

Issues in Fiscal Federalism and Revenue Allocation in Nigeria



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Anthony Ani Professorial Chair Conference Series, Number 1, 1999

PART V

THE DERIVATION PRINCIPLE

CHAPTER FIFTEEN

Majority Rule over Minority Right: Subversion of Derivation Criterion in Revenue Allocation in Nigeria

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INTRODUCTION

Revenue allocation everywhere in the world is a critical political economic issue. This is primarily due to the very practical case of scarcity of fiscal resources (means) and the resulting competition among component units of government/sectors (ends) for use of such resources. The reality of this age-long tried and tested truth is that there is no time that available resources shall ever adequately service all the component units of government and sectors of the economy. Thus, there is a natural evolution of competition among governmental units and economic sectors for the scarce revenue. Since the outlets of resources allocation are not inanimate, as is the case of allocating resources among market commodities, human involvement in the process often creates various dimensions of political competition and rivalry. Considering the space and time variations in resource endowment in society, the competition becomes tense and political.

In Nigeria, the fiscal revenue depends on traded commodities. Prior to 1970, the economy's main traded commodities were agricultural produce, namely, palm produce, cocoa, groundnut, cotton, rubber, and others. Thereafter, there was a horizontal change in the composition of exports from agricultural produce to another primary produce, crude petroleum oil. This change in the trade composition has had alteration effects on the criteria for revenue allocation.

Various criteria are often used in the allocation of revenue accruing to the distributable pool account (DPA), or the Federation Account, as it is now called. These criteria are discussed under revenue allocation principles. In Nigeria there are many criteria for sharing revenue among different tiers and especially, among the state governments. The criteria include equality of states, population, internal revenue factor, derivation, development factor, ecological factor and national interest/unity. Of these criteria, it would not be erroneous to admit that the derivation criterion has been the most controversial owing to the relationship between resource availability/development and the amount of revenue accruing to particular regions/states. The resource-poor states are usually opposed to the derivation criterion, calling instead for equality and population, while the rich regions insist on allocation based on derivation.

The choice of the derivation criterion as it relates to the appropriation of revenue in Nigeria in recent years is informed by the social and development crises existing in the Niger Delta region even as oil production brings in a lot of revenue to the government. The "minority" in this paper refers to the peoples of the Niger Delta and the "majority" groups in Nigeria refer to the Hausa-Fulani in the north, the Yoruba in the southwest and the Ibo in the southeast of the country.

Behind the changing criteria of revenue allocation there are issues of forces and interests in the policy changes: What are the

causes of changes in revenue allocation formulae? Do changes in revenue allocation principles cater for the rights of the resource owners or the lawmakers? Are externalities in production given due consideration in revenue sharing? What of the inter-generational gap created in the present-day resource exploitation? This paper will consider these issues using theoretical and empirical tools.

The rest of this paper is organized into four sections as follows: section 2 deals with theoretical principles on the political economy of revenue allocation, section 3 takes up evaluation of the various scenarios of revenue allocation in Nigeria, section 4 examines the consequences of fiscal resource allocation in Nigerian development, and the study ends with some concluding remarks in section 5.

2. The Political Economy of Revenue Allocation

There are two major strands of theory on which revenue allocation is carried out: the welfare economics and the political theory.

2.1 Economic Issues in Revenue Allocation

The major theme in economic argument in revenue allocation is the bridging of inequality gap. The gap could be sectoral or regional. This gap is created by unequal endowment of natural resources which results in an imbalance in the physical development of the communities. Through fiscal activities, taxes are levied on economic activities in the regions with concentrated economic activities and some of the proceeds transferred to the scant resource region. Fiscal resources are supposed to be appropriated in a way that will guarantee equitable development across sectors and

geographical regions within a fiscal system. The centrally collected revenue should be shared such that horizontal fiscal disparities among localities and vertical imbalances among tiers of government are minimized (Taiwo, 1999).

The practice of federalism is a way of solving the political problem of administration and economic problem of resource distribution. In practice, these problems are not clear-cut, economic or political. Solving the problem of administration within a political entity entails enhancement of administrative conveniences, which can be measured in terms of curtailment of administration costs — optimization of administrative costs is an economic issue. On the other hand, the distribution of resources involves some political issues of determining the constitutional criteria for such allocation in such a way that will ensure equality (or at least equity). There should be an avenue of avoiding the free rider problem in revenue generation. This problem arises when some units within a government or a level can benefit from revenue generated by others while contributing nothing to reduce the costs of generation or increase the total revenue to be shared.

In the distribution of fiscal resources, a major economic issue is that of ensuring the efficiency of the distribution process. An efficient distribution is that in which no section of the society is worse off, while making others better off. At the end of the distribution, for efficiency principle to be upheld in distribution of revenue by the government, some (if not all) parts of the federation must be better off, but no part must be worse off. As Musgrave and Musgrave (1982) observe, the problem of efficiency is beset with major measurement difficulties when the issue of redistribution is evaluated. This is because redistribution entails balancing loss of value with gains accruing to all parts of the society from fiscal operations.

Achievement of equality in the development of all parts of the society using fiscal activities involves sacrificing efficiency at

the altar of equality. Redistribution that can ensure equality will not guarantee efficiency (Browning and Johnson, 1984). Their argument for the trade-off between efficiency and equality is based on the use of income tax on individuals. This assessment may be different if the distribution process involves appropriation of property by government. The question of balancing the inefficiency and equality in an acceptable way encompasses the use of economic and political means to induce compromise and agreement. The means may be the use of consociational approach to power balancing and the protection of rights.

Although the consumption of public goods increases the welfare of the beneficiary, the provision of public goods entails the transfer of resources from individuals to the public sector. Such transfers reduce the level of consumption of private goods on which the affected individuals could have used the transferred resources (Musgrave and Musgrave, 1982). Thus, the costs of provision of public goods, and the costs of government activities generally, constitute some transfer of purchasing power by individuals from private goods to the public sector. It is these losses of purchasing power that make every individual a stakeholder in every government decision. These losses also provide a fundamental reason for which individual taxpayers must enter into bargaining and negotiation with the government and among groups that constitute the government. Bargaining and negotiation are better analyzed as political activities and studied under political science, but on account of resource transfer, there is an economics interface.

