El-Agraa (1999), however, warns that there is no guarantee that these economic gains could be achieved; much will depend on the choice of regional integration and the competitive behaviour existing prior to regional integration; otherwise, regional integration could worsen the situation.

## **II.2 Types of Regional Integration**

Regional integration agreements vary in type, structure and scope. These include free trade area, customs union, common market, economic union and monetary union. Each of these, in terms of structure and scope, is an improvement and of a higher level than the other.

### **II.2.1 Free Trade Area**

In Free Trade Areas (FTAs), member states agree to abolish internal tariffs and other quantitative restrictions within the group. However, each participating state is allowed to maintain its tariff against third countries. Essentially, the sole objective of FTAs is to promote trade. Examples of FTAs are the European Free Trade Association (EFTA), the Preferential Trade Area (PTA) for Eastern and Southern Africa, the North American Free Trade Agreement (NAFTA), Association of Southeast Asian Nations (ASEAN), etc.

### **II.2.2. Customs Union**

Customs Unions (CUs) share similar characteristics as FTAs, these involve the removal of internal tariffs and other discriminatory measures against trade; but in addition, member states erect common external tariff (CET) against the rest of the world. The dissimilarity between FTAs and CUs are the application of CET and rules of origin if a member in FTA indulges in trade deflection. Trade deflection takes place

when a member in FTA with the least external tariff imports goods from a third country and re-exports them to member states. Customs unions, therefore, guarantee free trade for members and also erect protective barriers through CETs. The CETs give rise to the incidence of trade creation and trade diversion. Trade deflection differs significantly from trade creation (TC) which is the import of cheaper products from a partner country than expensive ones from a third country. The inverse of TC is trade diversion (TD) which represents the import of expensive products from a partner country than cheaper ones initially imported from a third country. Examples of CUs are the Mano River Union (MRU), the Southern African Customs Union (SACU), Arab Common Market, Caribbean Community and Common Market (CARICOM), etc.

### **II.2.3 Common Market**

In addition to the complete removal of internal tariffs and erection of CETs, common markets (CMs) include factor mobility of labour (persons), capital, investment, technology, industry, etc, and the introduction of common rules to ensure fair competition and standards. Thus, CMs are higher levels of regional integration than FTAs and CUs. Examples are European Union (EU), Arab Magreb Union (AMU), etc.

### **II.2.4. Economic Union**

Economic Unions (EUs) add to the features of CMs, the harmonization of social and economic policies. In other words, economic policy harmonization involves the setting of targets on fiscal, monetary, exchange rate policies for member states. In effect, member states apply the same policies across. EUs are much higher level of regional integration than FTAs, CUs and CMs. Before the introduction of the euro on January 1, 1999, the EMU was indeed an economic union. Also, the West African Monetary Zone (WAMZ) and ECOWAS are still implementing FTA, CU, CM and EU in *pari passu*.

### **II.2.5. Monetary Union**

Monetary Unions (MUs) possess all the characteristics of EUs but the distinguishing feature are the phasing away of all members' national currencies, adoption of a single currency (which El-Algraa (1999) referred to as exchange rate union) and the establishment of a common central bank to conduct a common monetary policy. Examples of monetary integration or union are the West African Economic and Monetary Union or Union Economique El Monetaire Ouest Africaine (UEMOA) and the most prominent and influential among all regional integration is the European Monetary Union (EMU).

### **III. The Historical Evolution and Institutional Development of the European Union**

#### **III.1 Historical Evolution of the European Union and European Monetary Union**

The journey to the formation of the EMU commenced in 1951, when the governments of six European nations, namely Germany, Belgium, France, Italy, Luxembourg and the Netherlands signed the Treaty of Paris for the establishment of the European Coal and Steel Community. By 1957, the same countries signed the Treaty of Rome which founded the European Economic Community (EEC). The EEC which was later re-named the European Union (EU), however, commenced effectively in 1958. The objectives of the EEC included the integration of European economies into a common market to promote higher economic growth and development, ensure regional stability, increase the standard of living of its people and develop closer relations among member states. To actualize these lofty objectives of the EEC, four major institutions were established, these are the Assembly, Council, Commission and Court of Justice. Of these institutions, the Commission and the Council had and still have the responsibility for the development of economic and political ideals of the EEC. The Commission makes all proposals for the ratification of the Council (Adedeji, 1990 and Dolan 1990).

Among the early proposals, was the removal of tariff barriers to pave way for the transition to a common market. Though tariffs were removed in the 1960s, the 1970s and early 1980s, not much progress was made to achieve the goal of a common market. Indeed, other than some relative growth in intra-European trade, European markets were still subdivided along national configurations. In spite of these problems which militated against the smooth transition to a common market, the political ambition of the founding fathers of the EEC was to transform Europe into a gigantic economic power, a United State of Europe (USE), an equivalent of the United States of America (USA). The move for the realization of this dream was initiated in 1970. Popularly known as the Werner's Plan, named after the then Prime Minister of Luxembourg, the plan was conceptualized and designed for Europe to attain a monetary union in that decade. The plan included the establishment of an European Community Central Bank which would foster and nurture a European monetary Union. On the basis of this plan, the European Commission on October 30, 1970, submitted a memorandum which proposed the establishment of an European Economic and Monetary Union. Though, a monetary union could not be realized in

that decade, it led to the establishment of the European Monetary System (EMS) in March 1979. The EMS comprised three major parts, namely an Exchange Rate Mechanism (ERM), European Currency Unit (ECU) and European Monetary Cooperation Fund (EMCF). They were established to ensure monetary stability and close monetary cooperation amongst member countries. Furthermore, in 1986, the introduction of the Single European Act, which specified the removal of physical, technical and fiscal barriers to ensure complete realization of a common market, brightened the prospects of EMU, and by 1990, the Schengen Agreement eliminated border checks.

In 1992, the Maastricht Treaty set the conditions necessary for the formation of an economic union, a major foundation preceding the introduction of EMU. It was in this same year, specifically February 7, 1992, that the EEC adopted the name European Union. The treaty specified criteria which member countries should achieve in order to participate in the EMU. These criteria referred to as the convergence criteria, included low inflation, long-term interest rate, budget deficit to gross domestic product (GDP) ratio, national debt to GDP ratio and adherence to the existing ERM arrangement. The reference ratios for inflation and long-term interest rates, budget deficit and national debt to GDP set for 1996 were 2.3, 9.1, 3.0 and 60.0 per cent, respectively. The performances of member countries in 1997 were used to set the figures for interest and inflation rates in 1998; and by May 1998, on the basis of each country's performance, the European Council decided which of the countries qualified to join EMU on January 1, 1999. At the level of the EMU, participating countries lost their national powers over some economic policies, especially monetary policies, for adopting a single currency. These powers were transferred to a supranational body (the European Central Bank (ECB)) to formulate and coordinate such policies for the entire region. Consequently, the European Monetary Institute (EMI) which was established on January 1, 1994, to serve as the forerunner transformed into the ECB with the responsibility of conducting monetary policy.

Of the 15 member countries of the EU in 1998, 11 of them (Germany, France, Belgium, Luxembourg, Italy, Netherlands, Spain, Ireland, Austria, Portugal and Finland) were adjudged by the European Council to have met the convergence criteria set for the formation of the EMU. Britain has since opted out of the EMU project owing to the arrangement to adopt a single currency other than the Pound Sterling. The other three countries that could not meet the criteria for joining the EMU were Denmark, Sweden and Greece. Greece subsequently qualified. The EMI

which was transformed into the ECB in 1998, made all the necessary preparations for the historic launching of the single currency called the Euro on January 1, 1999, to signal the commencement of EMU. On this day, the German mark, French franc, Italian lira, Austrian shilling, Belgium franc, Luxembourg franc, Dutch guilder, Spanish peseta, Portuguese escudo, Irish punt and Finish markka were determined at 1.95, 6.56, 193, 6.27, 13.76, 40.34, 2.20, 166.39, 200.48, 0.79 and 5.95 to one euro, respectively. However, the euro did not go into physical circulation until the year 2002. It was only used for non-cash transactions, such as payments by cheques, credit cards and bank transfers. In 2002, eight euro coins and seven euro notes were introduced and circulated side-by-side with the national currencies (Guardian, 2002). The transition period was from January to June, 2002, after which, all national currencies were withdrawn from circulation. In effect, on July 1, 2002, the euro became the only legal tender among the participating countries.

Ten new countries were admitted into the EU in May, 2004, thus raising the total membership to 25. These countries, comprising Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia are, however, not in the euro zone area, bringing to 14 the total number of countries outside the euro area. On January 1, 2005, Greece was admitted to join the EMU; consequently the non-EMU members outside the euro zone have reduced to 13.

### **III.2 Institutional Development of the European Union and European Monetary Union**

The EU march towards the realization of the EMU, progressed successfully through the establishment of necessary institutions which served as the pivots for rapid integration. These institutions designed, formulated and provided logistic support for the implementation of policies, programmes and projects.

#### **III.2.2 Political Institutions**

These are the Council, Assembly, Court of Justice and Commission.

**The Council:** The executive arm comprising Presidents/Heads of State and Government that make decisions for the smooth operations of the EU and EMU.

**The Assembly:** The legislative arm that enact laws for governing the region

**The Court of Justice:** The judicial arm that interprets laws and adjudicates between and among participating states.

**The Commission:** This is the think-tank for major policies, programmes and projects proposals and implementation.

### **III. .2.3. Specialized institutions**

These include Sectoral Commissions, European Monetary Institute (EMI), European Central Bank (ECB) and the European System of Central Banks (ESCB).

#### ***Sectoral Commissions***

Under the Commission, there are nineteen (19) sectoral commissions headed by commissioners (Financial Times, July 10, 2000) who oversee the development of the following sectors: (a) Commission Reform; (b) Parliament/Energy/Transport; (c) Competition; (d) Agriculture; (e) Information/Society; (f) Internal Markets; (g) Research; (h) Monetary Affairs; (i) Development; (j) Enlargement; (k) External Affairs; (l) Trade; (m) Consumer/Food Safety; (n) Regions; (o) Budget; (p) Environment; (q) Justice/Home Affairs; (r) Employment/Social; and (s) Education/Culture

#### ***The European Monetary Institute (EMI)***

The EMI was established on January 1, 1994. It was based in Frankfurt, Germany. It served as the forerunner to the emergence of the ECB and the formation of the ESCB. The EMI was therefore charged with the responsibilities of developing a set of monetary instruments for the ESCB, the setting-up of a statistical databank and the preparation of euro bank notes. Also, the EMI served as the coordinating central bank among national central banks until it was succeeded by the ECB in May 1998.

#### ***The European Central Bank (ECB)***

As discussed above, the EMI was in May 1998, transformed into the ECB. Statutorily, the ECB's main function is to design, formulate and implement European-wide monetary policy, using policy instruments, particularly the money market interest rate. The ECB is an independent central bank. The Maastricht Treaty forbids it to be accountable to any European government or politicians. It is designed specifically to target inflation and ensure price stability.

#### ***The European System of Central Banks (ESCB)***

The ESCB is made up of members of the ECB and the central banks of EMU member states. The ESCB functions, among others, include issues on the operational aspects of central banking, such as the regular money market operations, funds transfer, management of international reserves of member states, issuance of euro bank-notes, lender-of-last resort and prudential supervision, etc. The ESCB members guide these

roles, particularly, the right to conduct money market operations in order to safeguard their respective local financial markets.

#### ***Other Specialized Agencies***

These include the European Regional Development Fund (ERDF) which provides financial and technical assistance to its overseas dependencies such as the Yaoundé and Lomé Conventions; the European Investment Bank (EIB) provides funds for the development of projects in the backward areas of the union; European Social Fund (ESF) financial support to workers displaced in the integration process; member states financed the development of infrastructures such as roads, rails, air and water transportation as well as telecommunications to link Europe; European research and development (R&D) activities led to the successful development of ESPRIT (aeronautics), RACE (satellite), BRIT (computer), ARAIN (satellite), EUROPE AIRBUS, European Atomic Energy Community (EURATOM) (Adedeji, 1990).

### **IV. Major Programmes, Projects, Policies and the Implications for the Achievement of the European Monetary Union**

Under this section, major programmes, projects, policies and their implications which contributed significantly to the achievement of the EMU would be discussed and analyzed in details.

#### **IV.1. European Monetary System (EMS)**

It was not until March, 1979, that the drive towards a monetary union was firmly initiated through the introduction of the EMS. The EMS was the first practical step towards ensuring some degree of monetary cooperation and stability among member states. The EMS was structured into three major units, namely, the European Currency Unit (ECU); the European Exchange Rate Mechanism I (ERM I); and the European Monetary Cooperation Fund (EMCF) (Bundus, 1990).

The ECU was an artificial currency that linked member states' currencies and played very important role in exchange rate management, and also ensured monetary stability. Each member state had defined units of its currency in relation to the ECU. Thus, the ECU served as a common denominator for the conversion of members' currencies to settle transactions. The ERM I on the other hand provided the mechanism for ensuring exchange rate stability among currencies of member countries to guard against currency volatility. In this regard, the specified band which defined the margins of fluctuation was a plus or minus 2.25 per cent; though Italy

opted for a wider 6 per cent band. The band was revised upwards in 1993 to a plus or minus 15 per cent. The methods of intervention varied from the application of various domestic policies to outright buying and selling of national currencies which was supported through the provision of credit facilities.

Bundus (1990) and Phillips (1990) highlighted the credit facilities which were classified into three categories, namely **the very short-term facility, the short-term monetary support facility and the medium term financing facility**. While the very short term facility required the participating states' central banks to provide unlimited and automatic credit to a member whose exchange rate required immediate intervention, the short term monetary support credit facility, on the other hand, was based on the value of an assigned creditor quota or debtor quota when faced with temporary balance of payments deficit or a sudden short-fall in external reserves. The medium term financial assistance also provided loans for supporting a more serious balance of payments problem. The credit fund provided was ECU 25 billion, comprising ECU 14 and ECU 11 billion short-term monetary support and medium term financing facilities, respectively. The EMCF was an ECU fund established to facilitate the settlement of transactions. In other words, the fund was used for providing ECUs for gold and dollar deposits. According to Lopex-Claros (1987), average inflation rate for all members of the ERM fell steadily from 11.3 per cent in 1980 to 2.5 per cent in 1986. Phillips (1990) concluded that, the EMS facilitated increased convergence in areas of prices, real output and money supply. Therefore, the EMS enhanced exchange rate management, stability and greater monetary cooperation among member states.

#### **IV.2 Introduction of the Single Act**

The Single Act which was ratified in 1985 was aimed at eliminating all factors capable of inhibiting the realization of a common market. The act targeted the removal of fiscal, technical and physical barriers that lingered on after tariff barriers had been dismantled in the 1960s. The Single Act also amended portions of the European treaties, of which the most significant was the scrapping of the use of veto power or obtaining unanimity of members on any issue. This was replaced with a single majority voting to accelerate the speed of decision-making (Dolan, 1990). Also, sanctions were swiftly imposed to accelerate the speed of implementation all over. It is important to note here that, prior to the Single Act (and in spite of the success achieved in the removal of tariff barriers), most of Europe still retained the identities of their national markets. Thus, the Single Act was crucial for the development of an

Europe-wide market that fostered and deepened financial intermediation across boundaries. It was also designed to promote Europe-wide money and capital markets that are necessary requirements for the effective conduct of monetary policy and overall policy coordination.

#### **IV.3. The Strategic Plans of the Delors' Committee**

In 1988, the Heads of Government constituted a technical committee of central banks' governors which was headed by the then President of the European Commission, Mr. Jacques Delors, to draw up concrete plans that could lead to the attainment of the EMU (Bundus, 1990). The Delors' Committee proposed a three-prong approach to an EMU. First, the Committee proposed a plan for the EEC members (now EU) who were not in the ERM (e.g. United Kingdom, Portugal, Spain and Greece) to join. France, Italy and Belgium; Spain and Ireland; and Portugal which had not completed the requirements of the Single Act in 1986 were requested to abolish completely vestiges of exchange and capital controls by 1990, 1992 and 1994, respectively.

The second plan of the Delors' Committee was the development of an European System of Central Banks (ESCB) fashioned like the Federal Reserve System of the United States (US). It also included the strengthening of policy coordination, as inspired by the EMS scheme, through the setting of economic targets and rules on budget deficit for member states.

The third plan required the establishment of a common central bank that would be charged with the responsibility for the design, formulation and implementation of monetary policy on behalf of member states. The plan also included the introduction of a single currency which would symbolize the attainment of a complete monetary union. Given the necessary approval for the plans, the Delors' Committee published the planned strategies in 1989 and commenced the implementation of the plans in stages from 1990. Consequently, in 1992, a major step taken by the European Commission, which was supported by Mr. Helmut Kohl of Germany and Francois Mitterrand of France who provided the political will to spearhead the integration efforts, was the introduction of the Maastricht Treaty.

#### **IV.4. The Maastricht Treaty of 1992**

The Maastricht Treaty was an important landmark in the build-up towards the attainment of the EMU. Elements of the Maastricht Treaty referred to as the

“convergence criteria”, included targets for inflation, long-term interest rate; budget deficit, national debt and exchange rate which partly represented details of the Delors Committee’s second stage plan. Member states willing to form EMU must pursue macroeconomic policies that would meet the target of 2.3 and 9.1 per cent for inflation rate and long-term interest rate, respectively, by 1996. The long term interest rate should not be more than 2 percentage points more than the average for the states. Also, participating countries must trim budget deficits to 3 per cent of their GDPs; and the ratio of gross national debt to GDP should not be higher than 60 per cent. Finally, the exchange rates of participating states must conform with the requirements of the EMS, particularly the ERM in 1996.

The Maastricht Treaty requirements were directed at ensuring that countries embarked on economic reforms or restructuring exercises which would harmonize the economic indicators of member states to the same base level. In other words, macroeconomic aggregates of member countries must on the average be homogenous to facilitate a healthy commencement of a monetary union. The convergence criteria, therefore, served as a leveler and provided a level playing field for the economies of member countries, such that the effects of the application of common monetary and exchange rate policies would be measured and evaluated based on the same macroeconomic fundamentals. If such economic cleansings were not done in order to smoothen out the existence of divergent macroeconomic aggregates of member countries, the application of the same policy measures across would have varying degrees of impact. Those that had bad economies in place would be worse hit by common policies than those with relatively healthier ones. The possibility of wide variation of policy impacts could therefore trigger problems of incompatibility among the participating states. While some will be growing and progressing faster, others could be lagging behind or retrogressing as the case may be.

#### **IV.5. The Drive to The Attainment of The European Monetary Union (EMU)**

The basis for participating in EMU was the achievement of the convergence criteria. The most controversial aspect of the convergence criteria was the requirement for governments to reduce considerably their budget deficits. To reinforce the blue-print of the Maastricht Treaty’s budget deficit requirement of not more than 3 per cent of GDP, unless a country was under an exceptional circumstance when its GDP was falling at an annual rate of 2 per cent, the EU introduced the “Growth and Stability Pact”.

***The Growth and Stability Pact***

The Growth and Stability Pact, which was agreed upon in December 1996, was ratified by the European Council in June 1997. The pact provides that any country that circumvented the rule faces a heavy fine through a majority vote of member governments. The limit placed on public borrowing was to ensure policy complementarity between fiscal and monetary policies. Specifically, it was designed to curb governments easing of fiscal policy through budget deficits capable of undermining the effectiveness of monetary and exchange rate policies. However, in the face of rising levels of unemployment, declining capacity utilization and growth, some of the participating governments were unhappy with the rigidity or strictness of the stability pact. Facing such economic circumstance, they require budget as a means of stabilizing their economies through deficit financing. Since they had no control over monetary policy, the Stability Pact rather constrained the flexibility with which they could use fiscal policy to address a number of domestic problems. This led to various complaints, for instance, Germany's former Finance Minister, Mr. Oskar Lafontaine resigned his appointment after he had challenged the ECB openly on this matter. Most of the governments have chosen to raise taxes in order to escape the stability pact penalty.

