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NIGERIA

Selected Issues and Statistical Appendix

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Approved by the African Department

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I. INTRODUCTION

1. This selected issues paper and statistical appendix provide background information to the staff report on the 2002 Article IV consultation discussions with Nigeria (SM/02/361/11/25/02).

2. The staff report discusses several medium-term challenges facing Nigeria. Critical among these are the need to restore macroeconomic stability through prudent fiscal, monetary and external policies, the development of a fiscal framework that allows for predictable and stable fiscal policies, and overall strengthening of the budget formulation process, accountability and transparency. Addressing these challenges will provide a basis for Nigeria to reduce its dependency on the oil sector and engender growth in the non-oil economy.

3. The topics in this paper were selected to focus on those key challenges facing Nigeria. Given the dependence of Nigeria on the oil and gas sector, the first section discusses issues and prospects in the oil and gas sector. It provides basic information on the sector and highlights the importance of strengthened governance. This section is followed by a discussion on fiscal policy rules, which presents options for Nigeria based on the experience of other countries. Implementing a fiscal policy rule is identified as one possible way for Nigeria to stabilize public expenditures in the face of volatile oil prices. Given the complications that a federal system can create for overall macroeconomic management, this section is complemented by another, which discusses issues in intergovernmental finance in Nigeria.

4. Notwithstanding the central challenge of designing appropriate fiscal policies in Nigeria, the effective implementation of complementary monetary policies is crucial both for short-run and medium-term stability. The section on monetary policy discusses some of the main challenges in carrying out monetary operations, including developing indirect instruments and strengthening the overall intermediation process of the banking system.

5. The final sections review developments in Nigeria's trade policy regime and presents a debt sustainability analyses. Trade policy reform provides an important vehicle for export growth in Nigeria, and when carefully implemented can contribute to the growth in the non-oil economy. Finally, one of the legacies of the past in Nigeria is a significant external debt burden. The section on debt sustainability analysis discusses some rescheduling scenarios, which would place external debt and debt service on a manageable and sustainable path.

II. Issues and Prospects in the Oil and Gas Sector[1]

A. Introduction

6. This section provides basic background information on the structure of the upstream and downstream oil and gas sector in Nigeria. In addition, it discusses key issues related to the prospects of the sector, the current fiscal regime, and, last but not least, governance and accountability in the sector.

7. Oil was discovered in Nigeria in 1956. From a modest start of producing about 5,000 barrels per day in 1957, Nigeria is today a major oil-producing country, the thirteenth largest producer in the world. Nigeria joined the Organization of Petroleum Exporting Countries (OPEC) in 1971 and is today the fifth-largest oil producer within the organization, with a quota of 1.787 million barrels per day (mbd). The state-owned national oil company, the Nigerian National Petroleum Company (NNPC) was established in 1977, and is a major player in both the upstream and downstream sectors. Gas resources are largely untapped, and Nigeria's gas reserves place it among the top ten countries in the world in that category.

8. The oil and gas sector in Nigeria is today at a crossroad. After two decades of relative stagnation, oil and gas are poised for renewed expansion. New contracts (production-sharing contracts (PSCs)) have been signed for the exploration of offshore oil resources, accompanied by large investments from international oil companies. The development of the gas sector, encouraged through a number of substantial tax incentives, raises expectations of high export and government revenues. The main challenge for Nigeria is to manage the oil wealth effectively, so as to maximize its impact on economic growth and poverty reduction. While this paper focuses narrowly on the structure and prospects of the sector and the issue of governance, more general issues related to the design of appropriate macroeconomic policies in an oil-dependent economy like Nigeria's are discussed in subsequent papers.

B. The Oil and Gas Upstream Sector: Endowment, Structure and Prospects

Resource endowment and structure

9. Nigeria is a country rich in oil resources. Crude oil reserves were estimated at 24 billion barrels in 2001. The reserve level targeted by the authorities for 2003, at 30 billion barrels, would be comparable to that of the United States, Libya, and Mexico, and would place Nigeria among the ten countries with the largest proven reserves (Figure II-1). At current production levels, these reserves would last for about 30 years.