The use of government revenue allocation principle to engender development in resource poor region is based on the theory of balanced growth, which emphasizes the need to provide the basic minimum developmental conditions (infrastructures) necessary for each region to rise above the low-level equilibrium trap unto a take-off (Thirlwall, 1983). Planned development, therefore, calls for inter-regional transfer of resources through some

fiscal process. The argument on the various versions of balanced growth, such as the "big push" and phasing of investment, and developmental issues on imbalance in goods are not discussed here, having been well attended to by others (see Thirlwall, 1983: 187–194). However, the craze for rapid transfer of resources in Nigeria can be understood in the light of the need to remove some natural obstacles to development via rapid provision of infrastructure across the length and breadth of the country, which is the belief of balanced development.

The theoretical principle behind the use of derivation as a criterion for revenue allocation is associated with change in social state of welfare that results from production activities and the compensation of losers by gainers in production activities. As production takes place in any society, value is created for some members of the society while some members suffer losses due to the "disvalue" created by the externalities of the production activities. A production activity is said to enhance the society's level of welfare, in *pareto*-optimality sense, if it is possible for those who gain value (and attain higher welfare level) to compensate those who made losses (and incur reduction in welfare level) such that the latter is at least left at the level of welfare as before the production with the former group still better off after the redistribution. This principle of redistribution of gains from production in a way that guarantees the removal of welfare losses caused by externalities of production is referred to as compensation principle (Quirk and Saposnik, 1968).

Compensation principle is the basis on which derivation as a criterion for sharing fiscal revenue is anchored. The production of oil, for instance, entails losses to the oil communities in three major ways, namely:

- (1) natural resource losses — these include the extracted depletable crude petroleum and losses on the vegetative part of land used in the mining.

- (2) externalities of oil production — these include environmental pollution, high costs of living, unemployment and loss of means of livelihood due to environmental degradation, etc.
- (3) social costs of production — for example, break-down in social value system, high crime rate, etc.

These losses incurred by the oil-producing communities due to oil production activities can be compensated for using fiscal means of revenue allocation based on losses (derivation) suffered by those oil communities.

2.2 Political Theory and Revenue Allocation

The political analysis of revenue allocation is anchored on the principles of bargaining and negotiation. The question in revenue allocation is that of who gets what, and by how? These questions are the basic problems attended to in political analysis. As Musgrave and Musgrave (1982) assert, "budget determination involves a political rather than a market process". The arguments behind the vertical distribution of fiscal revenue are mostly political. For instance, as Oyediran and Olagunji (1984) observe, higher spatial poverty in natural resource endowment increases the agitation for equality as a revenue allocation criterion. The richly endowed regions within a federation, on the other hand, are often more concerned with increased autonomy, and allocation of revenue based on relative contributions of each unit to the federal purse.

Political decision taking involves the selection of popular opinion. Many political decisions in the modern society are taken by voting. The opinion that scores the majority votes is often adjudged the socially or popularly acceptable opinion and is usually regarded as the decision. Voting is usually done using one person, one vote where the selection rule is based on the plurality of the

votes cast for a decision option. In some cases, point votes are also cast and the decision is arrived at using majority point votes. However, the selection of which method of voting to adopt for a particular political situation is a serious political matter involving both persuasive and pragmatic approaches to decision-making. Again, selection of voter's qualification is also a problematic political issue.

In Nigeria, for instance, the selection of voters and voting method has generated several controversies. These include the issues of north-south political strength balancing and power sharing. Ayoade (1998) sees state creation exercise as a measure used by a section of the Nigerian nation-state to gain domination over other groups. Since the number of states is an important object in the determination of most political problems, he views increased ascendancy of the north in the number of states as a way of one section predetermining the majority rule over others.

The type of government adopted also impact on the decision process. In Nigeria where twenty-nine out of the thirty-nine years of post-independence has been under the reins of military rule, there is need to understand the decision process of the military leadership. The decision process of the military government is mostly dictatorial. Under the military administration, the important guide to decision is the astuteness of the individual at the head. The choice of the head of state is therefore a crucial factor to choice decision. The military dictatorship confers the opinion of its leader as ultimate decision of society as a whole. This makes it easy for the military government to uniquely manipulate the revenue sharing formula to its own advantage (Mbanefoh, 1986).

3. Scenarios of Revenue Allocation in Nigeria

This section evaluates the revenue allocation criteria used at different periods from pre-independence period till date and attempts to adduce some feasible reasons for changes made in the allocation formula, noting the criteria that has taken place. Principally, this section emphasizes that changes in criteria for revenue allocation is a reflection of the people's choice and pressure on the decision makers. A group's choice is translated into state's decision through the so-called majority rule process, which does not necessarily guarantee fairness and justice to all component units (and indeed cannot ever be). What majority rule guarantees is the permanent protection of the interests of those numbered among the majority.

Three sub-sections of this section looks at fiscal federation in three periods: the period of full emphasis on derivation, the period of reversal from derivation to equality, and lastly, the period of gradual balancing between derivation and equality. A fourth sub-section is on the comparative analysis of allocation of oil revenue among the state tier of government.

3.1 Period of Emphasis on Derivation

Revenue allocation was the responsibility of colonial administrators in pre-independent Nigeria. Before the military intervention of 1966, a fiscal allocation commission accompanied almost every constitutional review; and there were five fiscal commissions between 1946 and 1965. The commissions include:

- (i) Sir Sydney Phillipson Commission of 1946,
- (ii) Hick-Phillipson Commission of 1951,
- (iii) Sir Louis Chick Commission of 1954,
- (iv) Sir J. Raisman Commission of 1958, and

(v) K. J. Binns Commission of 1964

A few things common to all these commissions are:

- (a) they were all headed by and composed of non-Nigerians — a major reason for the general acceptability enjoyed by the reports of all the commission due to the belief among Nigerian politicians that they were unbiased and disinterested parties (Oyediran and Olagunju, 1984).
- (b) derivation as a criterion for revenue allocation was consistent throughout the period.

This period was characterized by rapid response to agitations such that any change in constitution resulted in fiscal allocation formula review. It was not criminal to present agitation on fiscal matters even under the colonial era!

During the period 1948 to 1967, the regional government retained a higher ratio of the total revenue than the federal government (see Table 1). Secondly, during that period even that most disadvantageous region used to get their fair share.

The major source of revenue to government was export taxes on agricultural produce from different parts of Nigeria. This has presented an opportunistic argument that derivation as a criterion for allocation of revenue among component units of a federation is optimally used when all the composing units have some stable source of revenue. Such arguments, however, do not raise any subject on the protection of environment and other natural losses suffered by mining communities during the petroleum exploitation. We shall later return to this point.

3.2 Period of Reversal of Derivation Criterion

The period was dominated by military intervention and indigenization of revenue commissions. The rate of rejection of commission's report, which was virtually absent before the military intervention, rose significantly and sometimes the whole report

was rejected. Strangely too, during the period the government could also set up itself into the commission.