On November 25, 2003, the penalty for violating the Growth and Stability Pact failed to pass the acid test, as France and Germany, which had exceeded the 3 per cent minimum deficit requirement, lobbied other member states to overturn the punitive measures recommended by the European Commission. This dimension established a dangerous precedence for which the embattled Commission has decided to take a legal action in order to upturn that political decision.

***EMU Convergence Criteria Test and the Cessation of the EMI***

In spite of the controversy generated by the Growth and Stability Pact, participating countries strove hard to meet the convergence criteria by 1996, the reference year. However, the test to determine which countries qualified to participate in EMU was fixed for May, 1998, using the performance of 1997(see Table 1). The European Commission and the EMI in March 1998 submitted their recommendations to the European Council which selected 11 out of the 15 members of the EU that met the test requirements.

***The Position of Non-EMU Countries***

As discussed in part 2, only three countries, namely Britain, Denmark and Sweden were outside the EMU construct before the admission of the 10 new members to the EU. As for Denmark and Sweden, they opted for EMU but failed the eligibility test as indicated by the outcome of their convergence criteria performance. Consequently, they needed to improve on their performances in order to gain admission into the EMU. Greece in 2005, formally scaled through the hurdle and was admitted into the EMU. Britain, on the other hand, opted out of EMU arrangement largely on account of being unable to reach a political consensus on EMU. Among the reasons adduced is the loss of its national sovereignty and identity, as well as the nationalistic sentiments attached to the British pound sterling. If the pound sterling would not be adopted as the single currency and will be phased out, Britons find it hard to admit the reality of parting way with the sterling regarded, not only as a symbol of unity and economic strength, but also the pride of losing one of the foremost reputable currencies of the world. Besides, there is still an on-going controversy on the merits and demerits of joining the EMU (Wall Street Journal Europe and The Economist, 1999). Those opposing Britain's entry into the EMU often argue that the application of a common monetary policy for economies of varying conditions of boom and slump, limitation of the stability pact and the inflexibility of labour and product markets in Europe, will create more strains on these economies.

According to the group in favour of Britain joining the EMU, the sterling will be opened to speculative attacks as long as it remains pegged to the euro; Britain will lose about 40 per cent of direct investment (The Economist, April 1999), companies in Britain will face exchange rate risks and high transaction costs. Britain will lose out in the proposed merger of the London and Frankfurt stock exchanges with the head office in London, and its influence will dwindle in the continent if it fails to join the EMU. The result of an opinion poll reported in the Economist (April 1999), indicated that 65 per cent of Britons favoured joining the EMU; and by late 2001 or in 2002, it was expected that Britons would go to the poll to decide whether or not Britain should join the EMU. This has not happened. The ten new states which joined the EU in May 2004, will also have to pass the convergence criteria test to be admitted into the EMU.

***The Exchange Rate Mechanism II (ERM II)***

The importance of exchange rate stability for promoting intra-European trade and investment cannot be over-emphasized as evidenced in the EMS arrangements.

However, with the introduction of the euro, the ECU and ERMI arrangements ceased; but the exchange rates of the non-EMU countries could be volatile, transmitting negatively on the EMU zone. Consequently, the ERM I arrangement was transformed into ERM II for the non-EMU countries, referred to as the derogation countries (countries that are outside the EMU zone). The necessity for the ERM II arrangement stems from the fact that, it would discourage the derogation countries from embarking on deliberate devaluation with a view to securing competitive advantage over the EMU members. Such actions would not only undermine the competitiveness of the EMU countries, but will also create undue tension in the EU. Consequently, the ERM II, which was ratified by the European Council in December 1996 for the derogation countries, commenced effectively in January 1999 after the introduction of the euro. The euro, therefore, became the anchor currency which the currencies of the derogation countries are fixed to with margins of plus or minus 15 per cent. Fluctuation outside the margins would require intervention by the central banks of the non-EMU countries and serves as a condition for joining the EMU by the derogation countries.

#### ***The Design and Introduction of the Euro***

A major hallmark of a complete monetary integration is the introduction and use of a single currency by all participating countries. There are two options to this. The countries either agree to adopt a strong currency of a member country or design a new currency for member countries. In the case of the EMU, member countries opted for a new currency and in 1995, the European Council in conjunction with the EMI and the European Commission selected the name euro among other names. By December 1996 and June 1997, the designs of the euro bank notes and coins by the EMI in conjunction with the European Commission were ratified by the European Council. Consequently, seven bank notes and eight coins of various denominations were approved for circulation. The coins are 1, 2, 5, 10, 20, 50 euro cents, 1 and 2 euros, while the notes are 5, 10, 20, 50, 100, 200 and 500 euros. Thereafter, the official ECU ceased to exist, the ERM II became operational, and the ECB commenced operations to discharge its mandate, the conduct of a common monetary policy in the euro zone.

#### **IV.6. The Implications of the Introduction of The Euro**

The withdrawal of national currencies for the euro, which remains the only currency for the union, had some implications. These are discussed below:

### ***Currency Implications***

On January 1, 2002, the formal exchange of the national currencies of the 11 participating countries for the euro had serious currency implications. All national currencies were on July 1, 2002, withdrawn from circulation, leaving the euro as the only currency of transactions and, thus, the legal tender of a population of over 304 million people, comparable to the 260 and 125 million people for the United States dollar and Japanese yen, respectively. The amount of euro that was received by individuals and corporate bodies depended on the balances of national currencies outstanding to their credit and the relative strength of these currencies' exchange rates to the euro. The EMU countries bore the costs of introducing the euro which included legal, administrative, old notes withdrawal, automatic teller machines replacement, retraining of staff and publicity campaigns. The transactions cost of contracts or projects were redenominated in euro according to the worth of the former national currencies, while prices of goods and services declined after the change in currencies to levels where similar products and services were offered at competitive cheaper rates. Also, the payments system remained unchanged, using existing facilities, particularly the SWIFT technology, and was further enhanced by the Trans-European Automated Real-Time Gross Settlement Express Transfer (TARGET) introduced to achieve settlement of same day payment under any circumstance. These were expected to increase the efficiency of intra-European cross-border payments and ensure the smooth conduct of monetary policy in the EMU.

### ***Implications for the Money Market***

The introduction of the euro integrated the inter-bank markets, increased the size and reduced costs associated with different inter-bank markets. Under the same monetary policy for all institutions, the money market in Europe became the second largest market following that of the United States. Furthermore, the variety of money market securities and products that now exist further deepened the EMU money market. These products and securities were reconciled among banks through the instrumentality of the ECU Banking Association (EBA), renamed Euro Banking Association, which represents the institution for banks' clearing system. The existing interest rates were realigned as the strong economies with low interest rates exerted considerable influence on the interest rates structure, thus reducing interest rates to converge on Euribor (European Inter-bank Offer Rate).

***Implications for the Capital Market***

The immediate implication for the capital market was the conversion of the existing share prices into euro, while new shares are being quoted in euro. In effect, the existing stock exchanges maintained their identities within the European capital market. However, an European-wide capital market competition certainly brought about the harmonization of market conventions, which not only ensured efficiency and market deepening, but also led to the consolidation or mergers of some of the 39 existing stock exchanges. Besides, the elimination of exchange rate risks, declining costs of trading and settlement, as well as low inflation rate, attracted capital inflow, thus, enlarging the European capital market which competes favourably with the New York and Tokyo stock exchanges.

***Implications for the Foreign Exchange Market***

The introduction of the euro and the withdrawal of the old national currencies had significant impact on the foreign exchange market. First, costs associated with differences in exchange rates were eliminated; second, exchange rate risks which were associated with the fluctuations in exchange rates of national currencies were also removed. These savings influenced the reduction of prices in member countries. Foreign exchange transactions and record-keeping are more simplified in the euro zone as all member countries are dealing with a single currency, the euro. The prospects of well developed and competitive money and foreign exchange markets further promoted and deepened the activities of the derivatives market.

***Implications for Reserves Management***

The euro is not only floating against other international currencies (dollar, Yen, etc), but also pegged against the currencies of the derogation countries (non-EMU members). In the light of these, the ECB needs foreign reserves backing for the effective management of the euro in the foreign exchange market to achieve the objectives of monetary policy. Consequently, national central banks had to transfer some of their reserves holdings to the ECB to facilitate the discharge of its mandates. The percentage contribution by member countries was arrived at through the estimation of their respective reserves/imports ratios. This estimation provided the initial required reserves needed for the EMU project, which was proportional to each member's national reserves.

***Implications for Policy Formulation and Implementation***

In order to lay a solid economic foundation, the EMU countries strengthened their economic base through a package of convergence criteria implemented by all countries. These were stringent economic measures designed to smoothen all countries' economies across board, preparatory for the introduction of the euro and, thus, the conduct of monetary policy. To achieve them, the countries had to undertake a number of economic reforms, which included government budget rationalization. Also, they had to surrender their national powers to the ECB in the design and implementation of monetary and exchange rate policies. These portend serious policy implications to national governments in some respects. For instance, if a government has every justifiable reason to run a budget deficit, it does not control the monetary instruments to complement its efforts. Besides, attempt at borrowing could lead to higher interest rate for other countries.

***Implications for the CFA Franc Countries***

France and its colonies had since the 1930s maintained a monetary cooperation arrangement which metamorphosed into the introduction of a common currency, the CFA franc in 1948. The CFA franc which is issued separately by both the Western African Economic Monetary Union (UEMOA) and Central African Economic and Monetary Union (CEMAC) was pegged at a fixed parity against the French franc; this implicitly indicated a fixed exchange rate regime for the two monetary unions existing in the CFA zone. The agreed fixed exchange rate can be adjusted only if some adverse economic conditions exist and a mutual agreement for an adjustment is reached between the colonies and France. France also provides a guarantee for the CFA franc, thus, conferring on it the status of a convertible currency (Hadjimichael and Galy, 1977). However, the replacement of the French franc for the euro to which the CFA franc was pegged, has some important implications for France and its colonies. Specifically, what happens to the peg and the guarantee of France? Will the EMU countries accept these arrangements between France and its colonies? The ERM II arrangement is designed to facilitate currency cooperation between the EMU and the derogation countries. Besides, the EMU provisions allow for the negotiation of any currency arrangement with a country or group of countries. In these regards, the EMU can accommodate the CFA countries on terms and conditions agreed by both parties. Indeed, the CFA zone countries are willing to maintain the peg and France guarantee of the convertibility status of the CFA franc. Maintaining the peg to the euro does not constitute any problem as any adjustment in the fixed rate was based on the rate at which the French franc had been converted into the euro.

However, the area of problem is guaranteeing the convertibility of the CFA franc, as this may have some implications on France and the EMU countries. The guarantee arrangement is supported by France's Treasury rather than its Central Bank. In other words, under a tight budgetary condition, France may have to borrow from the domestic economy to meet euro obligations of its colonies. This could have adverse effect on domestic interest rate and, thus, interest rate management by the ECB. However, as long as the above condition does not exist and France meets the financial requirements of its colonies, the replacement of French franc with euro has little or no implications on the EMU.

In summary, so long as EMU supports currency cooperation arrangement, and the replacement of French franc with euro has no adverse implications, coupled with the fact that the monetary unions in the CFA zone maintain 65 per cent of their reserves in the French Treasury, France and her colonies have continued to wax stronger in sustaining the currency cooperation agreements.

## **V Ecowas Monetary Integration Efforts and the Lessons from the EU Experience**

### **V.1 Historical Evolution of the Economic Community of West African States**

The processes that were undertaken to achieve the EMU are indeed very instructive. It is worthy of note that it took the European countries 13 years (1957-1970) to initiate the need to advance further into a monetary union following the implementation of a common market. Thereafter, Europe attained the EMU in 29 years (1970-1999); however, if we count from 1957 when the idea was mooted and the processes commenced, then it took Europe 42 years (1957-1999) to achieve the EMU.

In the West African sub-region, the Economic Community of West African States (ECOWAS) was established on May 28, 1975. Sixteen (16) countries, namely, Benin, Burkina Faso, Cape Verde, Cote d'Ivoire, The Gambia, Liberia, Guinea Bissau, Guinea, Ghana, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone and Togo signed the membership of ECOWAS. Following the withdrawal of Mauritania in December 2000, the membership dropped to fifteen (15). The major objective of ECOWAS is to establish a common market and create a monetary union.

Both the common market and the need for a monetary union commenced concurrently in 1975. The establishment of the West African Clearing House (WACH) in 1975 was aimed at promoting some degree of monetary co-operation. In

other words, it has taken ECOWAS 30 years in pursuing the ideals of a monetary union. As against the EU experience, the ECOWAS integration process inadvertently commenced simultaneously with a limited degree of monetary union (monetary co-operation programme). However, the formal move for the formation of a monetary union was agreed in May 1983, which led to the reinforcement of the existing monetary co-operation programme into a comprehensive ECOWAS Monetary Co-operation Programme (EMCP) in July, 1987. The formation of the EMCP was preceded by the works of a study group, commissioned by the Committee of Governors of Central Banks, aimed at proposing in concrete terms, the methodology for achieving a monetary union. The report of the study group and the implications thereof, which were submitted in 1984, proposed a number of measures for the establishment of a common currency and, hence, a monetary union. Thereafter, a supplementary study aimed at articulating the various adjustment issues, such as fiscal, monetary, reserves and currency convertibility, which should be undertaken by member states, was also commissioned. This report which was submitted in 1986, proposed a five-year transitional period for the attainment of a single monetary zone by 1992.

In 1987, the ECOWAS Heads of State approved the EMCP, but opted for a gradual and phased approach to a monetary union. Consequently, the EMCP was phased into short, medium and long term programmes for the implementation of reforms and adjustment issues towards achieving a single currency by 2000. The short term programme which had a time frame of 1991-1994, was aimed at strengthening and improving the operational efficiency of the WACH through measures which included, the settlement of WACH trade arrears, introduction of new payment instruments (ECOWAS Traveller's cheque and Bills of Exchange), establishment of a credit guarantee fund, the transformation of WACH into a specialized monetary agency (which is now known as the West African Monetary Agency (WAMA) and the removal of non-tariff barriers (Obaseki 2001). These measures were introduced to boost the capacity and thus the operational capabilities of the WACH.

Furthermore, the medium term programme which had a time frame of 1994-1997, was intended to achieve regional currency convertibility and market-based exchange rates. This also included the intensification of the complete implementation of the trade liberalization measures, and the implementation of the monetary, fiscal and external adjustment measures. The long term programme envisaged that, between 1997-2000 time frame, all the adjustment issues for meeting the convergence criteria,

which were necessary for the introduction of a single currency for the sub-region, would have been completed. However, unfortunately, the EMCP programme of actions was not realized by the terminal date of 2000. Thus, the terminal date was revised to 2005, while members were expected to expedite actions and implement speedily, all outstanding measures for the establishment of a common bank (West African Central Bank) and the introduction of a common currency to facilitate intra-regional trade and the conduct of a common monetary policy.

## **V.2 Institutional Developments of the ECOWAS**

The institutions to achieve the objective of ECOWAS are the Authority of Heads of State and Government, the Council of Ministers; the Parliament; the Court of Justice; the Convergence Council; the Committee of Governors of Central Banks; the Technical Monitoring Committee, the Joint Secretariat of WAMA and the ECOWAS Executive Secretariat; National Coordinating Committees (NCC); the Executive Secretariat; and specialized institutions such as the West African Clearing House (WACH), transformed into the West African Monetary Agency (WAMA). Other specialized institutions are the ECOWAS Bank for Investment and Development Group and the West African Health Organisation; the West African Institute for Financial and Economic Management (WAIFEM) and the West African Bankers' Association (WABA).

### **V.2.1 Political Institutions**

#### ***The Authority of Heads of State and Government***

The highest ruling body that makes decisions on policies, programmes, projects and critical issues affecting the development of ECOWAS regional integration.

#### ***The Council of Ministers***

Deliberates to fine-tune and presents policies, programmes and projects for the approval of the Authority of Heads of State and Government and also takes responsibility for ensuring that policies, programmes and projects are developed to achieve the objectives of ECOWAS.

**ECOWAS Parliament:** Enacts laws for governing the operations of the Community.

**ECOWAS Court of Justice:** It adjudicates cases between and among member states.

**ECOWAS Executive Secretariat:** Prepares and implements the decisions of the Authority of Heads of States and Government, and also the regulations of the Council of Ministers.

### **V.2.2 Technical Institutions**

#### ***The Convergence Council***

The Council comprises Ministers of Finance and Governors of Central Banks of member state and is empowered to conduct multilateral surveillance of the convergence criteria of member states. The Convergence Council reports to the Authority of Heads of State and Government.

#### ***Committee of Governors of Central Banks***

They direct the technical committee of experts on issues to facilitate the implementation of decisions and overall development of monetary integration. They are directly responsible to the Convergence Council and the Council of Ministers.

#### ***Technical Monitoring Committee***

The Committee, which consist of representatives of the Ministers of Finance and Directors of Research of central banks of member states, shall monitor the convergence process of member states and supervise the work carried out by WAMA, ECOWAS Executive Secretariat and the National Coordinating Committees on the implementation of the convergence programme. The Committee shall prepare progress reports for the Convergence Council.

#### ***Joint Secretariat (WAMA and ECOWAS Executive Secretariat)***

The Joint Secretariat prepares meetings of the Technical Monitoring Committee and the Convergence Council on multilateral surveillance mechanism database and prepares half yearly progress reports to the Technical Monitoring Committee and the Convergence Council.

#### ***National Coordinating Committees (NCC)***

The NCC shall assist WAMA and the ECOWAS Executive Secretariat in the collection, processing and analysis of data on economic policies and the performance of the convergence criteria. The NCC shall forward the report of its activities to the Executive Secretariat on quarterly basis. Indeed, the Convergence Council, the Committee of Governors of Central Banks, Technical Monitoring Committee and the

NCC constitute the institutions for regional surveillance mechanism for the purpose of coordinating national economic policies to achieve the convergence of national economies.

### V.2.3 Specialized institutions

#### *The West African Clearing House (WACH)*

This was established on June 25, 1975 to serve as a clearing house for the settlement of payments made for goods and services, using local currencies of member states. It commenced operations in July 1976 in Freetown Sierra Leone, but inability to promote and also achieve the major objective of monetary cooperation resulted in its transformation into the West African Monetary Agency (WAMA) on August 8, 1996.

#### *The West African Monetary Agency (WAMA)*

To achieve the mandate of promoting monetary cooperation, WAMA has the expanded responsibility or objective of promoting trade liberalization, harmonizing fiscal and monetary policies, managing exchange rate system and ECOWAS Travellers' Cheque system, and providing multilateral surveillance mechanism to achieve monetary cooperation and, thus, monetary union.

#### **ECOWAS Bank for Investment and Development Group (EBID)**

The EBID which comprises two subsidiaries, namely **the ECOWAS Regional Investment Bank (ERIB)** for private sector financing and **the ECOWAS Regional Development Fund (ERDF)** for public sector financing, metamorphosed from ECOWAS Fund for Cooperation, Compensation and Development (ECOWAS Fund). The failure of ECOWAS Fund to achieve the objectives of financing the execution of development projects, providing grants for feasibility studies and guarantees for foreign investments, facilitating the mobilization of internal and external resources for member states and providing compensation to member states which suffer losses as a result of the implementation of the integration policy, contributed to the transformation into EBID. However, the Fund's problems were attributed largely to the inability to function as an international financial institution to cope with the volume of activities in the ECOWAS sub-region, poor institutional capacity owing to staff quota system, lack of corporate culture and managerial expertise, low financial resource mobilization and limited project execution (EBID Group, 2005). Thus, the two subsidiaries would therefore mobilize for the Community both internal and external financial resources for financing both private and public sectors' projects and promote the development of the sub-region.