10. Nigeria's total crude oil and condensate output had remained fairly stable from 1999 to 2001, around 2.2 mbd, out of which 85 percent was exported and the remainder allocated to the NNPC for domestic processing (Figure II-1). Given domestic refining capacity constraints, only about 51 percent of the domestic allocation was actually processed. The

[1] Prepared by Rodolphe Blavy.

unprocessed balance was exported by the NNPC for cash. In 2002, following a reduction in Nigeria's OPEC quota and periodic disruptions[2] to production, the daily production of crude oil (including condensate) is projected to be about 1.89 mbd.

11. The upstream oil sector is dominated by the NNPC, which holds a majority share (between 55 percent and 60 percent) in all six major joint-venture companies (JVCs) operating in Nigeria. The dominance of NNPC has historically reflected the public policy of using a state enterprise to develop domestic industries. In addition to these operations, the government of Nigeria has entered into PSCs with a number of private oil companies.

12. Nigeria produces and exports high-quality crude oil. Bonny Light and Forcados are Nigeria's marker crude on the world market. The most prospective basin is the Niger Delta, accounting for almost all of the proven and potential reserves, and all oil production to date. Since 1990, Nigeria has encouraged exploration of deep offshore areas by offering new deepwater concessions. Estimates of recoverable oil in Nigerian deepwater areas range from 8 to nearly 20 billion barrels, and may increase significantly Nigeria's current proven reserves.

13. In addition to oil resources, Nigeria has extensive gas resources. Nigeria's current proven gas reserves (3.5 trillion cubic meters) place the country in the top ten in the world and its very large potential for new discoveries could raise further Nigeria's reserves (Figure II-1). Production is still in its infant stage. Large volumes of associated gas are flared during oil production. Current projects in the gas sector target three potential markets: the export of liquefied natural gas to Europe and the United States; the processing of gas, currently flared, for use in the domestic market; and the building of gas pipelines to neighboring countries.

Prospects

14. A number of objectives have been set for the oil and gas sector by the current Nigerian government, including the following:

- increasing production capacity, to 4 mbd by 2010;
- raising reserves to 40 billion barrels by 2010, from 24 in 2002;
- working within OPEC, and respecting OPEC quotas; and
- eliminating gas flaring by 2008.

[2]Periodic disturbances in some communities that feel aggrieved by oil operations have routinely affected oil production and export.

15. Prospects in the oil sector will depend on the strategy adopted to deal with two issues: (i) the increase in production capacity and the tension that this creates with the constraints imposed by OPEC quotas; and (ii) the diverging fiscal regimes under which oil companies operate, that is, the memorandum of understanding (MOU) fiscal regime (defined below) and the PSCs.

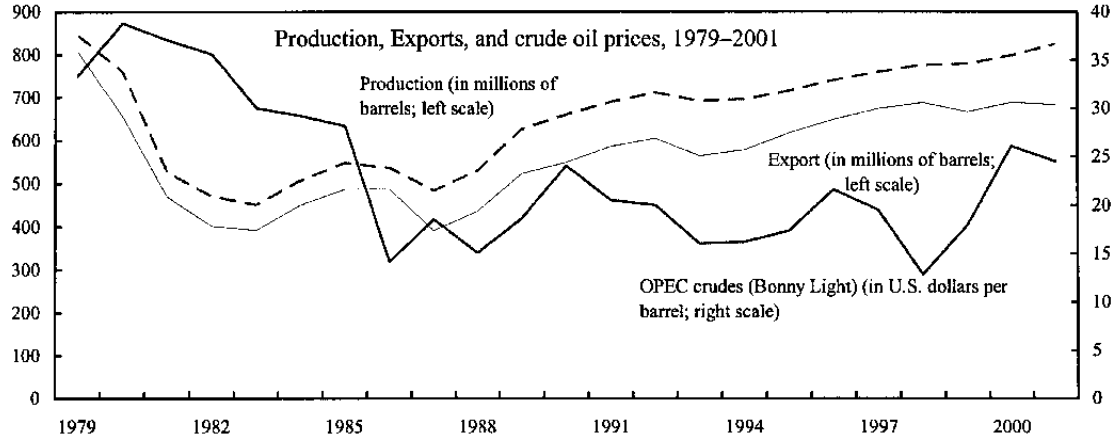
16. With regard to the first issue, while production (excluding gas) has been cut by 16.4 percent to 1.89 mbd projected for 2002 in compliance with OPEC's reduced quota, Nigeria's production capacity has grown to 2.6 mbd. Furthermore, the large investments in the sector will raise capacity at a much faster rate than the trend growth of 2 percent per annum demand. There is uncertainty in the oil industry in Nigeria with regard to how the government intends to address the rising potential excess capacity. The government has not yet clarified its future intention in this regard.