Generally, the reversal of derivation principle to equality, population and other criteria was a gradual one. In the Dina's report of 1968, which was rejected by the joint meeting of states commissioners and federal commissioner of finance (as chairman) in April 1969, there was a downward review of emphasis on derivation criterion. As Oyediran and Olagunju (1984) notes although the Dina's commission report was rejected on the one hand, it was fully implemented on another. The implementation was backed up by Decree No.13 of 1970, and later by Decree No.9 of 1971 and Decrees No.6 and No.7 of 1975. Decree No.13 of 1970 legislated a general downward review in the percentage of revenue appropriated for derivation principle to states of origin of revenue as follows:

Revenue Head	Before 1970	After 1970 Review
Export duties	100% Derivation	60% Derivation; 40% retained by federal government
Duties on fuel consumption	100% Derivation (i.e states of consumption)	50% Derivation; 50% retained by the federal government
Mining rents and royalties	50% Derivation	45% Derivation; 5% retained by the federal government

Monies accruing to the distributable pool account (DPA) were to be shared using equality and population of states as the criteria. Thus, 50 percent of the total amount accruing to DPA was shared on the basis of equality while the remaining was distributed proportionately based on the population of the twelve states. The derivation principle was now dropped as a basis of distributing the DPA.

Tables 2 and 3 show the appropriation of the revenue as military rule began and derivation principle was given less prominence. The Niger Delta region's share when the twelve-state structure was created shows that the *status quo* did not change with the change in trade composition from agricultural exports to crude petroleum. The revenue allocation gave emphasis to population, equality and landmass, all which were not favourable to the Niger Delta states.

By 1971, with the promulgation of Decree No. 9, rents and royalties of off-shore petroleum mining were transferred from states of derivation to the federal government. This decree was seen by the people of the south-eastern state (later Cross River and Akwa Ibom States), whose major oil deposits are off-shore as political subversion of their fiscal right and interests by the federal government. The obnoxious Decree No. 9 of 1971 was only abrogated in 1993, thus restoring the benefits of off-shore oil mining to the states of derivation.

There was further erosion of weight accorded to the derivation principle when the 1975 Decrees No 6 and No. 7 that gave the federal government ascendancy over states were promulgated. The following changes were remarkable in the decrees.

1. Reduction of the 45 percent share of mining rents and royalties paid to state of origin to 20 percent, and the appropriation of the balance to the DPA.
2. The federal government retained 65 percent of all import duties except those on motor spirits, diesel oil, tobacco, wines, potable spirits and beer. The remaining 35 percent of the import duties and the full duties on motor spirits, diesel oil, tobacco, wines, potable spirits and beer were paid into DPA.
3. The federal government retained 50 percent of all the excise duties while the balance went into the DPA.

4. State government's power to vary the rates of income tax charged was relinquished and a uniform income tax rate introduced throughout the federation.
5. The DPA was appropriated on the basis of 50 percent population and 50 percent on equality of states.

Oyediran and Olagunju (1984) observe that the driving force behind all these actions by the federal government was the growth in petroleum profit tax revenue accruing to the federal government. But there is more to the federal government action in the use of decrees to manipulate the revenue allocation. First, the manipulations reflect the downturn in the export over time from agricultural sector in which majority groups were the appropriators of the gains. As the oil fortune improved the military governments that were controlled by the majority ethnic groups (especially of the north and west) contrived out decrees to ensure maximum control of land resources and fiscal revenue by the federal government. Second, since the formation of revenue commissions would have led to stiff oppositions against some of the new sharing criteria, it was more convenient for the Supreme Military Council (composing of equality- and landmass- biased officers from the ethnic majority regions) to decide on the amount that the federal government should control and what proportion should be shared to states and by what criteria. This point can be buttressed by the rejections of Dina and Aboyade Commissions' reports by the military governments.

Given that the control of land resources (especially the oil mineral) and the fiscal revenue by the federal government was seen as a legislative and litigious issue, it was necessary for the federal government to ensure that all legal leeway and lacunae for the minorities to establish a case against the federal government or the multinational oil companies were securely checked. Thus, the Land Use Decree of 1978 revoked the right of ownership of land from individuals and communities to the government. The

right of the individuals and communities to use land stops at the use of the surface area of land as all minerals belong to the federal government. And the government can acquire any land for use for mining purposes by paying compensation for the property on the topsoil. Thus all mining rents are legislated right of the federal government. Besides, the decree along with the Petroleum Act of 1969 provide special legal protective shield to the oil exploitation business. Communities, farms, and any activities of individuals can be stopped once oil interest has been identified for the purpose of mining or laying oil pipeline or for any purpose connected therewith (section 28(2)) which constitute the *overriding public interest* in that decree.

The crises brought about by the Petroleum Act of 1969 and the Land Use Decree of 1978 are consummated in violence in the Niger Delta region. The legislations concerning the use of land for mining are clearly anti-humane. No provision was made for resettlement and rehabilitation of the affected communities. The decree did not incorporate how the value of compensation will be determined, thus encouraging gross under-payment by the oil companies. There was no consideration of environmental impact of the mining activities. No inter generational effect was ever implied for using natural resources. Some of these impacts have been assessed by the Constitutional Right Project (CRP, 1999) which concluded that "there is an urgent need to repeal the Land Use Decree", calling on government to make appropriate provision for reparation to Niger Delta people, and make a restoration of the right of every nation and people in Nigeria to the use of their resources through political restructuring.

While the federal government and the non-oil-producing states are reaping the gains of majority rule over the minority right, the oil-producing minority areas are agonizing under the weight of deprivation, gruesome killings by soldiers and police whose arms and ammunitions are paid for by the minorities oil wealth. Cases of such activities as described here are sufficiently studied by the

CRP (1999:23–40). They include oil spillage and environmental mismanagement like the one in Okoroba and Ebubu in the troubled Ogoniland and recently in Eket and Ibeno Local Government Areas of Akwa Ibom State. Even when some token payment is made for spillage, it is usually for the immediate communities and for the losses directly associated to things on the topsoil. Underground water effects, effects on neighbouring communities, future effects on agriculture and livelihood are never considered.

Again, the government is not monitoring the oil companies' modes of operation to guarantee fair business in the communities hosting them. For instance, Shell Petroleum Development Company could dredge creeks and fill lakes in a way that causes flooding in communities, but there is no one addressing these wicked cost management techniques of the company (CRP, 1999:17–19). Moreover, any outcry from the communities is simply dismissed by the majority government of Nigeria as barbaric cry of violence.