**West African Institute for Financial and Economic Management (WAIFEM):** It is set up to build capacity on economic and financial management for member states.

**West African Bankers' Association (WABA):** An umbrella association for bankers in the subregion to promote their activities.

**West African Health Organisation (WAHO):** The organization promotes matters on health, especially HIV/AIDS, malaria, etc.

### **Special Technical Commissions**

There are eight commissions which prepare Community programmes and projects and coordinate their implementation after approval. These are Food; Industry, Science & Technology and Energy; Environment and National Resources; Transport, Communication and Tourism; Trade, Customs, Taxation, Statistics, Money and Payments; Political, Judicial & Legal, Regional Security and Immigration Affairs; Human Resources, Information, Social and Cultural Affairs; and Administration and Finance (EBID) Group, 2005).

## **V.3 ECOWAS' Programmes and Projects**

### ***ECOWAS Trade Liberalization Programme***

The ECOWAS trade liberalization Scheme (ETLS) commenced on January 1, 1990. The Scheme aims at developing a customs union for a period of 15 years (Owolabi, 2004). Thus, the ETLS seeks to eliminate customs duties, taxes and other non-tariff barriers to facilitate the free flow of trade in the subregion. The continued existence of different customs declarations and valuation methods, numerous check points on roads and sea ports, lack of transportation and telecommunication networks and non-harmonisation of trade and investment policies have impeded trade in goods and services as well as human and capital mobility. These inadequacies are a reflection of countries unwillingness to implement the ETLS faithfully.

### ***ECOWAS Travellers' Cheque Scheme***

To enhance payment mechanism in the sub-region and promote trade, the ECOWAS Travellers' Cheque (ETC) was introduced in 1998 as a settlement instrument. The operations of the ETC have been suspended and efforts are being made to transfer its operations to the private sector. The ETC was denominated in the West African Unit

of Account (WAUA) which facilitated the conversion between and among local currencies through cross rates.

### ***ECOWAS Energy and Highway Projects***

Two major energy projects are being implemented in the sub-region. These are the **West African Gas Pipeline** and the **Energy Power Pool** projects. The West African Gas Pipeline project (WAGP) is being constructed by Nigeria and its joint venture partners (Chevron, Texaco and Shell Petroleum Development Company); the Volta River Authority of Ghana; the Sobe Gas of Benin; and the Soto Gas of Togo. The project which is estimated to cost about US\$530 million will supply gas from Nigeria to the Republics of Benin, Togo and Ghana (Nwachukwu and Etentuk, 2004). It is envisaged that the West African Gas Pipeline Company (WAGPCO) will in the future extend the pipeline to other West African Countries, thus reducing the cost of energy to consumers in the sub-region. Similarly, arrangements are on-going under the energy power pool to construct and interconnect electricity grid lines throughout the West African sub-region. Another major project that has reached an advanced stage is the construction of the **West African Highway Project** from Nigeria to Senegal. These are intended to provide infrastructural development for the promotion of productive activities in the sub-region.

### ***ECOWAS Common Policies***

The Community has approved Common Agricultural Policy (CAP) and Common Industrial Policy (CIP) to provide level playing fields for agricultural and industrial activities across the sub-region.

### ***Regional Security***

The Community has implemented a number of peace initiatives, including the peace keeping force called ECOWAS Monitoring Group (ECOMOG). In this regard, the Community has successfully intervened in the wars and crises in Liberia, Sierra Leone, Cote d'Ivoire, Guinea, etc.

## **V.4 The Fast Track Approach to Integration and the Birth of The West African Monetary Zone (WAMZ)**

The difficulties in achieving the ECOWAS monetary integration owed partly to the entrenched dichotomies among the Francophone, Anglophone and Portuguese colonies in the sub-region. The Francophone countries have a West African Economic and Monetary Union known as UEMOA, which is regarded as more viable

than any other integration arrangement involving other countries in the sub-region. Therefore, its members undermine efforts at achieving the ECOWAS integration. To meet the challenges posed by the Francophone UEMOA, the Anglophone countries and Guinea, which though a Francophone colony but not a member of UEMOA, thought it fit to have their own parallel umbrella union not only to serve as a basis for comparison, but a necessary antidote that would foster an early convergence, fusion and attainment of an ECOWAS-wide monetary union. Consequently, in its meeting held from 20<sup>th</sup> - 21<sup>st</sup> December, 1999, popularly known as the Accra declaration, Nigeria and Ghana initiated the Fast Track approach to integration. Since then, the participating countries have risen to six, which include the Gambia, Guinea, Liberia and Sierra Leone; and in December 2000, the West African Monetary Zone (WAMZ) was established as the second monetary zone.

The objective is to facilitate rapid integration of the non-UEMOA countries into a monetary union. The convergence criteria which the six countries must satisfy to form the second monetary union include a single digit inflation rate of 5 per cent, a budget deficit/GDP ratio of 4 per cent, reduction of Central Bank deficit financing to 10 per cent of the previous year's tax revenue and a healthy reserves to imports ratio of 3 to 6 months. These were to be achieved by 2002 and a common currency was to be introduced in 2003 to commence the monetary union. However, the failure to achieve the convergence criteria has led to series of postponements from 2003 to 2004, 2005 and now to December 1, 2009. According to Ashante (2001), the Fast Track group commands about 69 per cent (152 million people) of the population, 66 per cent of the gross domestic product (\$52,475 million), 68 per cent of total trade (\$29,534 million) and 65 per cent of reserves within the ECOWAS group. Thus, the Fast Track group now represents a formidable arm of the ECOWAS group.

#### **V.4.1 Institutional Developments for the WAMZ**

##### **V.4.1.1 Political and Technical Institutions**

In the WAMZ group, some of the institutional arrangements discussed under the ECOWAS group are also replicated. **These are the Authority of Heads of State and Government, the Council of Ministers or Forum of Finance Ministers, the Convergence Council, the Committee of Governors of Central Banks, the Technical Committee, Joint Secretariat (WAMI and WAMZ Secretariat) and the National Sensitization Committee (NSC).** The NSC is the equivalent of the ECOWAS NCC, but it is also mandated to carry out sensitization campaigns in each member state.

Under the WMAZ group, they **constituted Expert Working Groups** to tackle specific technical issues. The meetings of the three **Expert Working Groups** deliberated on the WAMZ Work Programme and proposed action plans for the successful implementation of the Work Programme before December 1, 2009, date for monetary union.

**Expert Working Group 1:** It worked on macroeconomic convergence, statistical harmonization and database development, financial integration, creation of customs union and programmes for promoting regional development and integration.

**Expert Working Group 2:** It examined the development of zonal payments and settlements systems for cross border transactions, preparation towards the introduction of ECO and the national sensitization programmes.

**Expert Working Group 3:** It discussed the action plans for the ratification of the WAMZ legal instrument and the activation of the WAMZ institutions such as the West African Central Bank (WACB), the West African Financial and Supervisory Authority (WAFSA), the Stabilization Cooperation Fund (SCF) and the WAMZ Secretariat.

The implementation of these action plans would lead to the achievements of the Real time Gross Settlement (RTGS) System as a payments mechanism, common macroeconomic database, capital account liberalization, regional currency convertibility, harmonization of financial and banking laws, common external tariff, ECOWAS trade liberalization scheme, harmonization of customs and ports procedures, sensitization, currency design and introduction of currency on December 1, 2009. Each policy, programme and project initiated by the expert working group passes through the hierarchy from the Technical Committee, Committee of Governors, and Council of Ministers for fine-tuning before presentation to the Authority of Heads of States and Government for approval.

#### **V .4.1.2 Specialized Institutions of the WAMZ**

##### ***West African Monetary Institute (WAMI)***

The Institute which was established in 2001, is saddled with the responsibility of preparing the grounds for and expected to metamorphose into the West African Central Bank (WACB) to conduct monetary and exchange rate policies, manage reserves, provide banking statistics and ensure an efficient payments system when

the second monetary zone would have commenced operations. By 2009, the existing monetary unions (UEMOA and WAMZ) are expected to decide on a formal date for a merger to form a single monetary zone with a common currency and central bank for the ECOWAS.

***West African Central Bank (WACB)***

The Bank with proposal to locate its headquarters in Ghana is expected to commence operations on December 1, 2009. It will be responsible for the conduct of monetary policy for the WAMZ group.

***West African Financial Supervisory Authority (WAFSA)***

The WAFSA is to be located in Nigeria and will coordinate other activities of central banking such as banking operations, supervision, etc.

***Stabilization and Cooperation Fund:*** The Fund will be used to provide credit facilities for countries in temporary balance of payments crisis.

***WAMZ Secretariat:*** The Secretariat which is being proposed for Guinea will provide administrative functions to facilitate effective implementation and coordination of the WAMZ programmes.

## **V.5 Comparative Analysis and the EU'S Lessons of Experience for the ECOWAS**

The foregoing analysis provides a brief historical background of the ECOWAS efforts at integrating its economies into a monetary union. What follows is a comparative analysis of the EU and ECOWAS integration processes to monetary unions in which the lessons of experience from the EU success story would be drawn to guide the ECOWAS integration. To do these, the analysis would be segmented into different levels of integration.

***Political Integration***

The integration of nations into a political and economic entity requires enormous political will on the part of the leadership. The will to carry the people along, implement common decisions, open territorial boundaries for citizens of other countries to undertake socio-economic activities and surrender some aspects of their national sovereignty is critical and important if any integration must succeed. This is indeed challenging, as the implementation of common policy measures could

contradict a nation's internal political and economic interests. Political integration provides the force which unites, facilitates and generates interest in implementing common policy measures. In the EU experience, France and Germany spearheaded and provided the leadership drive that galvanized and encouraged the leaders of others countries to embrace and promote the ideals of the EU integration. Even when Britain opted out, the leaders of these two countries sacrificed themselves to provide needed political leadership for others to follow and achieve political integration at both national and intra-regional levels.

In the ECOWAS sub-region, most leaders lack the political will and competence to implement their own national economic policy reforms let alone those prescribed at regional level. These are the direct results of poor leadership selection methods that breed frequent crises which are common phenomena in the sub-region. The consequence being the emergence of leaders who lack the political will and commitment, fail to provide the basic needs of the people, but in perpetual conflict and crises with the followership and pay lip service rhetorically to the ideals of a monetary union. Furthermore, the strong tie of countries in the sub-region to their colonial roots (Francophone, Anglophone and Portuguese territories) has tended to fractionalize countries into these dichotomies, leaving behind a political vacuum that is inimical to political integration.

### ***Social Integration***

Even if the integrating countries have the political will and provide the leadership required for a well-focused integration process, their ability or inability to carry the people along would have profound effect on the success of the integration programmes. In this regard, the enlightenment and full participation of citizens of the integrating countries are basic requirements for eliciting their support, and gain their confidence in the integration process. Thus, social integration of the people involves massive media enlightenment campaigns designed not only for sensitizing people on the programmes of integration, but also for drawing attention on the need for integration and the various benefits derivable in order to gain their total support for the programmes. This is extremely weak in ECOWAS countries, particularly the WAMZ countries. The mobilization exercise should embrace people of all professions, including market women, trade unions, business associations and the academia. The EMU countries had this experience which fostered support for the integration process and provided the basis for articulating and resolving some fears and social concerns. To allay the fears of minorities, the EU distributed institutions,

infrastructural facilities, projects and development programmes in an even and equitable manner. Also, the location and staffing of the institutions and sectoral commissions were fairly distributed to encouraged relatively weaker nations. For instance, the European Investment Bank is cited in Italy, the structural funds (consisting of regional, social and agricultural guidance funds) are located in Spain and the Integrated Mediterranean Programmes which were aimed at galvanizing support for integration were directed at depressed areas of Europe, including Southern France, Greece, Spain and Portugal.

### ***Institutional Integration***

The importance of institutional support for a successful implementation of any programme cannot be over-emphasized. Indeed, institutions are the veritable medium for decision-making, policy and programme implementation, monitoring, evaluation and coordination. The significance of institutions and programmes for achieving the lofty objectives of the EU and EMU informed the need for the systematic discussions on the various institutions and programmes in parts 2 and 3 of this paper, respectively. Besides, the creation of an enabling environment for facilitating programmes implementation within and among countries are also products of institutions.

In the ECOWAS sub-region, and particularly the WAMZ zone, institutional requirements and capacity for a monetary union are being established, while existing ones are also undergoing reforms. The major political institutions for overall integration coordination in ECOWAS are, Authority of Heads of State and Government (the Council in EU), ECOWAS Parliament (the Assembly in EU), Council of Ministers, Convergence Council, Committee of Governors and ECOWAS Secretariat (play the role of Commission in EU) and ECOWAS Court of Justice (Court of Justice in EU). In the EU, the Commission through Sectoral Commissioners propose policies, programmes and projects for the ratification of the Council, they are, therefore, the heart beat of the integration process. In ECOWAS, the Technical Committee, Special Technical Commission, export working groups play the role of Sectoral Commission in the EU. However, if the Authority of Heads of State and Government/ Council of Ministers in ECOWAS lack the political will, commitment and drive, which their EU counterparts had and still have, then the integration process in ECOWAS will remain illusive. Furthermore, other important specialized institutions such as EMI, ESCB, ECB and EBA provided technical or specialized functions to facilitate the integration process. The counterparts of these specialized

institutions in ECOWAS are WAMI/WAMA (EMI in EU), the West African Financial Supervisory Authority (WAFSA) which is ESCB in EU) proposed for Nigeria and the West African Central Bank (WACB, which is ECB in EU) proposed for Ghana are still in the process of being established. Apart from WAMI which is already functional, the WAFSA and WACB will commence operations only at the threshold of WAMZ/ECOWAS becoming a monetary union. The basic differences between the EU institutions and their counterparts in ECOWAS are that ECOWAS institutions suffer from lack of commitment, inadequate funding and staffing, thus becoming glorified institutions. Nevertheless, it would be merely wishful to think that WAMI alone can bring about a monetary union. Indeed, WAMI only provides technical guides and relies entirely on sovereign governments on which it has no statutory powers to enforce compliance to perform. Furthermore, as in the EU arrangement, each national central bank retains its independence to perform other operational aspects of central banking such as money market operations, funds transfer, issuance of banknotes, management of reserves, lender of last resort, prudential supervision, etc, which are distinct from the conduct of monetary policy that would be ceded to the WACB when it commences operations in December 2009. Furthermore, the national central banks will form the WAFSA as the central body for the coordination of their operational functions which will provide inputs for feeding the WACB. Therefore, as the EU model indicates, the existence of the proposed WACB does not extinguish or eliminate the role of national central banks, rather the arrangement still retains a decentralized central banking structure.

It is worthy of note to mention here that the system of appointing adhoc committees or expert working groups to tackle or handle policies, programmes and projects for regional development in the WAMZ should be replaced with permanent Sectoral Commissions or Sectoral Departments that could be held accountable for developments in their respective sectors. In this regard, such Sectoral Commissioners or departments will handle matters on common banking supervision, payments and settlement system, transportation, communications, trade, agriculture, industry, etc.

### ***Market Integration***

One of the fundamental objectives of every economic integration is the achievement of a single large market. National markets, which are usually inaccessible, owing to the existence of many barriers which are created to meet the economic, social and political interests and other exigencies of countries, are opened up through market integration. The process requires the removal of all barriers that are both tariff and

non-tariff in nature, to facilitate trade in goods and services, capital and labour mobility, as well as promote investment and production. The larger the size of the market, the greater the level of competition and industrial output resulting from large scale production. The EU achieved the removal of tariffs in the 1960s, but non-tariff barriers were eliminated in the late 1980s when the “Single European Act” was introduced in 1986. The Schengen Agreement of 1990 was a follow-up for the elimination of any form of border check. In the ECOWAS, the trade liberalization scheme has not been fully implemented by many countries. There are still many trade restrictions, border and road checks, and other corrupt practices by immigration, customs and other security personnel which militate against market integration.

### ***Financial Integration***

A well-developed financial market, consisting of vibrant money and capital markets, is essential for the promotion of trade, output growth and overall economic development. Fortunately, the European financial markets in London, Frankfurt, Paris, Brussels, etc are highly developed and competitive, with currencies that were internationally and regionally convertible before the introduction of the euro. The computerization of financial services and the introduction of a variety of financial products, internet and e-mail have improved efficiency and service delivery. With the introduction of the euro, cross-border funds transfer is facilitated through the use of the Trans-European Automated Real-Time Gross Settlement Express Transfer (TARGET) which automatically debits and credits parties to all transactions across Europe on real time basis.

In this area, the ECOWAS countries have poor money and capital markets, which are limited by non-convertible currencies, inefficient and outdated payments and settlement system, weak and absence of uniform banking supervision and capital market conventions. These are further constrained by poor power supply, telecommunications and computer facilities, all of which constitute barriers to trade.

### ***Infrastructural Integration***

Infrastructure play important role in promoting intra-regional trade and development. The conscious and collective efforts aimed at standardizing the development of roads, rail, air and water transportation, energy, water supply and telecommunications across Europe have aided trade and economic development. They are indeed critical for rapid trade, financial and production integration in

Europe. On the other hand, poor power supply, bad roads, poor telecommunications, lack of ships and planes for water and air transportation, lack of trains for rail transportation among the ECOWAS countries are serious impediments to effective integration.

### ***Production Integration***

This involves the harmonization and standardization of all production activities in a region. This led to the rationalization of industries in Europe and the introduction of common sectoral policies such as Common Agricultural Policy (CAP), Common Industrial Policy (CIP), Common Iron and Steel Policy under the European Coal and Steel Community, etc and supported by research and development institutions and programmes such as RACE, and ARAINE, BRITE, EURATOM, etc, for satellite, computer and energy, respectfully. The rationalization and standardization of production through common sectoral policies and supported by research and development institutions and programmes are issues which have not been sufficiently addressed in the ECOWAS.

### ***Economic Integration***

The processes of institutional, market, financial, infrastructural and production integrations are the forerunners which lay a solid bedrock of economic integration. In the case of the EU, these are further supported by specialized funds such as the European Regional Development Fund, European Agricultural Guidance and Guarantee Fund, European Investment Bank, European Social Fund, etc, all of which promote economic growth and development, thus, facilitating economic integration. However, the transformation into an economic integration takes place when the economies of member countries are further harmonized into a large economy through a set of convergence criteria. The criteria which were contained in the Maastricht treaty of 1992 were implemented by member countries. The failure in achieving institutional, social, market, financial and production integration, which serve as basic foundations, has constituted a serious constraint to economic integration in the ECOWAS. Consequently, meeting the set convergence criteria by member countries has been a herculean task. Indeed, there have been no consistent efforts toward realizing the convergence criteria. The performances of countries have fluctuated remarkably from one year to another; even to the extent that the record of achievement of two criteria in a country for a particular year may be reversed in the following year, indicating worsening conditions.

***Monetary Integration***

In addition to the requirements for economic integration, the introduction of a common currency which would necessitate the withdrawal of national currencies constitutes a monetary integration or monetary union. At this level of integration, the conduct of monetary policy, in which the direction of inflation, interest and exchange rates are critical performance indicators, is vested in a supranational central bank, while the national central banks perform the functions of banking operations, supervision, etc. In the case of the European Union, the introduction of the euro and the establishment of the European Central Bank marked the commencement of the European Monetary Union. In the ECOWAS sub-region, the planned introduction of a single currency and, thus, a single monetary zone in 2005 was evidently not feasible, largely because of the poor foundation of economic parameters on which to advance to monetary integration.

***Sequencing of Integration Process***

The various layers or structure of integration discussed above is a deliberate effort to show generally a sequence which a monetary integration process should take. The political decision of governments to form a monetary union can only be realized when the people are mobilized and the right institutions created to drive the integration process. Thus, political, social and institutional integration provide adequate capacity for integration.