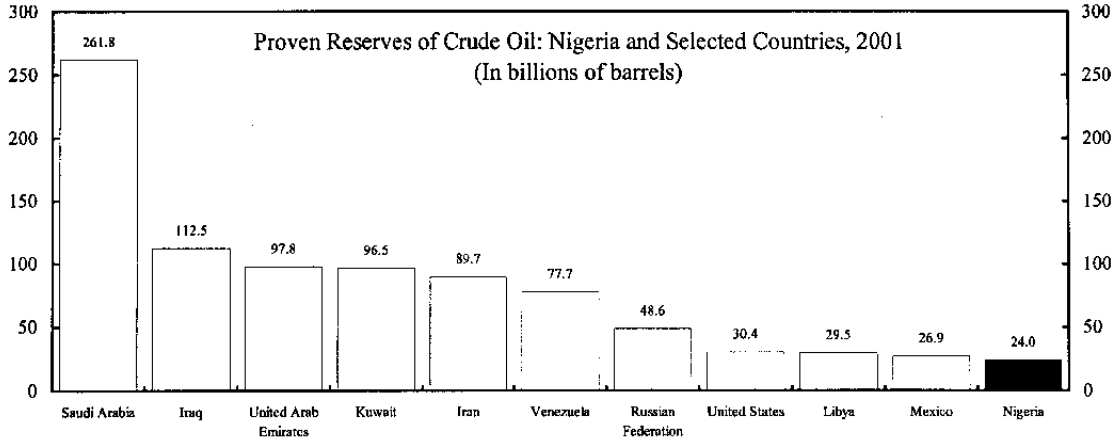
17. As to the second issue, the pressure to increase production will require that oil companies review the structure of their crude oil production. Currently, oil companies produce oil under two different fiscal regimes. These regimes are described in more detail in the next subsection. In brief, under the MOU fiscal regime, oil companies are liable for a government take, comprising petroleum profit tax (PPT) and royalty payments. Under PSCs, investment in exploration and development of new oil fields are recovered as "cost oil" when production starts, and then yield little revenues to the government until cost oil has been fully recovered.

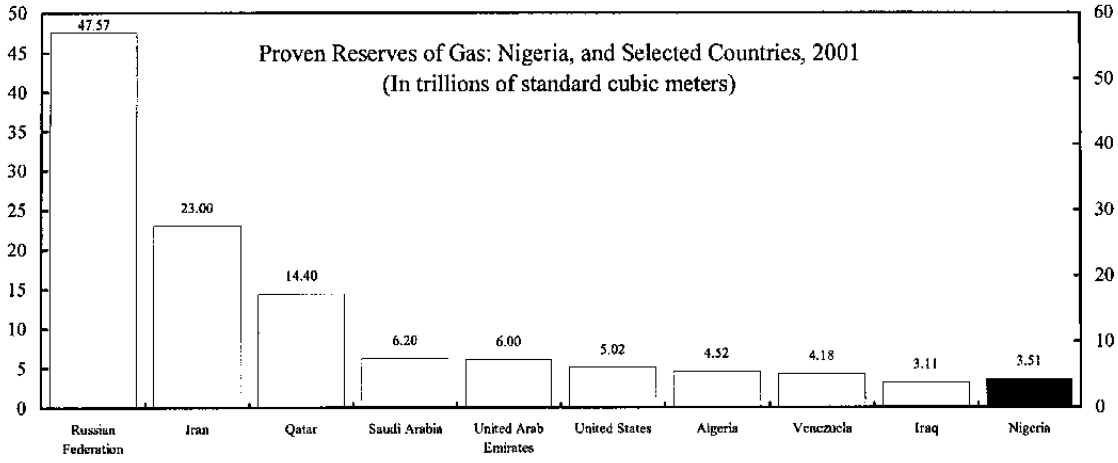
18. As indicated above, the potential for a rapid increase in gas production is promising. The Nigerian authorities project that foreign exchange earnings from gas will surpass that from the sale of crude oil in the medium term. For the optimal development of the sector, the government will have to overcome some obstacles and address several key reform issues. First, is the challenge of eliminating gas flares. In 2002, up to 55 percent of associated gas was flared. The government has targeted 2008 as the date by which gas flares will be completely eliminated, and it is currently on track to meet that objective. A second and more challenging issue in developing the gas sector is the need to refurbish the power sector so that it can utilize effectively the gas output. Refurbishing the power sector will necessarily require the restructuring of the Nigeria Electricity Power Authority (NEPA) and the possible privatization of some aspects of power generation and distribution. Third, is the need to develop a domestic market for gas and gas by-products, including in Nigeria's currently underserved regions. Fourth, is the promotion of investment in areas where gas utilization can lead to the substitution of imported products. Fifth, is the need to explore the potential for the export of gas to regional and extraregional markets.