3.3 Period of Gradual Balancing between Derivation and Equality

The effects of the over thirty years of subversion of oil-producing minorities' right to their natural resources have become obvious now even to the simple. The agitations and confrontations from the oil-producing communities in the Niger Delta have threatened the very existence of the nation-state of Nigeria, which has guaranteed the continued repressive suppression of the minorities' right. The deprivations complained about by the Niger Delta people have been acknowledged by the federal government either covertly or overtly. There was increasing attention given to derivation as a principle of revenue allocation in the 1990s and developmental agencies are being created and charged by the government to see to the provision of developmental infrastructures in the Niger Delta region.

Following increased agitation and undaunted confrontation by the oil-producing communities the revenue allocation exercise has gradually reintroduced derivation as a criterion for revenue sharing. The derivation criterion is now accorded one percent (1%) but supported by federal government funded developmental agencies such as Oil Mineral Producing Area Development Commission (OMPADEC), which was given 1.5 percent of the Federation Account by the Danjuma Commission report of 1989, and in 1999 assigned 3 percent (Agiobenebo, 1999). Recently the federal government constituted Niger Delta Development Commission to address environmental and developmental issues caused by oil exploitation in the area. Again, there has been a conscious curtailment of the size of federal government share in the Federation Account from 55 percent in 1981 to 48.5 percent in 1997 (Akpan, 1999), which indicates concession and compromise desired for the continued stay together of the different units in the federation.

3.4 Comparative Analysis of Allocations of Oil Revenue

Various comparisons are drawn on the flow of fiscal revenue from the federal government back to the minority of the Niger Delta in relation to other states in Nigeria. Other economic data will also be used to evaluate the level of changes that have taken place between the two groups of states in Nigeria. Most of the story to be told about the disadvantageous position of the Niger Delta states in the Nigerian fiscal relations can be read directly from the Tables 2, 3 and 4. Nevertheless, the following observations can be made about the situation depicted on the tables.

The situation in fiscal statutory allocation to the states in Nigeria within the geo-political zones is described using data in Table 4. The states in the Niger Delta end up with an average share value of 18.98 percent, that is, less than their allocation share value

at the beginning of the period. The trend of revenue allocation to the states in the Niger Delta is clearly on the decline. With 23.33 percent in 1979, their share plunged to 14.39 percent in 1991 and only meagerly increased to 16.07 percent by the close of the period in 1996. Conversely, the south western, north eastern and north western zones, which are predominantly majority groups, ended the period with allocation shares higher than what they received in 1979. They also ended up with higher mean values than their opening values, demonstrating a general increasing trend in their shares in the federally collected revenue. Speaking in terms of the general mean values, the north central zone is on the premier leading position ahead of other zones.

The comparison is further enhanced when consideration is also given to periodical mean values of allocation shares to the zones. Here, the period 1979–1996 is sub-periodized into four with the first three having a regular interval of 5 years and the last taking on the residual sub-period of three years. In general, the trend of the average values for the four sub-periods for the Niger Delta region is uninterruptedly declining from 21.33 down to 16.88 percent. This trend is also true for the north central zone but the difference is that, compared to the Niger Delta zone; their average values for each of the sub-periods are higher than the value for the Niger Delta throughout the period. The south western zone is also consistently leading the Niger Delta from 1984 up to 1996. Even the north western zone that began the 1979–1983 sub-period with a low 13.13 percent share ended up leading the Niger Delta region in the last two sub-period. The situation is shown in Table 4, with values in the average columns in bold fonts.

Using the sub-averages, it is observed that at the end of 1996 the trend of revenue sharing among the states in Nigeria is towards equality converging around 18 percent, especially among the northern and southwestern majority zones. The Niger Delta region, on the other hand, is getting worse off in the revenue allocation arrangement having declined to 16.88 percent at the end of 1994–

1996 with a trend tendency pointing towards further decline. This trend in revenue allocation to the Niger Delta region shows an obvious picture of abject neglect and deprivation when weighted against the fact that over 73 percent (see Akpan, 1999, Table 1) of revenue is generated from the region's petroleum products with gravely devastating consequences on the biosystem and environment of the region. Perhaps, it makes sense to mention the obvious from the average column in Table 4 that from 1984 when the majority regions' military dictatorships took over the reins of power in Nigeria, state fiscal apparatus have been used to inflict unjust shares on the environmentally shattered Niger Delta region. The decreases in the revenue shares of the Niger Delta were traded for the increases in the shares of majority regions. This is quite opposed to the situation in Table 1 when the region retained greater shares of the revenues derived from their domain, granting the adoption of revenue derivation principle during the period. The excruciating declines in the shares of revenue allocation to the Niger Delta have made it impossible for the state governments in the regions to meet the environmental, employment generation and other social needs of the regions. The period under study is dominated by consequent high rates of agitations, protest demonstrations, violent clashes, social insecurity, policing, detention and killings in the Niger Delta. It is observed that:

- (i) the Niger Delta region is disadvantaged now in the distribution of the revenue from oil, even as it was when agricultural exports boomed and the area did not have produce to enjoy export duties from. (This is demonstrated in Table 1–4);
- (ii) The Niger Delta region is worse off than most of the resource poorer regions in revenue allocation, and
- (iii) Better shares of revenue can be allocated to the Niger Delta area with a revenue allocation formula based on derivation

4. Consequences of Fiscal Resource Allocation on the Niger Delta

The positive effects of oil revenue on the Nigerian economy are not in dispute. Iwayemi (1990, 1995) shows the high contributions of oil revenue to different sectors of the economy and concluded that tremendous impacts have been made on physical development. The revenue being realized from oil is evidently invested in the development of economic and social infrastructures. The contributions of oil to the funding of projects can be noticed in the investment in road construction, the development of the manufacturing sector, and the development of government administrative centres of Lagos and Abuja. Educational and health sectors have also been highly developed with petro-dollars.

Nevertheless, the gains from oil wealth in Nigeria were not beneficial to the development of all sectors. For the agricultural sector, the Dutch Disease has been very eminent and has affected output negatively. This was because, with the surplus foreign exchange from oil exports, food and raw material imports could be easily funded, resulting in a weak and falling agricultural output in the periods that oil revenue peaked (Oyejide, 1987).

Oil revenue has also had serious adverse effects on the level of fiscal development of all tiers of government in Nigeria. Today, virtually all expenditure plans of all states (except Lagos) are tied to oil revenue remittance from the federal government. No state has the drive for exploration and exploitation of their existing tax power. Oil revenue has thus inflicted the Dutch Disease on other sources of revenue, and now the level of states' dependence on the federal government in Nigeria's inter-governmental fiscal relations is a high average of 71.1 percent (Akpan, 1999).