Following the provision of adequate capacity, we can then proceed to lay the critical foundation for success. First and foremost, is to achieve market integration. The EU spent about three decades to achieve a common market. A common market is the bedrock which inevitably stimulates and encourages financial and infrastructure integration. The combined effects of these accelerate production integration; because, the size or extent of market determines the overall level of production. If these which collectively provide a critical foundation for a successful monetary integration are non-existent, then calling for convergence criteria and introduction of a single currency are like placing the cart before the horse; and certainly as this proverb goes, a house that is built on a sandy or shaky foundation does not stand. The poor countries' performances with respect to the convergence criteria reveal or reflect the weak foundation on which ECOWAS or WAMZ integration process stands. ECOWAS or WAMZ member countries dissipate energy integrating in all fronts without a clear focus or a direction of integration.

It is only when a solid foundation has been laid that we can commence the application of harmonization of policies. These include the implementation of convergence criteria policy for economic integration and introduction of a common currency to commence monetary policy.

## **VI Policy Recommendations for the Ecowas Subregion**

Arising from the foregoing analysis are policy recommendations to address the problems undermining the achievement of ECOWAS monetary union.

A major policy thrust emerging from the analysis above is the need for the leadership of every member country to provide the political will and commitment needed for the implementation of ECOWAS policies and programmes for integrating the subregion. Furthermore, the expected merger of the two unions will require the concerted efforts of countries such as Nigeria, Senegal, Ghana and Benin Republic to provide the needed leadership and total political commitment for other countries to follow.

An appropriate framework for mobilizing the people who are the agents for achieving economic reforms and integration is absolutely necessary. It may be difficult to mobilize hungry people. Therefore, the ECOWAS governments should provide jobs, affordable housing, improved healthcare services, education and water supply under various policies and programmes in order to form the basis for effective social integration to attract the people's support, confidence and participation. The sensitization programme should include seminars/workshops, rallies, posters, bill boards, banners, radio/television jingles, and radio/television discussions.

The right institutions should not only be created but should be empowered in order to make them effective in driving the integration efforts. Therefore, WAMA/WAMI, WACB, WAFSA, WABA should be well-funded and staffed to provide the technical support for nurturing the ECOWAS integration. The setting up of permanent sectoral commissions or departments to facilitate the speed of policy proposal, implementation and supervision, evaluation and reviews is extremely important for the WAMZ group, rather than addressing sectoral issues on an adhoc expert committee basis.

To make the sub-region market accessible as the bedrock of integration, ECOWAS needs to review the trade liberalization policy as was the case with the EU's Single Act. It should effectively eliminate all tariff and non-tariff barriers, enforce the

protocol of free movement of goods, capital and persons across countries. It should stipulate appropriate penalties or sanctions for non-compliance through a simple majority voting.

There is need for the harmonization of financial market (money and capital) conventions and best practices including banking consolidation and supervision, efficient payments system, computerization, standard telecommunications facilities such as the Real Time Gross Settlement (RTGS) System that is being implemented by some ECOWAS countries and should be complemented by internet, e-mail, telex and fax machines services to facilitate same time cross border transactions and settlements.

The provision of adequate infrastructure promotes trade and rapid integration. Therefore, member countries should place priority in the provision of standardized strategic roads, rail, air and water transportation; general telecommunication facilities as well as energy and water supplies, all of which are basic requirements for successful integration. In this connection, a major ECOWAS road being constructed from Nigeria through the sub-region to Senegal for the free flow of vehicular movement and the West African Gas Pipeline/West African Energy Power Pool projects to provide energy are indeed commendable. Similar steps should be taken to provide water, air and rail transportation.

To facilitate production integration, ECOWAS should promote common agricultural, industrial, research and development policies as well as regional development programmes and projects. In these contexts, the Common Agricultural Policy (CAP) and Common Industrial Policy (CIP) already approved should be seen to be implemented by all countries to ensure standards for the sub-region.

The effective application of appropriate mix of internal monetary, fiscal, exchange rate and debt management policies by member countries to promote economic development and achieve the convergence criteria set for the WAMZ area is crucial for attaining economic integration of member states.

The existing economic structure and macroeconomic indicators in ECOWAS are still weak, and should be strengthened to provide a basis for the introduction of a single currency for the commencement of a monetary union. Indeed, these limitations

informed the postponement of the introduction of the ECO currency in the WAMZ area to 2009.

With respect to the sequencing of integration, ECOWAS/WAMZ should place more emphasis on achieving the requirements of a common market as recommended in (iv). This is a prerequisite and necessary foundation which determines the success of other higher levels of integration.

## **VII Summary and Conclusion**

The paper discussed the historical evolution of the EEC, now known as the EU, which progressed from a free trade area, customs union and to a common market. At this stage, the vision of the founding fathers was to transit into a monetary union, comprising a conglomeration of the national economies of Europe into a monolithic entity (the EU) which was earlier suggested as the United States of Europe. By the mid 1980s, the Single Act agreement removed all the barriers militating against the attainment of a common market, and prepared the stage for advancement into an economic union. Thus, the 1992 Maastricht Treaty, which specified the convergence criteria for all participating countries, was a remarkable advancement into an economic union. By 1998, when the economies of most of the participating countries were adjudged to have met all the convergence criteria and certified as an economic union, the stage was set for the most memorable event of the march towards attaining a monetary union. Following the design and adoption of a single currency and the necessary preparations, the EU launched the European Monetary Union on January 1, 1999 when the single currency, the euro, was introduced.

The introduction of the euro had some significant implications for the entire region, these included currency, money market, capital market, foreign exchange market and reserves management as well as implications for the UEMOA Francophone countries. These countries' monetary union is anchored on the CFA franc with a fixed parity to the former French franc, and now the euro. The relevance of these implications in the context of an ECOWAS monetary union cannot be overemphasized; adequate preparations should, therefore, be made to provide a basis for ECOWAS effective integration. The EU's lessons of experience indicated that the integration processes leading to the achievement of the EMU, was a great feat that was well planned and implemented progressively from one level to the other. Political integration was necessary to provide the leadership will and drive, which was reinforced by the appropriate social integration aimed at sensitizing and mobilizing the people to

realize the desired objectives. Institutional integration was the pivot for directing the course of integration and also for realizing market, financial, infrastructural, production, economic and monetary integration.

These processes must be given adequate consideration, articulated properly, well sequenced and focused to achieve the ECOWAS' objectives if it desires to spend fewer years to attain its monetary union.

## Appendix

Table 1: EMU Convergence Criteria

	Inflation (%)					Long Term Interest Rate (%)				Government Balance (% GDP)			
	1996*	1995	1996	1997	1998	1995	1996	1997	1998	1995	1996	1997	1998
EMU Reference Value	2.6	3	2.3	2.8	3.3	9.7	9.1	8.4	7.9	-3.0	-3.0	-3.0	-3.0
Belgium	1.8	1.6	2.5	2.3	2.2	7.5	6.5	6.0	5.9	-4.1	-3.3	-3.0	-3.0
Denmark	1.9	2.1	2.1	2.2	2.5	8.3	7.2	6.3	6.4	-1.6	-1.5	0.7	0.5
Germany	1.2	1.8	1.4	1.6	1.8	6.8	6.2	5.9	5.9	-3.5	-3.9	-3.2	-3.2
Greece	7.9	9.0	8.2	5.0	4.0	17.4	14.8	11.3	10.0	-9.1	-7.6	-5.7	-5.0
Spain	3.6	4.7	3.6	2.3	2.5	11.3	8.7	6.8	6.3	-6.6	-4.4	-3.3	-2.9
France	2.1	1.8	2.0	1.7	1.9	7.5	6.3	5.8	5.9	-4.8	-4.1	-3.2	-3.0
Ireland	na	2.5	1.7	1.7	2.0	8.3	7.3	6.4	5.9	-2.4	-1.5	-1.1	-0.5
Italy	4.0	5.4	3.8	2.0	2.4	12.2	9.4	7.3	6.6	-7.1	-6.8	-3.8	-3.5
Luxembourg	1.2	1.9	1.4	1.8	2.0	7.6	6.5	6.0	5.9	1.5	1.5	0.8	0.5
Netherlands	1.5	2.0	2.1	2.3	2.2	6.9	6.1	5.9	5.9	-4.0	-2.2	-2	-1.7
Austria	1.8	2.2	1.9	1.7	1.9	7.1	6.3	5.9	5.9	-5.9	-3.9	-3.0	-3.0
Portugal	2.9	4.1	3.1	2.7	2.7	11.4	8.6	6.8	6.4	-5.1	-4.0	-3.1	-2.9
Finland	1.5	1.0	0.6	1.2	1.8	8.8	7.0	6.3	6	-5.6	-2.9	-1.7	-0.7
Sweden	0.8	2.5	0.5	1.0	2.0	10.3	8.0	6.9	6.9	-8.1	-3.5	-2.5	-1.0
United Kingdom	na	2.8	3.0	2.7	3.0	8.2	7.8	7.3	7.0	-5.6	-4.4	-2.8	-2.7

	Government Debt (%of GDP)				E M S	Criteria Met			
	1995	1996	1997	1998		1995	1996	1997	1998
EMU Reference Value	60	60	60	60	E M S				
Belgium	134	131	128	125	YES	2	1	3	3
Denmark	72	71	67	65	YES	3	4	4	4
Germany	58	60	61	62	YES	3	3	2	2
Greece	112	109	105	102	NO	0	0	0	0
Spain	66	68	68	67	YES	0	1	2	3
France	53	55	57	58	YES	3	3	3	4
Ireland	86	80	76	71	YES	4	4	4	4
Italy	124	123	121	121	NO	0	0	2	2
Luxembourg	6	5	4	4	YES	4	4	4	4
Netherlands	80	78	75	72	YES	2	4	4	4
Austria	69	71	69	69	YES	2	4	4	4
Portugal	72	70	68	67	YES	2	2	3	3
Finland	60	61	61	60	YES	0	1	2	3
Sweden	79	78	77	76	NO	1	2	3	3
United Kingdom	54	56	57	57	NO	3	2	4	4

\*Harmonized indices of consumer prices. Source: ING Euroviad

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# External Debt, Investment and Economic Growth: Evidence from Nigeria

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Aloysius Ajab Amin & Isa Audu\*

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*This paper studies the impact of external indebtedness on Nigeria's economic performance. We find supportive evidence for the crowding out and debt overhang hypotheses in Nigeria. Based on these results, the paper concludes that the prospects of resolving the debt crisis in Nigeria will depend on deeper debt relief, diversification of export base and substantial direct foreign investment. Debt relief will enable the country to use the lean foreign exchange earnings to procure the badly needed inputs for the industrial sector and upgrading of infrastructures. However, without a stable political and macroeconomic environment, efforts at reducing the external debt burden may not be very successful.*

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**Keywords:** External Debt, Economic Growth, Public Investment, Nigeria

**JEL Classification Numbers:** F34, F43, H54, H63

**Authors' e-mail:** [Idep@unidep.org](mailto:Idep@unidep.org); [isaaudu@hotmail.com](mailto:isaaudu@hotmail.com)

## I. Introduction

There is a widespread recognition in the international community that excessive foreign indebtedness of many developing countries remains a major impediment to their stability and growth. Developing countries have contracted large amount of debts, often at highly concessional interest rates particularly in the 1970s. The hope was that these loans would put them on faster development path through higher investment and faster growth. But as debt service ratios reached very high levels in the 1980s, it became clear that for many of these countries, debt repayment would constrain economic performance in their countries. More importantly, it would be virtually impossible to repay back these loans and leave reasonable resources to support the domestic economy.

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\* This paper was written before Nigeria secured the substantial debt cancellation from the Paris Club of Creditors in 2005 under the Policy Support Instrument (PSI). The views expressed herein do not represent the views of the institution to which the authors are affiliated. The authors acknowledge the comments and suggestions of anonymous reviewers. All remaining errors are the authors' responsibility

Attempts to cope with the debt crisis through the adoption of IMF-supported programmes proved unsuccessful in alleviating the excruciating debt problem. The Although, Structural Adjustment Programme (SAP) had some benefits like for instance easier access to foreign exchange, significant improvement in non-oil exports as a result of export incentives and improvement in Government revenue. However, SAP have invariably resulted in increasing unemployment, low capacity utilisation, galloping inflation, high incidence of poverty, unsustainable fiscal deficit and further escalation of debt, among others. The Highly Indebted Poor Countries (HIPC) Initiative formulated by the IMF/World Bank has also fallen short of what is required to re-establish the conditions for sustained economic growth. The fiscal burden of debt servicing is inimical to economic growth and, is, in fact, an important reason for the failure of SAP to restore economic growth in many of the debt distressed countries.

The international community reacted to this development by coming up with plans to ensure that these indebted countries secure some relief. Such efforts as the Brady Plan, the Trinidad/Naples Terms, the Mauritius Mandate and the HIPC Initiative were all put forward to address what has now become the debt crisis. It is a global crisis because any massive default will rock the international financial system to its very foundations and, possibly, lead to a worldwide depression.

Several factors, both domestic and external, were advanced as reasons for the deteriorating African debt crisis. High among them was excessive borrowing by LDCs in the 1970s, the oil price shocks of 1973/74 and 1979/80 and worsening terms of trade. Other factors affecting the debt burden include rising world interest rates resulting from monetary contractions in some advanced countries and exchange rates fluctuation. Inappropriate domestic macroeconomic policies and political instability also played a major role in retarding the debtor nations' ability to grow out of debt burden, creating uncertainty, which compounds the problem of business planning and production (Iyoha, 1999). Ever since, the issue of external debt and its servicing has remained a topical subject dominating discourse on the international political economy.

The main objective of this study is to examine the impact of Nigeria's external indebtedness on public investment and economic growth from 1970-2004. This study is encouraged by the fact that no known study has explicitly modeled the interaction between external debt, public investment and economic growth in Nigeria by employing

the cointegrating modeling techniques. Previous studies in Nigeria generally analyzed the impact of external indebtedness by particularly concentrating on total/private investment or savings level rather than assessing the impact of debt overhang on economic growth and public investment.

The paper is divided into six sections. After the introduction, section 2 examines Nigeria's macroeconomic performance in the last 34 years (1970-2004); section 3 examines the genesis, trend, magnitude and structure of Nigeria's external debt. Section 4 reviews relevant literature. Section 5 provides models specification, empirical analysis and interpretation of results. Finally, section 6 gives the policy implications, recommendations and conclusion.

## **II. Macroeconomic Performance**

The Nigerian economy has passed through various phases of development in the last 34 years (1970 – 2004). The analysis of the performance of the economy would, therefore, be divided into three distinct periods: (i) 1970-1980, (ii) 1981-1994 and (iii) 1995-2004.

In the period 1970-1980, the Nigerian economy enjoyed remarkable growth. This period was characterized by massive inflow of foreign exchange earnings mainly from crude oil exports. Nigeria's financial credibility in the international markets was not in doubt. For the greater part of the 1970s, domestic and direct foreign investment was at an impressive level. These helped to sustain real GDP growth at reasonably high levels. The economy recorded an average growth rate of 5.0 per cent per annum during the period. On the external sector, the country enjoyed favorable balance of payments position owing to the significant boost from oil exports even though non-oil exports became virtually extinct. The sector sustained an average current account surplus of 1.5 per cent of GDP during the period, while gross international reserves averaged the equivalent of about seven months of imports. By 1980, the country's external debt was only US\$8.9 billion or 13.9 per cent of GDP, and the debt service ratio was a modest 0.7 per cent.

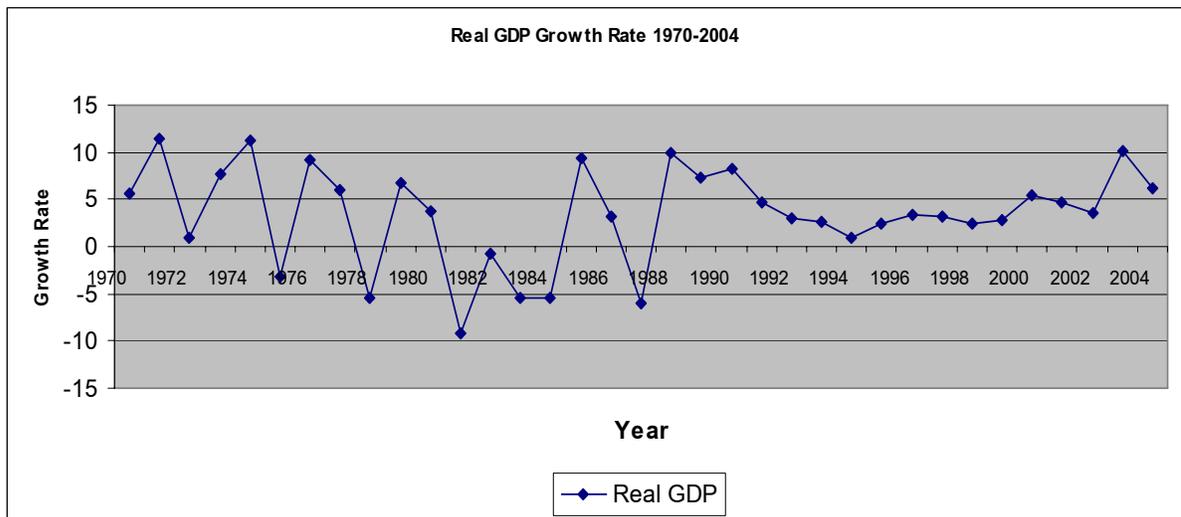
The inflation rate during this period average 14.6 per cent, although, there were three periods in which the inflation rate was over 20 per cent. The exchange rate as shown by the index of the market rate (1995=100) was generally over-valued, with the resulting

cheapening of imports while penalizing domestic production and exports. In other words, overvaluation of the naira enhanced its purchasing power vis-à-vis other international currencies.

In the period 1981-1994 Nigeria witnessed serious economic downturn and macroeconomic aggregates showed unsatisfactory performance. Specifically, between the period 1981 and 1984 the rate of economic growth measured by the rate of growth of real GDP, recorded negative growth rates. The GDP achieved its best performance in 1988, but declined thereafter. It should be pointed out that the real GDP has been growing at a decreasing rate since 1988 when it grew at 10.0 per cent; thereafter, the figures continued to decline with the exception of 2003 when the economy achieved another 9.6 per cent GDP growth rate (see table 1). The sharp drop in the real GDP growth rate in the period 1989 to 1994 indicated quite clearly that the GDP growth rate was not self-sustaining (see figure 1).

The economy also witnessed double-digit inflation during the period under review, with the exception of 1990 when the composite consumer price index grew by 7.5 per cent. Specifically, the inflation rate was 57 per cent in 1994 (see table 1).

Figure 1: Real GDP Growth Rate



Source: Central Bank of Nigeria (CBN) Annual Report (various issues), World Bank (2002) African Data Base, CD-ROM, Washington D. C.

Thus, the objective of securing a non-inflationary growth was not reasonably attained. The crisis in the oil market, which in turn adversely affected industrial performance, and the long-standing neglect of agriculture accounted for the decline. The fiscal operations of the government were consistently in deficit while the balance of payments remained under intense pressure. The external reserves fell to US\$1,041.4 million in 1983-the lowest level in ten years. At this level, external reserves could only support 1.05 months of imports, a situation which improved only marginally to 2.8 months of imports in 1985. The improvement in the reserves position in 1985 was very artificial, as there was an ample evidence to show that external trade arrears had accumulated. There was a dramatic jump in external debt from US\$10,667.7 million in 1981 to US\$29,428.8 million in 1994 or 175 per cent increase in just 13 years. The debt service ratio rose correspondingly from 4.8 per cent in 1981 to 19.5 per cent in 1994. To reverse the worsening economic fortunes in terms of declining growth rate, galloping inflation, worsening balance of payments, escalating debt burden and increasing/unsustainable fiscal deficits, among others, government introduced austerity measures in 1982. Due to the unimpressive impact of these measures, an extensive structural adjustment programme was put in place with emphasis on demand management to address the issues of expansionary and inflationary policies in August 1986.