19. At present, the development of the gas sector has centered on Nigeria's oil activities, given the large volumes of associated gas produced. The main projects in operation are the Nigeria liquefied natural gas plant on Bonny Island and the Escravos-to-Lagos Pipeline System (ELPS). The range of further potential developments is wide, including utilizing gas in power projects, in liquefied natural gas (LNG) plants, in "gas-to-liquids" (GTL) and

Figure II-1. Nigeria: Production, Proven Reserves, and Oil Prices







Sources: Central Bank of Nigeria *2001 Statistical Appendix*; and British Petroleum *Statistical Review of World Energy* (2002).

chemical industries, and exports through pipelines.[3] To ensure a proper expansion of the sector, the government would have to establish an environment conducive to growth, backed by a global strategy for the sector.[4] In particular, the improvement and/or creation of infrastructure for the commercialization of gas and the institution of a solid legal and regulatory framework will be important steps.

C. Fiscal Regimes

20. Governments typically design fiscal regimes for extraction industries to maximize revenues while attracting investment in the sector (Box II-1). Changes in the oil and gas sector pose challenges to the fiscal regimes governing the sector, and to government revenues. To benefit from the prospects of expanding oil capacity and gas production, Nigeria will have to address two main issues. First, because of different fiscal regimes for oil companies under MOU and under PSCs, revenue flows may be affected by a shift in production from JVCs to PSCs. Second, the impact of tax and fiscal incentives on the development of the gas sector has important short-term fiscal costs and potential medium- to long-term revenue implications that need to be carefully assessed. In the short term, the MOU terms remain the main determinants of oil-related government revenues. In the longer term, as part of production will be shifted towards PSCs, PSC terms will become more important in the determination of government revenues.

Box II-1. Desirable Features of Fiscal Regimes for Petroleum and Gas Extraction

International best practices suggest certain desirable features of fiscal regimes in the oil and gas sector:

- The government's primary objective is to secure a major share of the resource rents, thus ensuring that the petroleum sector makes its due contribution to public revenues.
- A second objective is that the fiscal regime for petroleum extraction should be progressive, that is positively correlated with project profitability. This suggests that the fiscal regime should be profit based and include incentives to contain costs.
- Another objective is for the government to shift risks (volatility of oil prices and vagaries of petroleum extraction) to the major oil companies. One way to shift risk is to ensure early receipts of revenues, but this will make fiscal regimes less progressive.
- The fiscal regime should provide incentives to increase production and productive capacity.
- Finally, a fiscal regime should be stable, transparent, and easy to administer.

[3] The utilization of gas in the power sector is promising, especially given the current insufficient level of electricity generation in Nigeria. The inefficiency of NEPA is such that small private power units provide more power capacity than NEPA. A number of proposals for additional LNG projects and GTL projects are under way. Finally, proposed pipeline projects, in particular, the West African Gas Pipeline (WAGP) and the Nigeria-to-Algeria Pipeline, may provide good platforms for exports to regional and extraregional markets.