The Niger Delta states are mostly the states referred to as the South-South in the Nigerian political zoning jargon. Just like many other deltaic regions in the rain forest belt of the world, the marshy,

water-locked and mangrove-forested scenery is the natural sight. With a large deposit of 22,000 million barrels of crude petroleum oil reserve in 1997 and an estimated 4,000 billion cubic meters (or 636 billion barrels of oil equivalent) of associated natural gas¹, it could be adjudicated that whatever beauty the ugly, marshy terrain in the mangrove swamp of the Niger Delta could not acquire would have been achieved with the discovery and exploitation of oil and gas deposits. Between 1979 and 1996, the exploitation of oil in the region has fetched the federal government total revenue of ₦1,484.82 billion. Of this amount, only ₦42.66 billion (or 2.87 percent) has been redistributed to the states in the Niger Delta region. The amount is the least compared to that accruing to any other groups. This amount cannot pay for the normal physical development of the Niger Delta region, especially when its natural terrain is taken into account. (See Tables 4 and 5.)

The effect of the low transfers of revenue from the federal government to the Niger Delta is worsened by the excessive powers given to the multinational oil companies by the federal government to exploit the free mineral without any care about the environmental effects. Environmental degradation has assumed a de-humanistic dimension in the region. Salt water from the ocean is often dredged inland to bring in oil rigs, polluting the fresh domestic water sources; communities are sometimes cut off to become an island in the process of such dredging. The enormous flood effects of such activities by the oil companies are never considered (CRP, 1999; Egwaikhide and Aregbeyen, 1999). The magnitude of environmental degradation as a result of oil exploitation and poor environmental management by the government and oil companies can be depicted by the chronicled extracts from Okoh and Egbon 1999: 411–412):

For instance, in 1979, a storage facility at the West Niger Delta, shell-operated Forcados terminal collapsed. This spilled an estimated 560,000

barrels into the surrounding land, mangrove swamps and the Atlantic. There was hardly any respite. In January 1980, another major blow-out occurred which spewed out some 200,000 barrels of crude oil into the Atlantic and destroyed some 840 acres of Niger Delta mangrove. A more resent spillage took place in January 1998, in which a 24-inch crude oil pipeline linking the Idoho offshore platform with the Mobil operated Qua Iboe Terminal ruptured. An estimated 40,000 barrels of crude spilled into the Atlantic, polluting the coastline from Eket to Lagos and beyond the Nigerian Western border to Ghanaian shores, over 960 kilometers away (Eromosele, 1998). The Jesse fire incidence of October 1998 is still very fresh in the mind of many Nigerians where over 1,500 lives were lost and several hectares of farmland and plantations were razed by fire.

Also, while referring to the contributions of late Claude Ake to the fight for the preservation of the Niger Delta environment in the article entitled, "Shelling Nigeria Ablaze" in the *Tell* magazine of January 29, 1996, Raji (1998:110) observe that Nigeria flares at least 76 percent of the total natural gas derived from petroleum production, thus, releasing up to 35 million tons of carbon dioxide and 12 million tons of methane into the atmosphere annually from such flaring. The effects of this continuous flare include rapid rise in temperature, noise pollution and the emission of SO_2 , VOC , carbon dioxide and NO_x and particulates into the atmosphere all the year round. The publication (*Tell*) also gave account of about "300 major spills a year . . . which discharge about 2,300m³ of oil" and "minor spills which are more numerous and (which are) invariably under reported"

Ake further maintains that no single oil company in Nigeria has ever been bothered about the effects of effluents:

According to a European Community study, *Mangroves of Africa and Madagascar*, the water of the Niger Delta contains at least 8 [parts per million] of petroleum and often up to 60 [parts per million]. An environmental impact study of Shell puts an average hydrocarbon content of petroleum hydrocarbons in waste water in Oloma creek at 62.7 mg/l. At the Bonny Terminal in Rivers State where Shell does its separation of water from crude oil, the mud at the bottom of the Bonny River has a lethal concentration of 12,000 ppm. But Shell lies that the wastewater at Bonny Terminal averages 7.8 mg/l. As the World Bank has noted, the industry is using API separator and TPF basin facilities which are unsuitable for separation of better than 50mg/l performance (Raji, 1998:111).

Another serious environmental impact of the oil exploration and exploitation was reported in *Newswatch* magazine of December 23, 1995 about the harmful effects of oil production in Iko, Ikot Abasi in Akwa Ibom State. The paper reported the corrosive and perforating effects of gas flaring on roofs of buildings of the villagers and also some skin diseases manifesting due to acid rains. It also reported the dearth of marine lives in the polluted rivers of Mgbede/Ebocha/Omiku in Ahoada Local Government Area of Rivers State. The unemployment effects on traditional occupations, which are some composition of what Raji refers to as "dislocation and disorientation," are suffered by the people of oil-producing areas.

These pollutions have longer term effects than any pure economic agents, like the multinational oil corporations, could be willing to internalize in their costs of operation unless forced by law to do so. For instance, most of the soils polluted can hardly be put to agricultural cultivation unless soil experts carry out serious

soil treatment and management for sometime. This means the host communities whose means of livelihood was crop cultivation are left without employment for life. Yet the petroleum and mining decrees and land use decree only recommend payment for the current crop losses but does not make provision for the losses in the waters flooded with crude oil or farmlands that cannot be cultivated; as a result of which fishers and farmers are put out of occupation with impoverishing effects on their lives.

There is, however, a tangential argument about the drudgery relief and high development cost demands of the Niger Delta region. This reasoning of majority rulers in Nigeria notwithstanding, natural endowment and development requirement equation is self-balancing for the Niger Delta region: the terrain may be difficult but their resource base is also tough enough to contain and support the huge costs of their development requirements. Raji (1998:118–119) refutes the assertion put forward by Jibril Aminu, a former petroleum minister from the majority northern group, contending that the Niger Delta region remains underdeveloped because of the very harsh terrain. Transportation is difficult because the creeks are difficult. Well, we may need to ask Aminu whether the areas, in any way, are more difficult than Lagos. The former capital city of Nigeria, in spite of its many creeks, its marshes and swamps, even the lagoon and the Atlantic Ocean, has a fine network of roads.