During the period 1995 to 2004, the performance of the Nigerian economy was rather mixed. In the sub-period 1995 to 1998 the various macroeconomic aggregates moved in the right direction. GDP growth rose from 2.4 per cent in 1995 to 3.4 per cent in 1996. The fiscal deficit/GDP ratio which was negative for most of the years, showed a positive rate of 0.1 per cent in 1995. The rate of inflation which was about 72.8 per cent in 1995, declined to about 29.3 per cent in December 1996. The exchange rate remained stable for over twenty months, interest rates had been decapped and the external sector experienced less pressure. However, debt stock trended upward to US\$32,584.8 million in 1995 before it dropped to US\$28,060.0 million and US\$27,087.8 million in 1996 and 1997, respectively. The external reserves increased from US\$1,410.0 million in 1995 to US\$4,080.0 million in 1996. These favorable economic fundamentals resulted from the curtailment of wasteful expenditure, attainment of relative stability in the foreign exchange market and the re-establishment of a favourable macroeconomic environment. Nonetheless, the economy witnessed unprecedented corruption, mismanagement and

international isolation due to alleged human right abuses (CBN, 1993 Perspective of Economic Policy Reforms).

However, after six years under the democratic experiment, the economy is still groaning under the strains of past events. GDP per capita has been on the decline. In 2004, it was estimated at US\$300 compared to US\$316 in 1996 and far below its peak of over US\$1000 achieved in the 1980s. The fiscal deficit/GDP ratio, which showed a positive rate of 6.3 per cent in 2000, recorded a negative rate of 8.9, 2.8 and 3.0 per cent in 2002, 2003 and 2004 respectively. The GDP growth, which averaged below 3.0 per cent between 1995 and 1999, took an upward turn in 2000 to 2004 increasing from 3.9 per cent in 2000 to 4.7, 4.6, 9.6 and 6.6 per cent in 2001, 2002, 2003 and 2004, respectively. However, on the average this is slightly short of the government target of 6.0 per cent. It is important to stress that because Nigeria's population is growing at about 3.0 per cent per annum, this improvement in GDP growth made little impact on the overall standard of living in the country (CBN Annual Reports and World Bank African Data Base 2003).

Average inflation rate more than doubled to 18.9 per cent in 2001, from about 7.0 per cent in 2000, but declined to 15.0 per cent in 2004. In addition, the naira depreciated against the US dollar, from an average of ₦80/US\$1 in 1996 to ₦133.5 in 2004 at the official foreign exchange market. Similarly, the average parallel market rate and bureaux de change rates depreciated from ₦85/US\$1 in 1995 to ₦140.8/US\$1 in 2004 (CBN Annual Report 2004).

### **III. Genesis, Trends, Magnitude and Structure of Nigeria's External Debt**

#### **Genesis of Nigeria's External Debt**

The origin of Nigeria's external debt dates back to 1958 when a sum of US\$28 million was contracted for railway construction. Between 1958 and 1977 the resort to foreign borrowing was minimal, as debts contracted during the period were the concessional loans from official sources such as the World Bank and Nigeria's major trading partners (i.e. bilateral and multilateral sources). These debts did not exert much pressure on the economy because the interest charged on them was generally low, with longer repayment

period from ten to forty years and this constituted about 78.5 per cent of the total debt stock. Moreover, the country had a comfortable external reserve as a result of the unprecedented inflow of foreign exchange receipts from crude oil exports. Nigeria was then able to lend to the International Monetary Fund (IMF) in 1974 under the oil facility. In fact, Nigeria was regarded as “under-borrowed” in relations to the absorptive capacity of the economy.

With the emergence of oil glut in 1978, however, Nigeria’s revenue from the oil sector declined and it became expedient to borrow to support the balance of payments and to finance projects. This led to the promulgation of Decree No. 30 of 1978, limiting the external loans the federal government could raise to ₦5.0 billion (US\$7.7 billion). Faced with serious deterioration in the foreign exchange position, the Nigerian authorities were forced to raise the first “jumbo loans” of US\$1 billion from the International Capital Market (ICM) in 1978. It was probably the largest Euro loan ever obtained by an African country. The loan had a repayment period of eight years, including a grace period of three years. The loan was used to finance various medium - long- term projects most of which did not yield any revenue many years after repayment on the project had commenced. The importance of these loans was that the profile of Nigeria’s foreign debt was completely altered. Before this time, the bulk of Nigeria’s loans was sourced from bilateral and multilateral institutions, which by their nature, were development oriented with generous conditions in terms of maturities, low and fixed interest rate and long grace period. In contrast, ICM loans are generally of less favorable terms.

Another characteristic of the "jumbo loan" was that it attracted a floating interest rate, which was linked to the London Inter Bank Offered Rate (LIBOR). The effect of this was that it made planning more difficult since the expected stream of debt service payments could not be calculated with certainty. Thus, at the end of 1979, the level of total debt drawn and outstanding had increased two-fold from the level of US\$3.1 billion in 1977 to US\$6.2 billion in 1979. But this was comfortable at 37.1 per cent of exports and 8.1 per cent of GDP. It is important to stress that the single act of borrowing from Euro markets by the Obasanjo-led military administration opened the floodgates for the imprudent borrowing by state governments. Consequently, the share of loans from bilateral and

multilateral sources declined substantially while borrowing from private sources at higher interest rates and stiffer conditions increased considerably.

The recovery of the oil market in 1979, with oil prices rising to an all-time high of US\$40.00 a barrel in 1980/81, gave a notion of a buoyant economy. Consequently, some deflationary measures put in place in 1978 were relaxed by the second republic administration. But a new consumption pattern that favored imported goods emerged. The import substitution industrialization strategy that was being pursued then also depended heavily on imported raw materials and appreciated exchange rates. Besides indiscriminate and excessive importation, there were also cases of over-invoicing and non-shipment of actual goods for which letters of credit had been established (Africa's Debt Crisis, NES Selected Paper for the 1994 Annual Conference).

However, the oil boom was short-lived and when it collapsed in the early 1980s the economy immediately suffered considerable strains. The production and consumption pattern that emerged in the era of oil boom could not be sustained in the face of declining foreign exchange earnings in the 1980s. Rather than address the problem of declining foreign exchange revenue, both the federal and state governments embarked on massive external borrowing from the International Capital Market (ICM). Thus, pressure mounted on the various sectors of the economy resulting in huge imbalance in government finances, low external reserves, deficits in the balance of payments and accumulation of trade arrears in respect to both insured and uninsured trade credit. Today, the country is under the burden of an unprecedented debt crisis. Thus, during the period 1980-1983, the debt position almost doubled from US\$8.9 to US\$17.7 billion, an increase of almost US\$9 billion or 98.8 per cent in only three years.

The reality and magnitude of Nigeria's debt problem did not dawn on her until 1982 when foreign creditors refused to open new lines of credit due to the country's inability to settle her import bills. This resulted in the accumulation of trade arrears amounting to US\$9.8 billion between 1983 and 1988. It then became necessary for Nigeria to seek relief by refinancing the trade arrears. The first refinancing exercise, which was in 1983, converted outstanding letters of credits worth US\$2.1 billion. In 1984, the government refinanced the remaining trade arrears especially those contracted through open account and bills for collection by the issuance of promissory notes worth US\$4.8 billion. Since

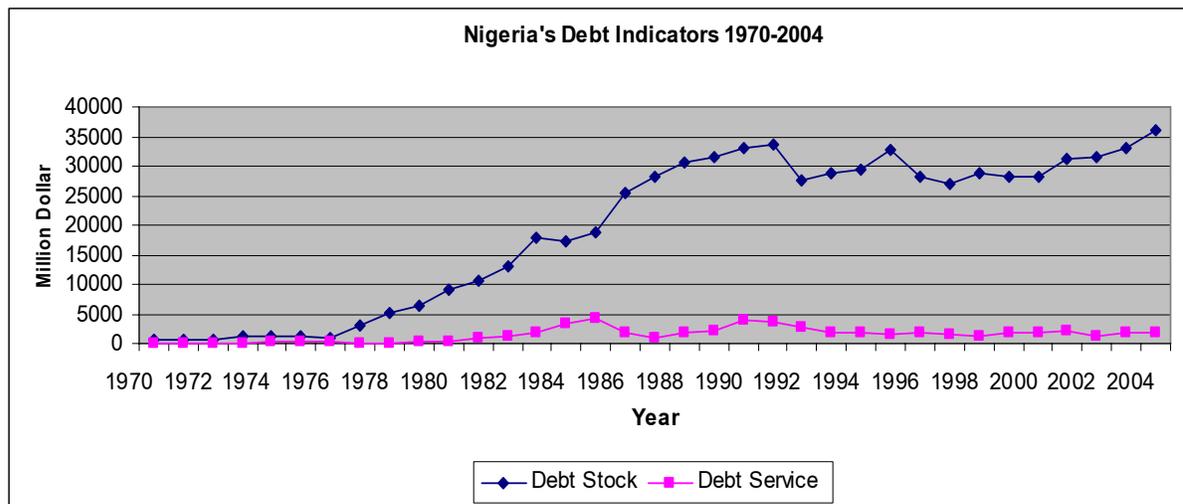
then, Nigeria has signed six other restructuring agreements; three with the London Club in 1987, 1989, and 1991. Apart from the promissory notes agreement, which has a repayment period of 22 years, the various rescheduling arrangements provided temporary debt relief. Indeed, the debt stock increases with every Paris Club rescheduling. With some agreements running concurrently, there was a bunching of maturities. While the London Club deal, which was closed in 1992, reduced the stock of debt by US\$3.8 billion, the Paris Club rescheduling increased the debt stock with capitalization of amounts rescheduled. Consequently, the dual problem of external debt service burden and debt overhang emerged.

### **Trends, Magnitude and Structure of Nigeria's External Debt**

In absolute terms, the total external debt stock rose from a meagre US\$567 million in 1970 to US\$5,091 million in 1978. Between 1979 and 1985, it increased further from US\$6,216 million to US\$18,904.0 million. It stood at US\$25,574.0 million in 1986, and peaked at US\$33,730.0 million in 1991. Thus, between 1985 and 1991, the debt stock increased by US\$14,826.0 million or 78.4 per cent in just six years. During this period, the increase has been astronomical due to the indiscriminate resort to external borrowing ostensibly to finance projects coupled with the crash in international oil price in 1982 ( World Bank African Data Base, 2003).

With the debt buy- back arrangement and the issuance of collateralized par bonds to the London Club of creditors in 1992, the debt stock dropped from US\$33,730.0 million in 1991 to US\$27,564.0 million in 1992. This changed in a significant way the structure of Nigeria's external debt. However, by 1993, 1994 and 1995 the debt stock trended upward to US\$28,718.2, US\$29,428.9 and US\$32,584.8 million, respectively. The debt stock then dropped to US\$28,060.0 and US\$27,087.8 million in 1996 and 1997, respectively. This was mainly because new loans were not contracted after the reconciliation exercise conducted in 1995 to ascertain the genuineness of some external claims. However, by 2003 and 2004, it had moved upward again, recording a total outstanding balance of US\$32,916.8 and US\$35,944.6 million, respectively (see figure 2 below).

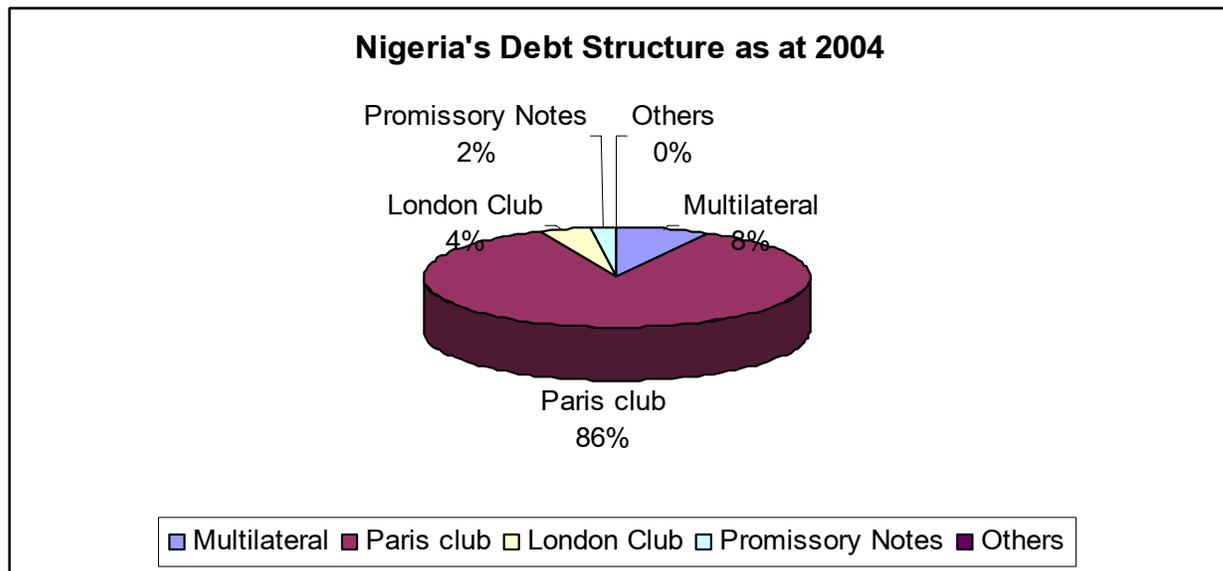
Figure 2: Nigeria's Debt Indicators



Source: CBN Annual Report and Statement of Account (various issues)

Nigeria's external debt stock has witnessed changes, both in structure and quantum. Over the years, the classification of Nigeria's debt by source as at the end of December 2004 showed that \$30.8 billion or 86.0 per cent is owed to the Paris Club of Creditors while indebtedness to multilateral sources amounted to \$2.8 billion or 8.0 per cent. Outstanding Promissory notes constitute 2.0 per cent or \$0.7 billion. Debt obligations to the London Club amounted to \$1.4 billion or 4.0 per cent. Other bilateral (non-Paris Club) accounted for the balance of \$47.5 million. Paris Club is the main source of Nigeria external debt and the most problematic. The debt continued to rise due to accumulation of payment arrears and default in interest payments. The arrears and interest are capitalized and added to the debt stock, further aggravating the debt burden (see figure 3).

Figure 3: Nigeria's Debt Structure



Source: CBN Annual Report and Statement of Account (various issues), Federal Ministry of Finance-Nigeria

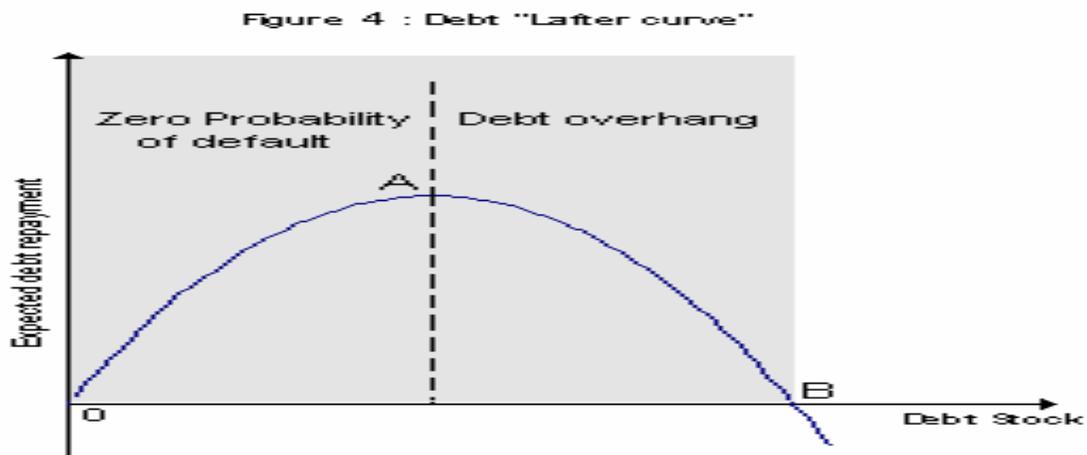
#### IV. Literature Review

Several studies have critically examined the problem of debt burden. The theoretical and empirical literature include the two-gap model by McKinnon (1964) and Green and Khan, (1990). "Liquidity trap, weak and strong debt overhang hypothesis" postulated by Claessen and Diwan (1990), and the concept of "debt Laffer curve" used by Krugman (1989), etc.

##### Theoretical Literature

The dual-gap analysis illustrates the role of foreign capital in the development process. The role of capital here is that it permits developing countries to invest more than they can save domestically. This proposition is made by the two-gap model (McKinnon, 1964 and Green and Khan, 1990). They noted that the volume of savings in developing countries was too low on account of the low income and, therefore, domestic saving should be supplemented by foreign resources to boost investment and increase the rate of economic growth. Provided that such funds are effectively utilised, then the country may succeed in boosting the rate of growth of its GDP and will be able to service debt conveniently. Foreign borrowing can contribute significantly to economic growth if the main constraint to growth is the foreign exchange.

Krugman (1989) and Froot and Krugman (1989) conceptualized the model of debt overhang of developing countries by applying the theory of "Laffer Curve"<sup>6</sup> to obtain a relationship between debt stock and the levels of expected repayment (i.e., debt Laffer Curve). The theory presupposes that larger debt stocks tend to be associated with lower probabilities of debt repayment. The curve sloped like an inverted U-shaped, graphs expected repayment as a function of the face value of the outstanding debt (Figure 4).



Source Author: Krugman (1989)

On the upward-sloping or "good" side of the curve, an increase in the face value of the debt service leads to an increase in repayment up to the "threshold" level, while along the "wrong side" of the curve (i.e. down-ward sloping) an increase in the face value of the debt reduces expected repayment. In a sense, debt relief, through debt service or debt stock reduction, becomes a rational choice for both creditors and debtors, when a debtor is said to be on the "wrong side" of the laffer curve.

When a country opens up to foreign capital and starts borrowing, the impact of debt on growth is likely to be positive (moving from zero indebtedness to point A in figure 4), but as debt ratio increases beyond point A, additional debt eventually slows growth. Thus, point A can be considered as the growth-maximizing level of debt. When debt reaches point B, however, the overall contribution of debt to growth turns negative. The

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<sup>6</sup> Laffer curve is an illustration of the thesis of an American Economist, Arthur Laffer, who postulated that there exists some tax rate, which maximizes government tax revenues. In this case, it was proposed that taxes above the optimal rate discourage production and, hence, result in lower revenue.

concept of debt Laffer curve is essentially an approach used in debt reduction mechanism.

Claessens and Diwan (1990) classified debt overhang into three different degrees: “liquidity trap, weak debt overhang, and strong debt overhang”. A “weak” debt overhang exists where the outstanding debt is so large that the situation cannot be resolved simply by issuing further financing or new money for the country. The situation can only be improved by using commitment mechanism to ensure allocation of loans for investment.

In the case of a “strong” debt overhang, the debtor postpones the implementation of profitable investment projects until at least part of the debt is forgiven. The leaders of the debtor country have no incentives to participate in extensive structural adjustment program because the benefits of increased growth would end up in creditor’s pocket while the short-term cost would rest solely on the debtor’s shoulders. Provision of large amount of liquidity cannot improve the debt overhang problem. Thus, the resolution of a strong debt service overhang calls for debt and debt service reduction, commitment to large investment program, commitment to structural economic adjustment and provision of new money in that order.

Lastly, debt overhang is considered as liquidity trap, if external debt accumulation is not too large, but the indebted country has to struggle with having to allocate scarce financial resources between consumption, investment and external transfer to service existing debt. Since extensive cut-down in funds used for consumption are politically hard to make, then consumption expenditure takes a larger share of the debtor country’s income, driving down investment and discouraging future output. Thus, the resolution of illiquidity effect of a debt overhang calls for injections of substantial new money facilities. It also calls for commitment to structural economic adjustment. Overall, the review of the theoretical literature on external debt and growth suggests that there are several channels through which heavy debt burden impedes growth.