But the argument does not stop here. Because, while successive governments in the same Lagos expend several billions of naira to contain ocean surge in Victoria Island on a yearly basis, the slums of Ajegunle and the ghettos of Mushin remain neglected. If, indeed, the Niger Delta terrain is so difficult, how come Gulf Oil is able to erect a tank farm in Escravos? A comprehensive analysis of Nigerian problem will have to take into consideration the nature of relations of production and the system of distribution. It also has to contend with the strong alliance existing between ruling

class (military as well as civilian) and the several multinational corporations. It is this alliance which in the specific case of oil-producing areas, make it possible for the oil companies to simply call on the police (and the army in some instances) as soon as they perceive any security problem.

Another angle to the predicament is the high degree of occurrences of many socio-economic problems associated with the operation and mismanagement of oil business in the Niger Delta region. These include conflicts of various scope and scale, poverty, unemployment, decay in social values, poor transportation and housing, and high crime rate (Okoh and Egbon, 1999).

Indeed, with the atrocious neglect and legislated oppression suffered by the Niger Delta minority no attention might be given to the inter-generational effects of the current economic relations. With the utter deprivation and dispossession brought about by current reins of legislation against the Niger Delta region combined with the received truth of oil as depletable resource, what will happen to lives of generation yet unborn; what will be the inter-temporal effects of the current economic relations between Nigeria and the Niger Delta region? These are not purely economic questions; there are political and sociological implications in addition.

With the on-going agitation, vicious circle of violence and prevalence of poverty, children are likely to imbibe these anti-social habits. The education process is being disrupted and there is a high tendency towards increasing incidence of illiteracy. Should the future generation come to meet wasteland and inherit natural poverty? When that generation will read or be told that ultra-modern cities like Lagos, Abuja and others were developed from the wealth from their wasteland, the anger of that generation will threaten natural unity.

Across the world, oil-producing communities' experiences differ from the tales of agonies and woes in the Niger Delta region of Nigeria. For example, Shetland Islands in the UK covering an

area of 800 square kilometres has a population of 30,000 people and serves as the operational base for the mining of the North Sea oil. Proceeds from the oil accounts for 42 % of the local council's budget and it also enjoys disturbance fees put in a trust fund that had yielded \$200 million by 1992. The case of Alaska in the US also comes to mind. Here oil income accounts for 80% of the local administrative budget. This is in addition to a direct share of income from the sale of oil mining licences amounting to \$10 billion in 13 years between 1976 and 1989 (see CRP, 1999: 24, 25). In Nigeria, oil communities have nothing to show except squalor, environmental decay and the presence of federal government military might as an occupational force only interested in oil that has turned the rest of the Nigerian economy around. Nevertheless, something can still be done to avert the problems in the Niger Delta minority lands. We are confident that the implementation of the recommendations suggested in the concluding section of this paper will bring a long-term solution to the Niger Delta problem.

CONCLUSION

The change in revenue allocation criteria, especially change that de-emphasizes the principle of derivation, reflects the satisfaction of majority economic interests in Nigerian fiscal federalism. The fiscal relations and revenue allocation criteria that do not internalize the interests of the sourcing region by making adequate provisions for the externalities generated by the taxed economic activities can hardly be sustainable under federalism.

Recommendations

There is need to evolve a long-term plan aimed at alleviating the Niger Delta region of the eminent perpetuity of poverty.

1. The current revenue allocation of one percent (1%) of the collected revenue to the states of origin should be reviewed upwards such that at least 35 percent of the revenue sourced

from a state is retained in that state for developmental purposes. This does not negate the ardent need for the federal government to fund some physical development projects such as roads, potable water supply, electricity, telecommunications and other social infrastructures. This should be done through the newly formed Niger Delta Development Commission.

2. Accordingly, given the age and level of environmental effects of oil exploitation the government should set up a research consortium to manage the environment of the Niger Delta region. Also, the government should enact and enforce laws that will compel oil companies to bear as much costs of the pollution that their activities cause, as economically feasible. Thus, since all pollutions resulting from oil exploitation have longer than one period effect, the companies should be made to pay environmental tax. But when a company causes pollution it should be responsible for of the immediate cleaning while the environmental tax revenue will be used for the long-term restoration of the environment.
3. Currently, Nigerian oil is the most cheaply exploited, "while production costs elsewhere average eight dollars per barrel, in Nigeria the average is two dollars, the lowest production cost any where in the world" (CRP, 1999:36). This is so because the government has legislated against payments of economic costs (rents) of land. Rents/royalties charged by government are too low. The Land Use Decree of 1978 and Petroleum Act of 1969 should be reviewed and replaced with laws that enable the communities to be coproprietor of the resources from their land. This will alleviate the Niger Delta people of the daring encroaching poverty. The review of such laws may even have an increasing effect on the size of government revenue, for the government can then charge rent taxes on the individuals that collect mineral rents on their land.

4. The host states of petroleum exploitation should be allowed by law to open up petroleum exploration and mining firms either solely on their own or in partnership with the private investors or jointly with other states. They should be granted the licence for lifting of crude oil. This will form a vent for inflow of financial gains from the petroleum mining activities. Besides, it is also advisable that oil-producing communities be made to buy shares in the oil firms. This will make them co-owners of these companies and they will share in the liabilities and gains of the oil business. There are three-fold effects of the indigenes being made stakeholders in the oil business. First, they will be directly informed about the state of affairs in the industry, and this will reduce the rate of misunderstanding between the communities and the oil firms. Second, the producing communities are likely to gain income from the profits. Third, the environment is likely to be better protected since the communities, who now are co-producers, have a stake in the conservation of the ecosystem for the generations that will outlive the oil wealth.

5. The government should minimize armed forces and police presence in the area but should sue for peace through restoration of the subverted rights of the Niger Delta people. The complaints and agitations of the Niger Delta minority can be attended to in the framework of true federalism and republicanism. It is not out of context here to join the current unheeded calls for federalism with the centre lightly loaded with fiscal powers and responsibilities.

The costs of continuing the suppression of the minority rights under the majority rule are rather too high for Nigeria. Derivation criteria should be restored and the oil firms should pay for the land used for the oil production. There is need to review the repressive Land Use Decree of 1978. The government should embark upon infrastructures projects in the Niger Delta to minimize human

TABLE 1: REGIONAL SHARES OF FEDERAL STATUTORY ALLOCATION 1948-1968

Year	Northern Region		Western Region		Eastern Region		Midwestern Region	
	£Nmillion	%	£Nmillion	%	£Nmillion	%	£Nmillion	%
1948/49	1.8	40.7	1.1	24.7	1.6	34.6		
1949/50	2.1	34.8	1.7	28.1	2.3	37.1		
1950/51	2.6	36.6	1.9	27.2	2.5	36.2		
1951/52	3	36.0	2.2	27.2	3.1	36.8		
1952/53	3.9	34.2	4.3	37.7	3.2	28.1		
1953/54	4.2	31.8	5.2	39.4	3.8	28.9		
1954/55	9.5	34.7	10.5	38.3	7.4	27.0		
1955/56	8.6	33.3	10.7	41.5	6.5	25.2		
1956/57	9.7	34.2	11.6	40.8	7.1	25.0		
1957/58	9.1	31.4	12.2	42.1	7.7	26.5		
1958/59	9.2	29.8	13.5	43.7	8.2	26.5		
1959/60	12.1	31.5	15.4	40.1	10.9	28.4		
1960/61	14.1	33.6	16.4	39.0	11.5	27.4		
1961/62	16.3	35.0	16.4	35.2	13.9	29.8		
1962/63	16	34.1	16.9	36.0	14.0	29.9		
1963/64	17.8	36.5	14.1	28.9	13.7	28.1	3.2	6.6
1964/65	18.4	36.3	12.2	24.1	15.1	29.8	5.0	9.9
1965/66	23.1	36.2	14.1	22.1	19.7	30.9	6.9	10.8
1966/67	24.6	35.3	14.7	21.1	20.8	29.8	9.6	13.8
1967/68	20.9	35.5	17.9	28.7	14.4	23.1	9.2	14.7

Continued on the next page

Table 1 continued

Year	Total Allocation to Regions		% of all Federal Revenue	% of all Regional Revenue	% of all Nigerian Revenue	Index of inequality Coefficient of Variation
	£Nmillion	%				
1948/49	4.5	100	20.4	81.8	19.6	19.3
1949/50	6.1	100	21.7	85.9	21	11.5
1950/51	7.0	100	21.3	87.5	20.7	13.8
1951/52	8.3	100	16.5	89.2	16.1	13.1
1952/53	11.4	100	22.4	84.4	21.5	12.3
1953/54	13.2	100	22.3	75.9	20.8	15.0
1954/55	27.4	100	43.8	74.7	38.2	13.9
1955/56	25.8	100	43.0	61.0	35.1	20.9
1956/57	28.4	100	40.2	63.6	32.6	19.8
1957/58	29.0	100	40.9	63.6	33.1	20.1
1958/59	30.9	100	40.0	64.0	32.6	23.6
1959/60	38.4	100	43.2	71.5	36.9	15.3
1960/61	42.0	100	37.5	74.1	33.2	14.7
1961/62	46.6	100	40.7	69.3	34.5	7.4
1962/63	46.9	100	40.7	65.4	33.5	7.7
1963/64	48.8	100	39.2	68.8	33.3	9.9
1964/65	50.7	100	33.9	68.0	29.2	7.6
1965/66	63.8	100	39.6	71.4	34.3	6.4
1966/67	69.7	100	41.1	70.8	35.1	7.4
1967/68	62.4	100	41.6	73.4	35.5	12.2

Source: Phillips (1971: 396)

TABLE 2: STATE SHARES OF FEDERAL ALLOCATIONS (1968-1972)

State	1968/69		1969/70		1970/71		1971/72	
	£Nmillion	% of Total	£Nmillion	% of Total	£Nmillion	% of Total	£Nmillion	% of Total
North-western	2.2	4.3	5.7	6.3	7.4	6.5	9.6	7.6
North-central	3.5	6.8	5.7	6.3	7.1	6.2	8.3	6.6
Kano	5.6	10.9	9.6	10.7	10.2	8.9	11.4	9.0
North-eastern	2.4	4.7	7.4	8.2	9.1	7.9	11.7	9.3
Benue-Plateau	2.6	5.0	6.2	6.9	6.8	5.9	7.8	6.2
Kwara	1.9	3.7	4.0	4.5	4.7	4.1	6.0	4.8
Lagos	5.9	11.5	7.0	7.8	7.1	6.2	5.8	4.6
Western	14.8	28.7	17.2	19.2	22.1	19.3	18.6	14.8
Mid-Western	6.3	12.2	11.2	12.5	15.3	18.3	15.4	12.2
East-Central	3.0	5.8	5.8	6.5	8.5	7.4	11.8	9.4
South-eastern	1.8	3.5	4.9	5.5	7.0	6.1	8.9	7.1
Rivers	1.5	2.9	5.0	5.6	9.4	8.2	10.7	8.5
Total	51.5	100	89.7	100	114.7	100	126.0	100

Source: Phillips (1971: 405)

discomfort level in the region. The adoption of true federalism with high-level decentralization that guarantees relative autonomy of the units of government can remove most of the crises in the Niger Delta. These are the ways to accommodate the minority rights in the majority rule.

TABLE 3: STATE SHARES OF THE DISTRIBUTABLE POOL ACCOUNT

State	Prior to May 1967 (%)	May 1967 to April 1969 (%)	April 1969 to 1972 (%)	Percentage of Total Population
North-western	42	7	9.3	10.3
North-central		7	7.8	7.3
Kano		7	9.3	10.4
North-eastern		7	11.3	14.2
Benue-Plateau		7	7.8	7.2
Kwara	28	7	6.3	4.3
Lagos		2	5.5	2.5
Western		18	12.7	17.7
Mid-western	30	8	6.4	4.5
East-central		17.5	10.6	12.9
South-eastern		7.5	7.4	6.4
Rivers		5	5.5	2.7

Source: Phillips (1971: 406)

TABLE 4: REVENUE ALLOCATION (IN N' MILLION) TO DIFFERENT GEO-POLITICAL ZONES IN NIGERIA (1979-1996)