### **Empirical Literature**

Much empirical literature exists on the interactions between external debt, investment and economic growth in cross-sectional analysis. The economic growth-debt relationship in developing countries is studied mainly by using OLS estimation methods

(e.g. Borensztein, 1990; Iyoha, 1999; Chowdhury (1994). However, most of the empirical evidence on debt overhang has been rather mixed, but many of the studies find debt variables to be significantly and negatively correlated with investment or growth. Borensztein (1990) using data for the Philippines found that the debt overhang hypothesis was largely valid. Deshpande (1997) also came out with similar result from his study of the experience of 13 severely indebted countries. Greene and Villanueva (1991) also found evidence of the debt overhang hypothesis for 23 developing countries. Elbadawi (1996) confirmed the debt overhang hypothesis for 99 developing countries. Furthermore, Iyoha (1999) provides empirical support for the debt overhang hypothesis for Sub-Saharan Africa (SSA).

In contrast, Cohen (1993) rejected the debt overhang theory, arguing instead, that the important debt problem is crowding out of investment caused by debt service payments. Warner (1992) also arrived at a similar conclusion as Cohen in his study of 13 heavily indebted countries. Similar results were corroborated by Degefe (1992) in Ethiopia. Generally, empirical studies on the subject are not conclusive.

Most of the empirical literature on the relationship between external debt overhang and economic growth and investment show negative effects. The studies that have shown favorable effects of external debt are rare. They include World Bank (1988) study for the period 1980-86 and Chowdhury (1994) for Bangladesh, Indonesia and South America.

## **V. Model Specification, Empirical Analysis and Interpretation of Results**

The specification of the models are based on the empirical work of Elbadawi (1996) and Were (2001) which are largely derived from the neoclassical framework. The work of Elbadawi and Were are some of the recent studies that captures the effect of both current debt flows and the effect of past debt accumulation (known as debt overhang) as well as liquidity effect of annual debt service payments on economic growth and investment. Similarly, their works are some of the few studies that largely focused on a cross section of low income countries. However, our models are augmented with some debt overhang variables to the equations to determine the significance of the direct impact of debt overhang on economic growth and investment. Besides these variables, the models also incorporate policy fundamental and shock variables since there are so many channels

through which indebtedness works against growth. The dependent variable is real GDP growth rate (GDPGR). The explanatory variables have been identified as ratio of external debt to GDP ( $EDTGDPT_t$ ), which should stimulate growth. This is because reasonable levels of current debt inflow that help to finance productive investment are expected to enhance growth. Past debt accumulation lagged one period ( $EDTGDPT_{t-1}$ ), as a measure of debt overhang, debt service to export ( $DSE_t$ ) captures the “crowding out” effects. A dummy variable is also introduced as a proxy for political stability (GCRI), and takes the value of 0 for stability and 1 for instability in the growth model. The functional relationships are specified as follows:

### Growth Equation

$$GDPGR_t = f(EDTGDPT_t, EDTGDPT_{t-1}, DSE_t, GPUIV_t, GPUIV_{t-1}, FDIGDP_{t-1}, HCD_t, FISBAL_{t-1}, INF_t, REER_t, GCRI_t)$$

Where

$GDPGR_t$	=	Real GDP growth rate.
$EDTGDPT_t$	=	Ratio of total external debt to GDP.
$EDTGDPT_{t-1}$	=	Ratio of external debt to GDP lagged one period, as a measure of debt overhang.
$DSE_t$	=	Total debt service as ratio of export, is expected to capture the crowding out of total investment.
$FISBAL_{t-1}$	=	Lagged fiscal balance in percentage of GDP
$GPUIV_t$	=	Public investment- GDP ratio.
$GPUIV_{t-1}$	=	Public investment - GDP ratio lagged one period to reflect the effect of past investment.
$FDIGDP_t$	=	Private foreign investment-GDP ratio.
$HCD_t$	=	Gross secondary school enrolment rate (proxy for the quality of Human capital)
$INF_t$	=	Inflation rate (reflects macroeconomic instability).
$REER_t$	=	Effective real exchange rate (reflects credibility of policies)
$GCRI_t$	=	Dummy variable for political stability.

### Public Investment Equation

The real GDP growth rate is included in the public investment equation in order to allow for the possible existence of “investment accelerator effect”. The functional relationship is consequently specified as follows:

$$GPUIV_t = f(EDTGD P_t, EDTGD P_{t-1}, DSGDP_t, RESM_t, AIDGNI_t, FISBAL_{t-1}, INT_t, REER_t, FDIGDP_t, GDPGR_{t-1}, GPUIV_{t-1})$$

Where,

- DSGDP<sub>t</sub> = Total debt service in percent of GDP (reflects the crowding out effect of debt service on public investment).
- RESM<sub>t</sub> = Foreign reserve as a ratio of imports.
- AIDGNI<sub>t</sub> = Foreign aid in percent of gross national income.
- INT<sub>t</sub> = Interest rate (to capture interest rate effect on investment.)
- GDPGR<sub>t-1</sub> = Real GDP growth rate (captures investment accelerator principle)

Other variables are as already defined.

### Correlation Results

The objective of this section is to show whether and how strongly these pair of variables are related. The summary of the correlation matrix are presented in table below.

	LGDPGR	LEDTGDP	LGPIV	LDSE	LDSGDP	LFDIGDP	FISBAL	LINF	LREER	LHCD	GCRI
LGDPGR	1.000	-0.572	-0.495	-0.634	-0.497	-0.397	0.654	-0.687	-0.562	-0.549	-0.336
LEDTGDP		1.000	0.315	0.395	-0.469	-0.542	-0.503	-0.223	0.557	0.245	
LGPIV			1.000	0.315	0.395	-0.469	-0.542	-0.503	-0.223	0.557	0.245
LDSE				1.000	0.315	0.395	-0.469	-0.542	-0.503	-0.223	0.557
LDSGDP					1.000	0.395	-0.469	-0.542	-0.503	-0.223	0.557
LFDIGDP						1.000	-0.469	-0.542	-0.503	-0.223	0.557
FISBAL							1.000	-0.503	-0.223	0.557	0.245
LINF								1.000	-0.223	0.557	0.245
LREER									1.000	0.557	0.245
LHCD										1.000	0.245
GCRI											1.000

The correlation matrix presented in table above confirms the time series evidence in the literature, suggesting a negative correlation between economic growth (GDPGR) and external debt (LEDTGDP) in Nigeria. Growth is also negatively correlated with other debt service ratios. On the contrary, public investment (LGPIV) is positively correlated to external debt.

### Time Series Properties

Recent developments in econometrics have shown the limitations of traditional modeling construct in empirical analysis. The outcome of such generating series (i.e. working with non-stationary variables) leads to spurious regression results from which

further inference may be meaningless. Unit root and cointegration tests are important tests that are often used to circumvent the inherent limitations of traditional models. To this effect, the Augmented Dickey-Fuller (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 tests show that the variables Real GDP growth rate (GDPGR), interest rates (INT), fiscal balance in percent of GDP (FISBAL) and private foreign investment/GDP ratio (LFDIGDP) are stationary (integrated of order zero) at 5% level of significance. The rest of the variables were found to be stationary after differencing once. The variables are, therefore, integrated of order I (1).

### ADF Unit Root Test Results

Variable	ADF Tests Statistics	5% Critical Value	Level
GDPGR	5.2834	3.5578	I(0)
LEDTGDP	5.7823	3.5629	I(1)
LDSE	6.1224	3.5629	I(1)
LDSGDP	7.6963	3.5629	I(1)
LGPUIV	6.4338	3.5629	I(1)
LHCD	5.4012	3.5629	I(1)
INT	4.1960	3.5578	I(0)
LINF	11.9801	3.5629	I(1)
LREER	4.5780	3.5629	I(1)
FISBAL	4.3940	3.5629	I(0)
LRESM	12.1002	3.5629	I(1)
LAIDGNI	4.2703	3.5629	I(1)
LFDIGDP	4.7398	3.5577	I(0)

The next step after finding out the order of integration of the variables was to establish whether the non-stationary variables are cointegrated<sup>7</sup>. To establish this, the Johansen test was used. The test indicates the presence of five and six cointegrating equations (vectors) in the two models at 5% level of significance. This result confirms the existence of a long run equilibrium relationship between the variables (see annexes 1a and 1b).

<sup>7</sup> The concept of cointegration implies that if there is a long-run relationship between two or more non-stationary variables, deviation from this long-run path are stationary. Variables may move apart in the short-run but be brought together by market forces, government policy or both. So variables are said to be cointegrated if they are affected by the same long-run influence.

Having established cointegration in the two models, growth and public investment equations were re-specified to include an Error Correction Term (ECM).

$$D(GDPGR_t) = \alpha_0 + \alpha_1 D(LEDTGDP_t) + \alpha_2 D(LDSE_t) + \alpha_3 D(LGPUIV_t) + \alpha_4 D(LFDIGDP_t) + \alpha_5 D(LHCD_t) + \alpha_6 D(LINF_t) + \alpha_7 D(LREER_t) + \alpha_8 (GCRI_t) + \alpha_9 D(LEDTGDP_{t-1}) + \alpha_{10} D(LGPUIV_{t-1}) + \alpha_{11} D(FISBAL_{t-1}) + \alpha_{12} ECT_{t-1} + U_{1t} \quad (1)$$

We have the following *a priori* signs:

$$\alpha_2, \alpha_6, \alpha_8, \alpha_9, \text{ and } \alpha_{11} \leq 0, \text{ and } \alpha_1, \alpha_3, \alpha_4, \alpha_5, \alpha_7 \text{ and } \alpha_{10} \geq 0$$

$$D(LGPUIV_t) = \beta_0 + \beta_1 D(LEDTGDP_t) + \beta_2 D(LDSGDP_t) + \beta_3 D(LRESM_t) + \beta_4 D(LAIDGNI_t) + \beta_5 D(LFDIGDP_t) + \beta_6 D(INT_t) + \beta_7 D(LREER_t) + \beta_8 D(FISBAL_t) + \beta_9 D(GDPGR_{t-1}) + \beta_{10} D(LEDTGDP_{t-1}) + \beta_{11} ECT_{(t-1)} + U_{2t} \quad (2)$$

We hypothesize the following signs:

$$\beta_2, \beta_6, \beta_8, \text{ and } \beta_{10} \leq 0, \text{ and } \beta_1, \beta_3, \beta_4, \beta_5, \beta_7, \text{ and } \beta_9 \geq 0$$

### Granger Causality Test

Granger proposed the causality concept in 1969: the variable  $Y_{2t}$  is the cause of  $Y_{1t}$ , if the predictability of  $Y_{1t}$  is improved when the information related to  $Y_{2t}$  is incorporated in the analysis. The basic principle of Granger causality analysis is to test whether past value help to explain current value. Maddala (1998) indicates that if two variables are cointegrated, there must be at least one direction of causality between investigated variables. Our objective is to investigate whether observation of a variable like public investment (LGPUIV) is potentially useful in anticipating future movements in GDP growth rate (GDPGR), and to test Granger causality between LGDPUIV and LEDTGDP, and between GDPGR and external debt (LEDTGDP).

### Interpretation of Granger Causality Result

Test for causal relationship between public investment (LGPUIV), GDP growth rate (GDPGR) and external debt for the period 1979-2004 is shown in annex 2. The results indicate that we can reject the null hypothesis that public investment does not Granger cause GDPGR and that LGPUIV does not Granger cause external debt (both at 5% level of significance). With regard to the relationship between external debt and GDPGR, the

analysis shows that we cannot reject the null hypothesis that external debt do not Granger cause GDPGR, indicating that there is no evidence of Granger causality between external debt and GDPGR in the case of Nigeria.

### Estimation Results

The results of the models obtained below used ordinary least square (OLS) technique on time series data covering 1970-2004. The econometrics computer software package, E-views (version 4.0) was used for the estimation.

### Growth Equation

The estimated results for the growth equation are presented below:

Dependent Variable: D(GDPGR)			
Variable	Coefficient	t-Statistic	Probability
C	2.181585	2.575794	0.0196
D(LEDGTGDP)	0.053554	0.032759	0.9742
D(LDSE)	-4.923255	-4.839725	0.0002
D(LGPIV)	3.706496	2.410126	0.0276
D(LFDIGDP)	-1.500176	-3.380285	0.0036
D(LINF)	-1.690784	-2.418853	0.0271
D(LREER)	7.949880	3.625443	0.0021
D(LHCD)	-18.93489	-3.260327	0.0046
GCRI	-2.450915	-2.412374	0.0274
DLEDGTGDP(-2)	5.044408	2.832718	0.0115
DLGPIV(-1)	-1.130598	-0.876809	0.3928
DFISBAL(-1)	-0.428443	-3.871655	0.0012
ECM(-1)	-1.751680	-9.473445	0.0000
R-squared	0.926435	F-statistic	17.84062
Adjusted R-squared	0.874506	Prob(F-statistic)	0.000000
Durbin-Watson statistic	1.855843		

### Results for Public Investment Equation

The regression estimates for the public investment equation are presented below. The evaluations of the results are also discussed below.

Dependent Variable: D(LGPUIV)			
Variable	Coefficient	t-Statistic	Probability
C	0.018898	0.277232	0.7848
D(LEDGTDP)	-0.302245	-1.294962	0.2117
D(LDSGDP)	0.193980	2.105787	0.0495
D(LRESM)	0.078930	0.847027	0.4081
D(LAIDGNI)	-0.552004	-2.488590	0.0228
D(LFDIGDP)	0.129973	2.423560	0.0261
D(INT)	0.018063	1.173675	0.2558
D(LREER)	-0.471518	-2.220070	0.0395
D(FISBAL)	-0.024264	-2.223478	0.0392
DLEDGTDP(-1)	-0.029510	-0.125300	0.9017
DGDPGR(-1)	0.028391	2.211118	0.0402
DLGPUIV(-1)	0.033130	0.205981	0.8391
ECM(-1)	-0.733695	-2.587835	0.0186
R-squared	0.739206	F-statistic	4.251658
Adjusted R-squared	0.565343	Prob(F-statistic)	0.002962
Durbin-Watson statistic	1.918196		

### Other Diagnostic Tests

The outcome of the diagnostic tests is satisfactory. A value with a corresponding probability greater than 5% is an indication of good result. The results of the test further suggest that the model is well specified and robust for policy analysis (see annex 3). In addition to the above tests, the CUSUM and CUSUM of Squares stability tests were performed in order to establish the reliability and stability of our model. The graphs show that the parameter movements are within the critical lines at the 5% level of significance, indicating stability of the model (see annex 4).

### Interpretation of Results

#### Growth Equation

Several of the variables considered in the determination of the growth regression output were found to be statistically significant and with t-statistics greater than two in absolute terms, namely, LDSE, LGPUIV<sub>t</sub>, LFDIGDP<sub>t</sub>, LINF<sub>t</sub>, LREER<sub>t</sub>, LHCD<sub>t</sub>, GCRI<sub>t</sub>, LEDTGDPT<sub>(t-1)</sub>, and FISBAL<sub>(t-1)</sub>. The rest of the variables LEDTGDPT<sub>t</sub> and LGPUIV<sub>(t-1)</sub> are not statistically significant. Similarly, all the variables have the hypothesized sign, except LEDTGDPT<sub>(t-2)</sub>, LFDIGDP<sub>t</sub>, LHCD<sub>t</sub> and LGPUIV<sub>(t-1)</sub>.

The regression results of the error correction model (ECM), in the growth equation support our hypotheses by confirming the existence of crowding out and import

compression hypotheses in Nigeria. This means that debt servicing pressure in the country has had a significant adverse effect on the growth process. However, the coefficient of past debt accumulation ( $LEDTGDP_{t-2}$ ) relates positively to economic growth, thus contradicting the prescription of the debt overhang hypothesis in Nigeria. This result was not expected. However, the explanation for the positive relationship could be found in the structure of public finance in Nigeria. In the past the need for foreign borrowing by Nigeria was minimal, as debt contracted by the country were concessional debt from official sources such as the World Bank and Nigeria's trading partners. These debts did not exert much pressure on the economy because the interest charged on the loans was generally low, with longer repayment period. Moreover, these loans and grants financed a lot of consumption and investment expenditure in many sectors of the economy, notably education, health, transport and communication etc. Nonetheless, the country had comfortable external reserves as a result of the unprecedented inflow of foreign exchange from oil exports.

The results further revealed some evidence in support of a positive relationship between current capital inflow in Nigeria and economic growth ( $LEDTGDP_t$ ), but that support is not robust. Perhaps the results could point to the impact of external resources in the Nigerian growth process and suggest that Nigeria depends heavily on external resources. These results are consistent with the findings from similar studies (e.g Elbadawi, 1996, Were, 2001).

Fiscal balance as a per cent of GDP (lagged one period), inflation rate, and human capital development negatively affects economic growth while the real effective exchange rate is positively related to economic growth. Political instability negatively affects economic growth, as the dummy variable introduced to capture political instability had a negative sign.

The lagged error correction term ( $ECM_{t-1}$ ) has the expected negative sign (-1.75) and highly significant. The negative value supports our earlier findings of the cointegrating relationship between the variables. The coefficient indicates speed of adjustment of around -1.75 which is relatively high. This implies that following short-run disequilibrium, 175% of the adjustment to the long-run takes place within one period. The coefficient of determination relating to the goodness of fit, measured by the  $R^2$

indicates that 92% of the variations in GDP growth rate are explained by the independent variables during the period of the study. The F-statistics of 17.84 with a corresponding low probability of 0.00000 is a clear indication that the model is well specified. The Durbin-Watson statistics of 1.85 indicates that autocorrelation is not a problem in our specification.

### **Public Investment Equation**

The result shows that the variables  $LDSGDP_t$ ,  $LAIDGNI_t$ ,  $LFDIGDP_t$ ,  $LREER_t$ ,  $FISBAL_t$ , and  $GDPGR_{t-1}$  are found to be statistically significant. The remaining variables are not statistically significant. All the variables have their hypothesized sign, except  $LEDTGDP_t$ ,  $LDSGDP_t$ ,  $LAIDGNI_t$ ,  $LINT_t$  and  $LREER_t$

In the public investment equation, past debt accumulation ( $LEDTGDP_{t-1}$ ) negatively affects public investment. This outcome is expected and revealed some evidence in support of the debt overhang hypothesis in Nigeria. However, that support is not robust in the model. On the other hand, debt service ratio ( $LDSGDP$ ) is positively related to investment, thus contradicting the prescription of crowding out hypothesis in Nigeria. This result was unexpected. The sign of this variable is an aberration. However, the structure of the economy might have accounted for the aberration. Crude oil dominated the country's export; and if a significant proportion of the debt service is linearly related to oil exploration through the joint venture operations, and given that oil exports and investment/economic growth are highly correlated, then the outcome is not surprising. The more debt obligations the oil companies and the Nigerian National Petroleum Corporation (NNPC) settled the more creditworthy the sector becomes, hence the more vibrant the sector and the economy. It is also plausible to argue that debt service ratio for Nigeria has been relatively small compared to other low-income highly - indebted countries. This is because of the country's determination not to spend beyond 30.0 per cent of its earnings on debt service. The results further suggest that GDP growth rate is positively related to public investment through the accelerator mechanism and this supports the a priori expectation that the rate of growth of GDP should be positively related to investment. The results also show that private foreign investment is a key determinant of public investment confirming the complementarity's hypothesis in production.