Geopolitical zone	1979	1980	1981	1982	1983	1984	1985
Niger Delta States' Allocation	616.02	894.5	807.7	633.8	609.7	569.9	606.8
As a Percentage of Total	23.33	23.69	21.11	19.52	18.99	20.36	18.61
S/ Western States' Allocation	474.20	675.3	684.90	631.00	614.40	535.20	633.10
As a Percentage of Total	17.95	17.89	17.90	19.43	19.14	19.12	19.42
S/Eastern States' Allocation	321.90	452.00	428.60	376.90	376.10	308.10	368.20
As a Percentage of Total	12.19	11.97	11.20	11.61	11.72	11.01	11.29
N/Western States' Allocation	330.30	458.60	499.40	456.80	444.80	405.40	496.70
As a Percentage of Total	12.51	12.15	13.05	14.07	13.86	14.48	15.23
N/Eastern States' Allocation	336.30	490.40	553.00	457.00	484.40	399.70	476.10
As a Percentage of Total	12.73	12.99	14.46	14.07	15.09	14.28	14.60
N/Central States' Allocation	562.40	804.50	852.00	692.20	680.70	580.70	679.90
As a Percentage of Total	21.29	21.31	22.27	21.31	21.20	20.75	20.85
Total Allocation to Southern States	1412.30	2021.80	1921.20	1641.70	1600.20	1413.20	1608.10
As a Percentage of Total	53.47	53.55	50.22	50.55	49.85	50.49	49.32
Total Allocation to Northern States	1229.00	1753.50	1904.40	1606.00	1609.90	1385.80	1652.70
As a Percentage of Total	46.53	46.45	49.78	49.45	50.15	49.51	50.68
Total Allocation to All States	2641.30	3775.30	3825.60	3247.70	3210.10	2799.00	3260.80

Continued on the next page

Table 4 continued

Geopolitical zone	1986	1987	1988	1989	1990	1991	1992
Niger Delta States' Allocation	514	1175.2	1581.6	2036.6	2650.90	2764.30	4087.60
As a Percentage of Total	18.07	18.96	19.33	20.57	19.62	14.39	17.22
S/Western States' Allocation	572.80	1205.70	1552.20	1891.20	2488.30	4149.20	4615.40
As a Percentage of Total	20.14	19.46	18.97	19.10	18.42	21.61	19.44
S/Eastern States' Allocation	304.10	700.80	932.50	1147.40	1447.20	1497.10	2779.70
As a Percentage of Total	10.69	11.31	11.40	11.59	10.71	7.80	11.71
N/Western States' Allocation	448.10	910.60	1522.20	1813.20	2273.50	3813.80	4954.20
As a Percentage of Total	15.76	14.69	18.61	18.32	16.83	19.86	20.87
N/Eastern States' Allocation	437.40	898.10	1138.20	1344.20	1979.40	2822.90	3561.00
As a Percentage of Total	15.38	14.49	13.91	13.58	14.65	14.70	15.00
N/Central States' Allocation	567.40	1306.70	1454.60	1667.20	2670.40	4155.90	3739.00
As a Percentage of Total	19.95	21.09	17.78	16.84	19.77	21.64	15.75
Total Allocation to Southern States	1390.90	3081.70	4066.30	5075.20	6586.40	8410.60	11482.70
As a Percentage of Total	48.91	49.73	49.70	51.27	48.75	43.80	48.37
Total Allocation to Northern States	1452.90	3115.40	4115.00	4824.60	6923.30	10792.60	12254.20
As a Percentage of Total	51.09	50.27	50.30	48.73	51.25	56.20	51.63
Total Allocation to All States	2843.80	6197.10	8181.30	9899.80	13509.70	19203.20	23736.90

Continued on the next page

Table 4 continued

Geopolitical zone	1994	1995	1996	Average			
				1979 to 1983	1984 to 1988	1989 to 1993	1994 to 1996
Niger Delta States' Allocation	4412.30	6978.60	6852.00				
As a Percentage of Total	15.84	18.73	16.07	21.33	19.07	17.80	16.88
S/Western States' Allocation	4633.20	6362.30	8742.60				
As a Percentage of Total	16.63	17.08	20.50	18.46	19.42	18.77	18.07
S/Eastern States' Allocation	3300.30	4659.70	4764.90				
As a Percentage of Total	11.85	12.51	11.17	11.74	11.14	10.67	11.84
N/Western States' Allocation	5687.70	6816.90	7116.10				
As a Percentage of Total	20.42	18.30	16.69	13.13	15.75	19.26	18.47
N/Eastern States' Allocation	4577.80	5966.10	6992.20				
As a Percentage of Total	16.43	16.02	16.40	13.87	14.53	14.80	16.28
N/Central States' Allocation	5245.80	6468.00	8173.70				
As a Percentage of Total	18.83	17.36	19.17	21.48	20.08	18.71	18.45
Total Allocation to Southern States	12345.80	18000.60	20359.50				
As a Percentage of Total	44.32	48.32	47.75	51.53	49.63	47.23	46.80
Total Allocation to Northern States	15511.30	19251.00	22282.00				
As a Percentage of Total	55.68	51.68	52.25	48.47	50.37	52.77	53.20
Total Allocation to All States	27857.10	37251.60	42641.50				

Source: Computed with data from CBN Annual Report and Statement of Accounts (various years).

TABLE 5: CONTRIBUTIONS OF OIL TO THE FEDERAL REVENUE AND EXPORT VALUE IN NIGERIA

Year	Federal Government Oil Revenue ¹ (Nmillion)	Federal Government Oil Revenue (\$million)*	Oil Export Earning (Nbillion)*	Oil Export Earning (\$million) ²
1970	166.6	233.24	0.51	714.00
1971	510.1	733.43	0.93	1335.40
1972	764.3	1161.73	1.18	1794.00
1973	1016	1544.31	1.90	2890.00
1974	3724	5912.05	5.38	8538.00
1975	4271.5	6935.38	4.59	7449.00
1976	5365.2	8577.46	6.23	9956.00
1977	6080.6	9403.96	7.12	11014.00
1978	4555.8	2836.74	14.44	8990.00
1979	8880.8	14908.18	9.27	15559.00
1980	12353.8	22609.44	13.23	24204.00
1981	8564.4	14040.00	10.47	17159.00
1982	7814.9	11613.76	7.65	11366.00
1983	7253	10016.57	7.29	10063.00
1984	8269.2	10810.82	8.74	11423.00
1985	10923.7	12221.64	11.34	12682.00
1986	8107.3	4012.32	11.10	5493.00
1987	19027	4735.56	28.29	7041.00
1988	19831.7	4371.39	29.82	6573.00
1989	39130.5	5293.91	55.62	7525.00
1990	71887.1	8943.63	105.04	13068.00
1991	82666.4	8342.14	116.18	11724.00
1992	164078.1	9485.16	196.56	11363.00
1993	162102.4	7260.44	213.94	*9582.09
1994	160192.4	7319.37	200.71	*9170.45
1995	324547.6	14828.94	805.88	*36821.32
1996	369190	16868.70	1101.58	*50332.33
1997	416811.1	19044.56	1064.97	*48659.78
Total	1928085.5	244064.81	4039.92	372489.38

* Values in this column and those marked in the next column were converted using the average exchange rate as provides in the CBN source below.

Source: 1. CBN (various issues), *Statistical Bulletin*
2. World Bank (1991, 1994) *World Tables*

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