The lagged error correction term ( $ECM_{t-1}$ ) has the expected negative signed (-0.73) and statistically significant at 1 level %. The result confirms the existence of long run relationship between the dependent and explanatory variables. The coefficient of the error term indicates a speed of adjustment of around -0.73. This suggests that following short-run disequilibrium/deviation, 73% of the adjustment to the long-run take place within one period either by market mechanism, government intervention or a combination of both. The R-squared ( $R^2$ ) of 0.74, which measures goodness of fit, indicates that 74% of the systematic variations of public investment in Nigeria is explained by the explanatory variables during the period of the study. The overall F-statistics of 4.25 with a low probability of less than 5%, gives clear evidence that the equation is well fitted. The Durbin-Watson statistics of 1.91 indicates the absence of autocorrelation in our specification.

## **VI. Policy Implications, Recommendations and Conclusion**

### **Policy Implications**

The heavy debt burden that confronts Nigeria has adversely affected the level of economic performance. Though kept below 20.0 per cent, the level of debt service payments still remains large. This means that the resources that would have been used for investment are diverted to meeting debt service obligations. The debt servicing and the adjustment policies required to address the debt burden have also worsened social welfare in the area of education, health, communication, etc. The most serious implication of debt overhang is that, it has reduced the amount of foreign exchange available to finance the importation of raw materials and capital goods needed for rapid economic development. This means that the debt burden has denied the industrial and agricultural sectors the needed inputs, holding back new investments and even the maintenance of capital stock. The import compression effect, which arose from the decline in foreign exchange earnings from the levels in the 1970's and early 1980's, and the need to meet debt service obligations, led to a reduction in commitments to development projects. For most of the 1980's and part of the early 1990's, real GDP growth was negative.

The pursuance of improved macroeconomic policies, which is an essential condition to cope with the pressures of debt and debt service, has caused a decline in living standards

because of debt build-up, arrears on debt, debt-service and external commercial payments, thus stretching the supply of foreign exchange to the limit. The accumulation of arrears arose over the years because of the inadequate financial provision of external debt service. Such arrears on debt service obligations increased to about \$19.0 billion at the end of 2002 and accounted for about 60.3 per cent of the total indebtedness during the period. These have impaired or worsened Nigeria's credit ratings in the international market as the country was classified as the third most risky country in terms of credit rating in 1994. The country could no longer attract the needed foreign capital to augment domestic savings. It also made the rescheduling of Nigeria's debt difficult by the Paris Club of Creditors. This is because the country is perceived by the creditors to possess the capacity to service its debt beyond what is currently paying. This illusion has eroded the confidence of both domestic and potential foreign investors.

### **Policy Recommendations**

Based on the above policy implications, the study provides the following policy recommendations for consideration.

- Nigeria must press for substantial debt reduction in the external debt stock, in order to achieve sustainable growth and economic development. Debt forgiveness or interest write-offs are recommended rather than temporary debt relief.
- The need to expand the country's productive capacity base is also quite apparent. In this regard, the promotion of non-oil exports in order to increase the exports earnings of the country should be encouraged; specifically, the revitalization of agriculture is recommended. This effort should be consolidated through backward integration.
- Greater emphasis must be placed on maximizing the concessionary assistance from multilateral institutions as well as encouraging foreign direct investment. Borrowing, especially from commercial creditors, could be considered only after detailed feasibility studies on the social and commercial viability of the project have been undertaken and should not be guaranteed by government. As long as investments maintain commercial net worth by paying interest and principal regularly, borrowing will not constitute a problem.

- Government should curtail its extra-budgetary activities and reduce its expenditure. In other words, there should be fiscal discipline.
- The country should be stabilized politically in order to attract foreign direct capital in the form of direct and portfolio investment. If there is no political stability, private investors will relocate their enterprises or simply wait for the instability to dissipate.

### **Conclusion**

In conclusion, we have seen the interaction between external debt, investment and economic growth. We also acknowledge the fact that Nigeria is a developing country with great potential for rapid growth. However, we realize that this could not be possible without adequate investment. Thus, given the capital inadequacy of the nation both in terms of foreign exchange and domestic savings, one option is to obtain foreign financing to bridge these gaps. But, if foreign borrowing is to be resorted to, such funds must be invested in productive activities; that is the marginal efficiency of investment or internal rate of return must be higher than the cost of capital.

Finally, Nigeria still has a chance of overcoming her external debt problems by cultivating the right policies such as trade liberalization, tax reforms, favorable investment climate, etc and, through deeper debt relief/debt cancellation. The debt relief will enable the country to use the lean foreign exchange earnings to procure the badly needed inputs for industries and infrastructures; this would help in restoring investment, financial solvency and promoting economic growth.

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**Appendix****Table 1: Selected Economic Indicators 1970-2004**

Table 1								
SELECTED ECONOMIC INDICATORS 1970-2004								
Year	GDPGR	Inflation Rate	Exch.Rate	CAB/GDP(%)	EDT/GDP	EDT/EXPORTS	TDS/EXPORTS	External Reserves(\$)
1970	5.70	13.80	0.7143		11.50	68.20	4.50	156.58
1971	11.47	15.60	0.6955		6.50	36.30	1.80	281.38
1972	0.98	3.20	0.6579		6.70	33.90	3.00	243.58
1973	7.64	5.40	0.6579		7.20	34.90	3.00	377.98
1974	11.16	13.40	0.6599		4.30	13.90	1.80	3,452.30
1975	-3.22	33.90	0.6159		4.10	14.30	3.10	3,583.70
1976	9.18	21.20	0.6265		2.10	8.60	3.50	3,286.30
1977	6.09	15.40	0.6466		6.30	26.60	0.90	2,814.50
1978	-5.49	16.60	0.6060		9.10	48.20	1.00	1,298.90
1979	6.84	11.90	0.5957		8.10	37.10	1.40	3,059.80
1980	3.71	9.90	0.5464		13.90	34.40	0.70	5,462.00
1981	-9.25	20.90	0.6100		17.80	59.80	4.80	2,441.60
1982	-0.82	7.70	0.6729		26.40	108.00	9.50	1,043.30
1983	-5.40	23.20	0.7241		50.80	171.50	17.80	224.40
1984	-5.40	39.60	0.7649		61.60	146.30	29.10	710.10
1985	9.40	5.50	0.8938		66.60	144.20	31.80	1,657.90
1986	3.20	5.40	2.0206		126.50	503.00	38.70	2,836.60
1987	-0.60	10.20	4.0179		120.80	374.60	12.90	7,504.59
1988	10.00	38.30	4.5367		134.30	446.40	28.50	5,229.10
1989	7.30	40.90	7.3916		132.50	401.30	27.50	3,047.62
1990	8.30	7.50	8.0378	7.4	117.40	246.10	28.30	4,541.45
1991	4.73	13.00	9.9095	-3.9	123.50	275.30	29.20	4,487.00
1992	2.98	44.60	17.3000	-0.9	88.70	246.10	24.40	713.00
1993	2.65	57.20	22.0468	-2.8	143.90	310.20	17.90	1,330.10
1994	1.02	57.00	218861	-5.7	139.80	349.90	19.50	1,658.80
1995	2.44	72.80	70.3632	-9.4	121.30	290.50	13.80	1,441.00
1996	3.40	29.30	69.8449	8.5	89.00	194.90	11.60	4,074.70
1997	3.16	8.50	71.7505	1.2	78.50	187.10	9.80	7,581.20
1998	2.36	10.00	84.4000	-11.5	94.20	337.70	14.20	7,100.00
1999	2.80	6.60	91.8000	1.2	83.80	226.20	13.40	5,450.00
2000	5.40	14.50	101.6500	15.71	68.10	163.80	14.90	9,910.40
2001	4.70	16.50	111.9400	5.18	61.20	174.00	14.60	10,415.60
2002	4.60	12.20	120.9700	1.29	72.00	191.40	17.40	7,681.10
2003	9.60	23.80	129.3600	15.17	61.10	145.62	15.10	7,467.78
2004	6.60	10.00	133.5000	16.63	59.20	158.37	12.74	16,955.02

**Annex 1(A): Johansen Cointegration Test for Growth Equation**


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Series: GDPGR LEDTGDP LDSE LGPUIV LFDIGDP LREER LINF FISBAL LHCD GCRI

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Lags interval (in first differences): 1 to 1

Hypothesized		Trace	5 Percent	1 Percent
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Critical Value
None **	0.999877	655.7342	212.67	226.40
At most 1 **	0.967174	376.5775	175.77	187.31
At most 2 **	0.950274	270.6654	141.20	152.32
At most 3 **	0.910929	177.6272	109.99	119.80
At most 4 **	0.760024	102.6591	82.49	90.45
At most 5	0.596840	58.41544	59.46	66.52
At most 6	0.365367	30.25434	39.89	45.58
At most 7	0.297488	16.15839	24.31	29.75
At most 8	0.149695	5.212512	12.53	16.31
At most 9	0.005968	0.185564	3.84	6.51

\*(\*\*) denotes rejection of the hypothesis at the 5%(1%) level

Trace test indicates 5 cointegrating equation(s) at both 5% and 1% levels

**Annex 1(B): Johansen Cointegration Test for Public Investment Equation**

Series: LGPUIV LEDTGDP LDSGDP GDPGR LRESM LAIDGNI LFDIGDP INT LREER FISBAL

Lags interval (in first differences): 1 to 1

Hypothesized		Trace Statistic	5 Percent Critical Value	1 Percent Critical Value
No. of CE(s)	Eigenvalue			
None **	0.995198	448.5296	212.67	226.40
At most 1 **	0.903172	283.0282	175.77	187.31
At most 2 **	0.873241	210.6488	141.20	152.32
At most 3 **	0.842210	146.6193	109.99	119.80
At most 4 *	0.603888	89.37805	82.49	90.45
At most 5 *	0.534149	60.67025	59.46	66.52
At most 6	0.417013	36.98964	39.89	45.58
At most 7	0.346788	20.26235	24.31	29.75
At most 8	0.203683	7.060895	12.53	16.31
At most 9	1.28E-05	0.000397	3.84	6.51

\*(\*\*) denotes rejection of the hypothesis at the 5%(1%) level

Trace test indicates 6 cointegrating equation(s) at the 5% level

Trace test indicates 4 cointegrating equation(s) at the 1% level

**Annex 2: Result of Granger Causality Test**

Pairwise Granger Causality Tests

Sample: 1970 2004

Lags: 1

Null Hypothesis:	Obs	F-Statistic	Probability
LGPIV does not Granger Cause GDPGR	32	4.46042	0.04342
GDPGR does not Granger Cause LGPIV		2.89356	0.09964
LEDTGDP does not Granger Cause GDPGR	32	0.03614	0.85055
GDPGR does not Granger Cause LEDTGDP		0.10859	0.74413
LEDTGDP does not Granger Cause LGPIV	32	1.00469	0.32447
LGPIV does not Granger Cause LEDTGDP		4.77686	0.03707

*Probability is the critical probability (acceptance probability)*

*The null hypothesis  $H_0$  is accepted as soon as probability is higher than 5%*

**Annex 3: Summary of Diagnostic Tests****Summary of Diagnostic Tests for Growth Equation (1)**

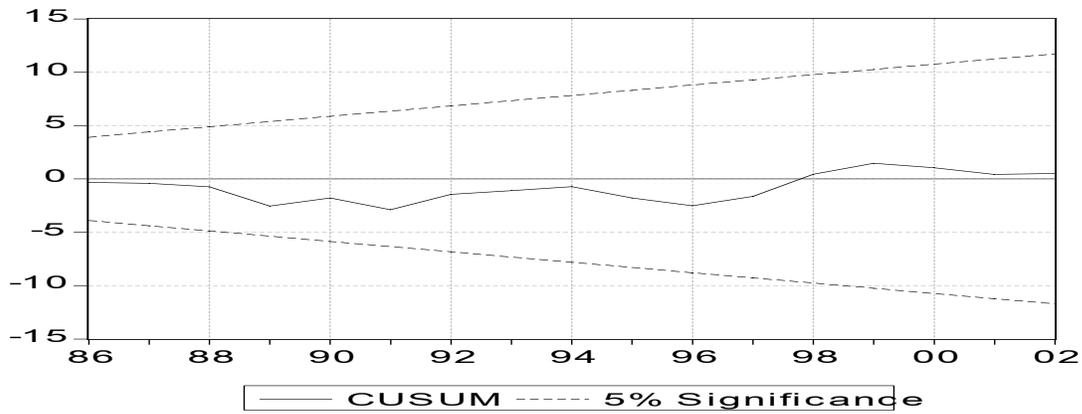
Test	F-Statistics	Probability
<i>Jack-Bera Normality</i>	<i>0.51</i>	<i>0.77</i>
<i>Breusch-Godfrey</i>	<i>0.11</i>	<i>0.73</i>
<i>White Heteroskedacity</i>	<i>0.23</i>	<i>0.99</i>
<i>RAMSEY Reset</i>	<i>0.05</i>	<i>0.82</i>

**Summary of Diagnostic Tests for Public Investment (2)**

Test	F-Statistics	Probability
<i>Jack-Bera Normality</i>	<i>0.86</i>	<i>0.65</i>
<i>Breusch-Godfrey</i>	<i>0.03</i>	<i>0.85</i>
<i>White Heteroskedacity</i>	<i>0.40</i>	<i>0.94</i>
<i>RAMSEY Reset</i>	<i>0.26</i>	<i>0.61</i>

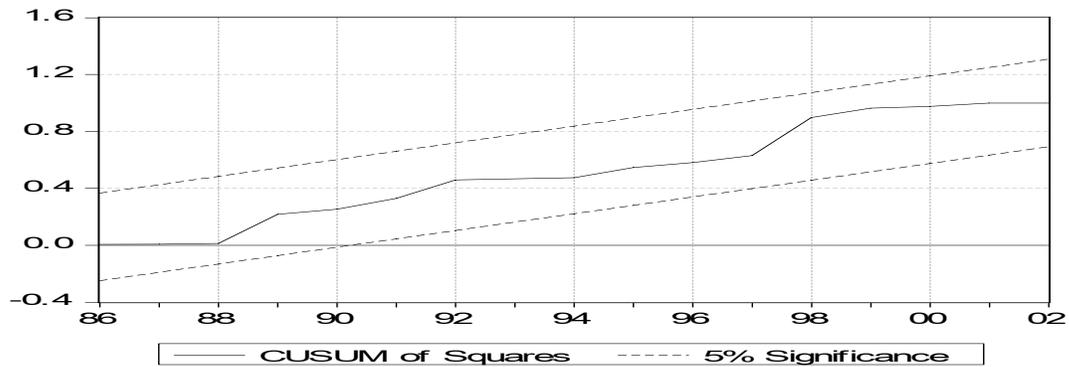
**Annex 4: CUSUM and CUSUM of Square Stability Test**

i) *CUSUM and CUSUM of Squares stability for Growth Equation (1)*



*We conclude that the ECM model is stable*

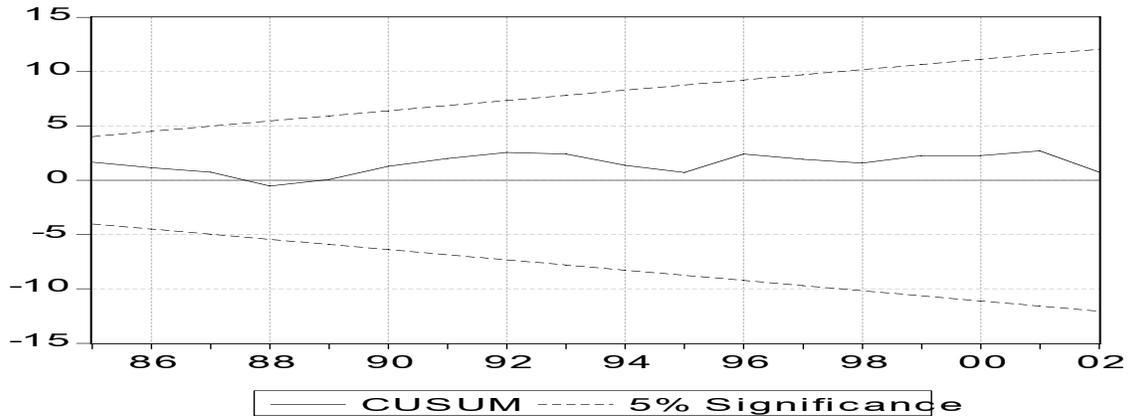
**CUSUM of Squares Test**



*We conclude that the ECM is stable*

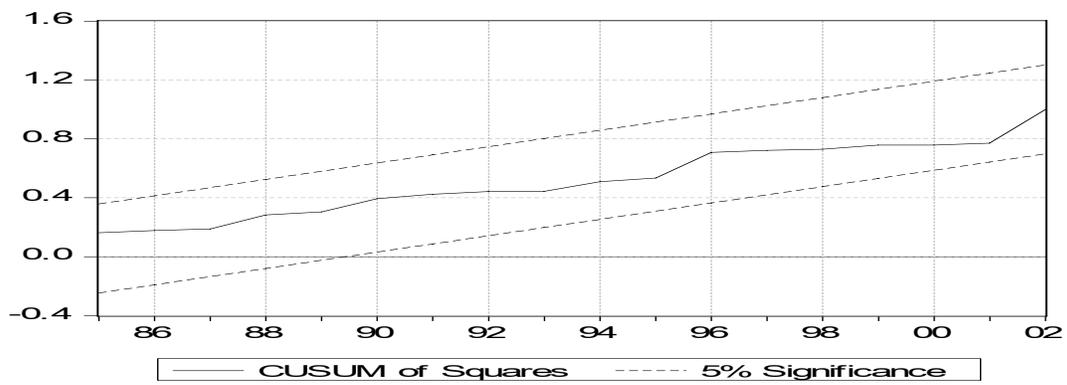
ii) *CUSUM and CUSUM of Squares stability for Public Investment Equation (2)*

**CUSUM Test**



*We conclude that the ECM model is stable*

**CUSUM of Squares Test**



*We conclude that the ECM is stable*

# Matters arising from the Introduction of the Defined Contributory Pension Scheme in Nigeria— A Policy Proposal

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J.S. Akuns\*

## I. Introduction

The pristine pension system relied on children to provide the consumption needs of their parents, when such parents became incapable of producing goods and services due to old age or some other reasons. The system served medieval societies efficiently well until the end of the Stone Age. With the emergence of the industrial society, the administration of pension assumed a formal dimension as an instrument of public policy for which government and employers of labour became responsible for defining associated benefits to beneficiaries and society at large. The catchword for the pension system became the *defined benefits (DB) pension scheme or pay-as-you-go (PAYG)*. Thus, government, employers and employees became the core stakeholders of the pension system unlike the aboriginal scheme that relied on children and parents as the core stakeholders.

Either private or public sector, DB scheme could be funded or unfunded but operationally, they are linked to employee terminal emoluments and years of service. The earliest recorded DB scheme is that of Germany in 1889. The DB scheme served their purpose very well until they recently became unsustainable due to demographic changes and fiscal imbalance that imposed financing difficulties. In some developing countries, the un-sustainability is largely as a result of constraints of financing outstanding pension obligations. In Nigeria for instance, the outstanding public sector pension obligations stood at N2 trillion in 2004. The figure represents 23% of Nigeria's GDP at current market prices compared to 14% for Italy in 2003.

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\* Akuns is an Assistant Director, Governor's Office, Central Bank of Nigeria, Abuja. He acknowledges the comments of anonymous reviewers. All remaining errors are the author's responsibility.

The identified difficulties associated with the operations of the DB schemes compelled the need for reforms of the pension system by tinkering with existing schemes of DB pension or introducing entirely new ones such as the *defined contributory (DC) pension scheme* pioneered by Chile. Although the body of literature on pension system seems to be exclusively devoted to DB schemes, the scant literature about the DC schemes and its resounding success in Chile paint a picture of success and potentials that will relief the difficulties experienced with the DB pension schemes. The synopsis of DC pension seems to have been inspired by the philosophy of privatization/commercialization as well as the pristine pension system that relied on children.

In line with global trends in pension reforms as well as stark domestic realities, Nigeria introduced the operation of the DC pension scheme on 1<sup>st</sup> July 2004. The pension reform is an integral part of an overall public policy reforms that seek to achieve sustainable economic growth and social welfare in Nigeria. In this regard, the main thrust of the paper is to examine some salient features of the defined contributory pension scheme and their welfare implications to retirees. In welfare terms, the key questions for public policy are thus ‘is the defined contributory pension scheme Pareto optimal?’ ‘Who amongst the identified core stakeholders of modern society pension system will be hurt most?’

In what follows, an overview of the defined contributory pension scheme is carried out in section 2, while country-specific experiences with the defined contributory pension scheme is reviewed in section 3. Issues of public policy on the defined contributory pension scheme are explored in section 4. Finally, section 5 contains the concluding remarks of the paper.

## **II. An Overview of the Defined Contributory Pension Scheme**

The synopsis of pension is all about the need to smoothen the distribution of consumption expenditure of a citizen over a life span. Pension systems, which have been with mankind from creation, constitute the mechanism for the smoothening of a citizen’s lifetime consumption and are, therefore, safeguards

against destitution when a citizen is no longer capable of producing goods and services to meet his/her needs due to either old age or some other reasons.

The defined contributory pension scheme requires both the employer and the employee to jointly fund an account in the name of the employee towards funding for the employee in retirement. Both parties base the funding on a fixed rate of contribution. The funds so accumulated together with income generated thereon during years of active labour service by the employee constitute his/her pension assets. At retirement, such assets become an annuity over the lifespan of the retiree.

A retiree may be entitled to withdraw a certain percentage of such assets lump sum. Thereafter, the balance will continue to be invested while the employee continuously draws out of the fund based on some programmed schedule to finance his consumption needs in retirement. Typically, pension assets under the DC scheme are protected by law from any form of infringement, such as those arising from court processes such as lien.

One of the tangible dividends of the defined contributory pension scheme is that it allows pension asset owners to make decisive input in the growth of the value of their pension asset and its eventual perpetuation. Furthermore, an intangible benefit of the scheme lies in the portability of pension rights and their inherent capacity to free the intrinsic feelings of labour from the often heard emotional concerns of remaining “fixed” in the employment of an enterprise because of the stability and certainty of payments of pension benefits during the lifespan of retirement.

Another major benefit of the scheme is that it builds up a pool of resources that foster individual and economy-wide prosperity within the paradigm of Franco Modigliani’s life-cycle income hypothesis. Further more, pensions as a component of transfer payments in aggregate government expenditure will cease. And within the ambit of Say’s law productive active labour will bring forth its own retirement income on a concurrent basis. This contrasts with the DB scheme where the payment of pension income of retirees depended on the active labour force.

Pension assets under the DC schemes are bequeathals to heirs. The existence of mature capital markets with high fiduciary standards and transparency enhance the effectiveness of DC pension schemes. The coverage and application of DC pension schemes are versatile. The scheme may not necessarily be uniformly applied by employers in either the public or private sector, but the coverage could be extended to both employees and the self-employed in the formal and /or informal jobs. Per se, the scheme imposes no retirement age on employees. The DC pension scheme builds up long-term investment funds and their assets are portable.

### **III. Country-Specific Experience**

Generally, Chile pioneered the defined contributory pension scheme in 1980 to salvage its DB pension schemes. The Chilean scheme was made compulsory for all full time workers in the country. It requires workers to pay 10% of their annual income into a retirement savings account, with full ownership and control. As at 2003, the scheme proved widely acceptable that 5.6 million Chileans, instead of the targeted 3 million full time workers, were operating the scheme.

The widespread acceptance of the DC pension scheme in Chile spurred other Latin American Countries to introduce it with varying degree of coverage. Mexico and Bolivia introduced the scheme in 1997, while El Salvador followed suit in 1998. Similarly USA, UK, Japan, Nigeria and other OECD countries experiencing fiscal imbalance in sustaining their DB pension schemes have introduced DC pension schemes tailored to their local peculiarities.

In the US, the participation rate of full time workers in the DC pension schemes increased from 45% to 57% between 1988 and 1997. Amongst full time workers in medium and large companies, the rate increased from 43% in 1993 to 55% in 1997. In the UK, the DC pension schemes are very popular amongst younger generation of workers. Overall, the buzzword in pension reforms in most countries is the introduction of DC pension schemes to either replace existing DB pension schemes or be juxtaposed with them.

#### **IV. Issues of Public Policy**

For the purpose of analysis, pension system stakeholders are categorized into three core groups as a basis for evaluating the policy thrust of DC pension scheme against a Pareto optimal condition, viz: government, employers and employees compared to the aboriginal family pension scheme that relied on children and parents as stakeholders.

Conceptually, a Pareto optimal condition of welfare exists when a change in public policy improves the welfare of target citizens without making anyone or group worse off. The Pareto optimal condition was espoused in 1895 by Vilfredo Pareto, an Italian Economist, as a yardstick for gauging the impact of public policy on societal welfare.

Under the family and the DB pension schemes, an intergenerational symbiosis exists between children and parents as well as between employees and government-cum-employers. Parents work during their active labour years to raise children, who will in turn work to provide sustenance for the parents when such parents can no longer engage in labour service due to old age/infirmity. Similarly, under the DB schemes, employees work to 'raise' and sustain a corporation as a going-concern during their active labour years. In retirement, the corporation sustains the retirees by paying pension, as is the case with DB schemes. Thus, in operational terms, the DB pension scheme as an instrument of public policy is a translation of the informal family pension scheme to a formal level that reflects and accommodates the exigencies of an industrial society. Hence, in Pareto terms, the DB pension scheme did not alter the welfare standard of pensioners, either as parents or retirees. It could, therefore, be safely concluded that DB pension scheme, as a replacement of the family pension scheme is Pareto optimal.

It is worthy of note that the family pension schemes are still operational without glitches. They offer comparable schemes akin to those of the DB and DC pensions. The objective function of both schemes is to secure and adequately provide for the welfare of citizens in retirement lifespan.

On the contrary, under the DC pension scheme, a retiree shoulders the full burden of the pension system. The identified symbiosis between employees and government-cum-employers is shrugged off. The ability of a holder of pension asset to exercise a decisive role in growing his pension asset carries with it an embedded risk that could be termed the Achilles' heel of the new scheme. The risk could crystallize in the form of pension asset shrinkage and/or loss. The likelihood constitutes a major burden associated with the DC pension schemes.

A pension asset can shrink when a component of a diversified portfolio is totally lost to enterprise collapse or market failure. The former energy giant in the USA, Enron, and Savannah Bank of Nigeria Plc in Nigeria are cases that typify the possibility of shrinkage of even the most diversified pension asset portfolio. In the extreme, a gullible pension asset holder who invests his asset in a single portfolio, such as in any of the cases cited above, would suffer a total loss.

Either way, the incidence of pension asset shrinkage and/or loss is burdensome and increases as the age of the holder advances. In very advanced age, such an incidence will place enormous strains on a retiree, as the traditional fallback on bonds of primordial family pension schemes may have been eroded and/or weakened by the ruthlessness of the logic of market forces and the attendant enthroning of individualism.

The objective function of pension schemes is to safeguard the economic welfare of a citizen in retirement lifespan. The DB scheme, which defined fixed pension benefits, guaranteed the certainty of fulfilling that objective, particularly for adequately funded schemes. The fixed sum pension asset may lose transactional value or purchasing power over time in the lifespan of a retiree, but its instrumental utility to an aging retiree with a declining profile of needs is enormous.

The loss of value inherent in the DB pension schemes is often ameliorated by periodic upward reviews of the fixed sum pension benefit by government. For instance, the DB pension of £3 per month in 1967 rose to N35,000 in 2005. A

similar case exists for retirees that are reckoned to be collecting pension for over 30 years. Comparatively, the DC pension scheme obviously empowers the pension asset holder to grow the value of the asset but has conterminously staked such empowerment on the likelihood of shrinkage and/or loss of asset. Thus in economic welfare terms, the DC pension scheme is not Pareto optimal, as a retiree will continuously face the challenges of a likely slump in his welfare due to a probable shrinkage and/or loss of pension asset.

One way to mitigate the likelihood of a shrinkage and/or loss of pension asset is for public policy to institute a compensatory fund that will redeem proven cases of pension asset shrinkage and/or loss. The objective is to ensure that the pension assets of a retiree do not suffer debilitating leakages during retirement lifespan. This will safeguard the assets and guarantee to the holder the certainty of the asset as in the DB scheme. The whole essence of a compensatory scheme being advocated by this paper is to put at bay, grief from retirement lifespan.

In both the US and UK, similar arrangement exists to safeguard and guarantee the certainty of pension assets of retirees. In US, the Pension Benefit Guaranty Corporation (PBGC) operates as a quasi-government enterprise to insure pension assets under the DB scheme. In UK, the Pension Protection Fund (PPF) directly provides compensation to retirees. The US arrangement is based on an insurance scheme, while the UK arrangement is a government enterprise that deals directly and based on compensatory payments to retirees.

The kernel of a pension asset compensatory fund is compassion and moral underpinnings borne out of reparative inklings. This is quite unlike the case with an insurance scheme, which as a commercial venture is primarily driven and sustained by profit motives. Besides, an insurance scheme will require asset holders to pay insurance premiums. Obviously, such payments would constitute debilitating leakages of pension assets and, therefore, be an additional burden on pensioners. The option to insure pension assets as a guarantee against the likelihood of shrinkage and/or loss is not consistent with a Pareto optimal condition.

Another major policy issue that makes the DC pension scheme sub-optimal is that its 'sign-on' effectively triggers a reduction in the welfare of an employee by reducing the disposable income of an employee. The requirement that an employee jointly contributes to the funding of his retirement savings account is effected from employee payroll by check off. Yet, the employee still has to pay tax, which was applied under DB scheme to finance pensions. Therefore, the check-off from employee payroll for tax, in addition to retirement savings, constitutes the magnitude of reduction from employee disposable income. The component of deduction for retirement savings is new to the employee and, therefore, constitutes a burden that reduces his current welfare. The component of deduction for tax is not new per se, but was often the source of government revenue for pension payments [or transfer payments]. Since the DC pension scheme requires an employee to fend for his pension upfront, the continued payment of PAYE tax by employees deserves review.

One option is to make contribution for retirement savings tax deductible. Another is to convert the tax deductions to contributions for an increased level of retirement savings. On the other hand, employees are allowed to enjoy a clean pay by abrogating PAYE tax. In essence, the burden of tax as an instrument of fiscal policy will be borne by employers alone who are the second pillar of the identified pension system core stakeholders.

On the basis of the forgoing analysis, the introduction of DC pension scheme in Nigeria will hurt employees the most out of the three identified core stakeholders of a pension system. The symbiosis that exists between the stakeholders under the DB pension scheme is stripped off. Under the DC pension scheme, the pensioner alone as the third core stakeholder of the pension system bears the burden of the likelihood of shrinkage and/or loss of his pension asset.

As a corollary, a DC pension asset is a bequeathal, and so is potentially encrusted with transferable rights and can, thus, be held on a hereditary basis depending on the extent of its perpetuation by successive holders. This dimension, though latent, is apparent and does not seem to have been factored into the scheme despite the fact that the scheme began 1<sup>st</sup> July 2004. The DB pension scheme

operated with in-built mechanism that automatically extinguished the claim to pension by heirs, and was, thus, clearly stripped of any form of transferability and the possibility of bequeath. The heritability of the DC pension scheme poses the challenge of dealing with the rights and the attendant claims of heirs, especially rancorous ones. The propensity of rancorous heirs to extinguish a pension asset by immediate consumption may, in aggregate terms, trigger agitations that might precipitate a possible loss of confidence in the system, and the attendant undermining of its effectiveness.

The flip side of a pension asset transcending into a bequeathal is one in which the retiree, due to longevity, outlives his asset. This possibility, which is non-existent under the DB scheme, is eminently real because draw down of pension asset is based on some planned profile at the time of retirement. Yet, neither the planner nor the plan mechanism has the capability of factoring a retiree's actual lifespan with a limiting precision. In the long run, the idea that matters is that a retiree's actual lifespan is a crystallized position that is not amenable to planned draw down of pension asset at the time of retirement. Thus, whether a pension asset becomes a bequeathal or not is a threshold position that seems uncontrollable by any logic.

A sound legal framework that is capable of striking a balance between cultural cleavages and the exigencies of an industrial society need to be crafted to deal decisively with issues relating to heritability of pension assets. Beyond its theoretical abstraction, the longevity of a pension asset holder poses no daunting challenge. At such an advanced stage in life, age will necessarily impose on the retiree a significantly small profile of needs. As a result, cases of longevity risk that crystallized should be dealt with on merit and treated under a government social security system designed for it and other deserving related cases.

## **V. Concluding Remarks**

Overall, the benefits of DC pension scheme form the crux of the pension reforms in Nigeria. As the economic manager and, indeed, the institutional capacity builder of the economy, the CBN should once more rise to the challenge of paving the way under the DC pension scheme. This will inspire confidence in the pension

system and also smoothen out the identified issues that constitute one of the reasons making employees apprehensive about the workable benefits of the DC pension. Besides, it seems that the likelihood of pension asset shrinkage and/or loss does not get adequate mention in public discussions. As a result, in groping for a safe kerb, most employees that operated a funded scheme in the DB scheme tend to unnecessarily clamor for a closed scheme under the new system.

Under the DC pension scheme, a closed pension scheme only vouches for the institutional integrity of the pension asset custodian as well as the administrator, but does not vitiate the identified likelihood of shrinkage and/or loss of pension assets. Neither does it rouse a countervailing ameliorative measure such as the proposed compensatory fund being advocated in this paper.

Since the holder of a pension asset would not know the precise length of a retirement lifespan, it is not likely that asset drawn down will be structured to a zero level such that it matches the limiting date of retirement lifespan. On *a priori*, a net positive balance of a pension asset under the DB scheme will be a bequeathal. The DC scheme is new in Nigeria but some countries have operated it for a period that is reasonably long enough to lend itself to evaluation against the welfare objective of public policy. The outcome of such evaluation will enrich the operations of the scheme in Nigeria.

# Broad Money Demand and Financial Liberalization in South Africa— A Review

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Abdurrahman Abdullahi\*

## I Introduction

**F**inancial liberalization encompass the following: the lifting or easing of interest rate ceilings, lowering of compulsory reserve requirements and entry barriers, as well as the reduction of government control in the allocation of credit. Financial liberalization has been the hallmark of both developed and developing countries in the face of globalization. The paper, therefore, tried to study the stability of money demand using different estimation procedures under a financially liberalized economy.

## II Summary of the Paper

According to the author, recent changes in international finance are posing serious challenges to the conduct of monetary policy. The achievement of price stability was made even more difficult by financial innovations and liberalization during the 1990s, as well as the switch in policy emphasis from monetary targeting to inflation targeting. As a result, a money demand function in the form of a single equation model is now the center-piece in monetary policy design. It is used to forecast the path of the national income and design money supply consistent with target paths in real economic growth.

The objective of the study was, therefore, to test the stability of money demand and the performance of the money demand equation in South Africa, in the face of financial liberalization and changes in the payments and settlement system. This was done by developing a fixed-coefficient error-correction model for broad money demand function for the period 1971 to 2000, after which quarterly forecasts were generated for 2001 and 2002, using a varying-parameter regression model.

The money demand function was specified in error-correction form in order to capture the non-stationarity of the underlying time series. This methodology was appropriate for

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\* Abdullahi is an Economist in the Monetary Policy Department, Central Bank of Nigeria, Abuja. He acknowledges the comments of anonymous reviewers and colleagues of the Department.

this work for two reasons. First, though money stocks, price and income levels are non-stationary, they may well be co-integrated. Second, error-correction models allow for a broad range of dynamic relationships between variables. The single equation error-correction representation was estimated for M3 (nominal M3) using consumer price index and real GDP, short-term market interest rate, long-term market interest rate and own rate of M3. All variables except the interest rates were in natural logarithms.

The varying-parameter regression technique used for the forecasts, on the other hand, uses the basic idea that the parameter vector in an econometric relationship may be subject to the sequential variation over time due to the problems of structural change, misspecification or aggregation. Thus, the essence of the approach is to formulate an economic equation as a Kalman filter state-space model and to use a recursive algorithm to maximize the log-likelihood function via a combination of the iterative estimation and maximization and scoring technique. Thus, the model offers insight into improved methods of analyzing time series data. Quarterly data from 1971 to 2000 were used to estimate the model, while data for 2001 to 2002 was excluded for ex-post forecasting evaluations.

Empirical results obtained from the study indicated that despite significant fluctuations in the income parameter, the other long-run parameters of the estimated model were remarkably stable. Also, a modeling strategy that allows parameters to vary over time would better explain a money demand equation and, therefore, improve its forecasting ability. Results also indicated that the switch to inflation targeting has not removed the nexus between monetary policy and the stability of money demand in South Africa. Thus, the debate about the stability of money demand is still relevant.

The author, thus, concluded that long-run causality from money growth to price inflation may exist even in an inflation targeting regime or due to an accommodating monetary policy, while the long-run stability of money demand may be affected by financial liberalization and innovations, as well as the removal of capital controls.

### **III Comments**

The study of monetary developments through the use of time-varying parameter regression technique is an effective way of identifying the impact of financial innovations

to money demand. The stability of the demand for money, for instance, could be affected by innovations in the payments system, real time settlements, product diversification, changes in monetary policy framework as well as the substitutability between holdings of alternative assets. Thus, for a developing economy, such changes have useful implications for monetary policy. This study, therefore, provided significant insights into the behaviour of the money demand function, which is of utmost relevance for Nigeria. The efforts at liberalizing the financial markets, reforming the payments and settlement systems, changing the monetary policy framework as well as the automation of banks' and other financial institutions continue.

Specifically, the key lessons from the study for Nigeria could be summarized as follows:

An important area which would provide a basis for further investigation is the incorporation of expectations and information asymmetry since it has become almost a fact that anchoring expectations and uncertainties enables monetary authorities to effectively control money growth and price level. This is because monetary signaling can only be achieved with minimum dead-weight losses, if economic agents must interpret and follow the desired course of monetary actions. It would, thus, be a lesson to begin to publish forecasts which could signal and anchor economic agents' behaviour. This can precede the full implementation of the inflation targeting framework of monetary policy

First, regime shift in terms of a framework for the conduct of monetary policy require a clear understanding of the dynamics that drive economic behaviour; otherwise, smooth transition could be undermined. While the demand for money functions may not matter so much in an inflation targeting regime, the relationship between volatility of monetary aggregates and price determining indices implies that they are useful policy information.

So far, most of the conditions for moving to inflation targeting have been met. These include:

- Goal Independence of the central bank;
- Coordination between monetary and fiscal authorities in order to address the problems of fiscal surprises and dominance;
- The central bank is also developing a liquidity forecasting model;
- Enhanced revenue base of the government;

- A strong external (reserve) position, which will ensure stability in the foreign exchange market; and,
- Transparency in the conduct of monetary policy through various institutional arrangements and fora such as the Bankers' Committee, Monetary Policy Forum, Annual Monetary Policy Conference, etc.

However, there is the need to intensify efforts at identifying the source of volatility of demand for money function for Nigeria, which would provide a basis for streamlining operations to conform to an inflation targeting regime, for instance, the use of reserve management to influence the domestic money market operations.

In conclusion, therefore, implementing forecasts for key monetary indicators is a credible way of enhancing monetary policy operations. It should be noted, therefore, that there is the need for a stable forecasting regime that clearly brings out the trend, transitory, irregular and permanent components of money demand in Nigeria. This would provide useful information that would aid in the administration of monetary policy, especially given the impacts of financial liberalization and changes in payments and settlement systems on money demand.

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