[4] The extensive work undertaken by the World Bank in the gas sector in Nigeria is a good reference for such a strategy.

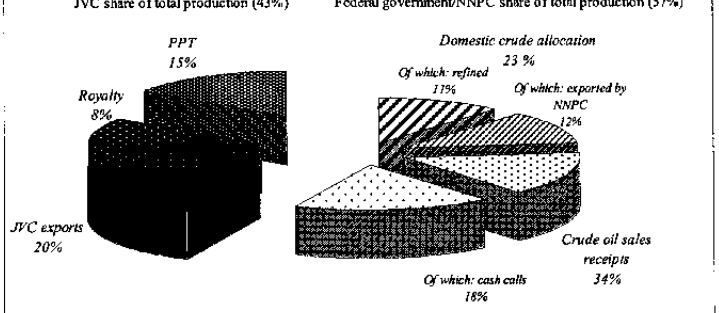
Memoranda of understanding

21. Under JVCs, the private partners are taxed under a fiscal regime known as the memorandum of understanding. Current estimates suggest that JVCs account for 98 percent of total oil production in Nigeria. The operations of the JVCs cover almost all of the allocated license areas, onshore and offshore.

22. Nigeria's MOU terms are competitive in comparison with other oil-producing countries, such as Algeria, Angola, Indonesia, and Venezuela. The terms are satisfactory for both investors and government, because they provide adequate incentives to invest and transfer major shares of the project rents to the government.

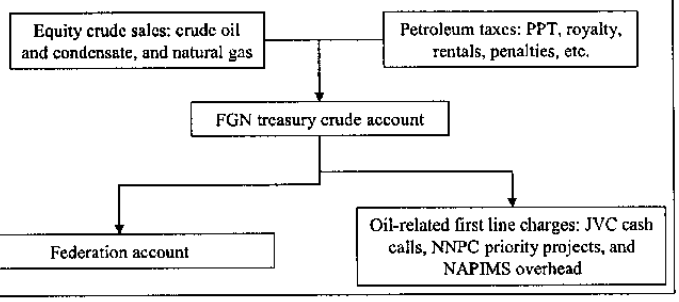
23. Of the total crude oil produced by JVCs, 57 percent accrues to the government, equivalent to its average majority share in the joint ventures. Federation crude is then either exported, yielding significant inflows as crude oil sale receipts, or allocated to the NNPC for domestic use, yielding domestic crude receipts (see figures II-2 and II-3). Two other major sources of financial inflows to the federation are royalty and PPT payments by JVC partners. Other inflows include pipeline fees, rental fees, gas-flaring penalties, and natural gas export proceeds. In terms of outflows, cash call payments represent the funding requirements of the government to meet its share of the JVCs operating and capital costs. Payments for NNPC priority projects cover expenses such as maintenance and refurbishment of infrastructure.

Figure II-2. Nigeria: Decomposition of a Barrel of Crude Oil 1/



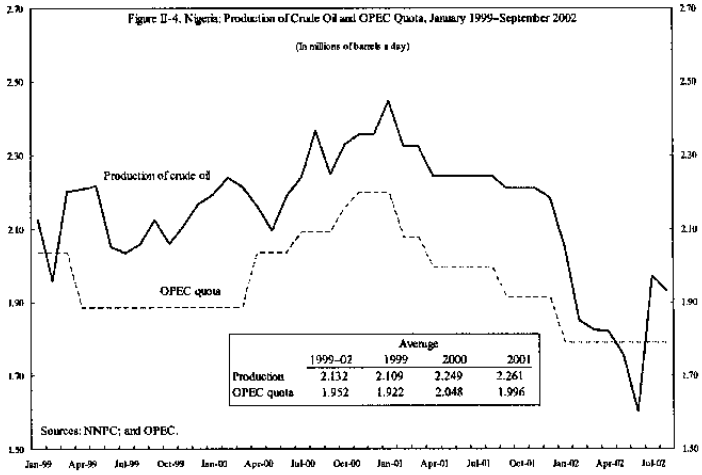
Sources: NNPC; and Fund staff estimates.
1/ Based on 2002 estimates.

Figure II-3. Flow of Funds under the MOU



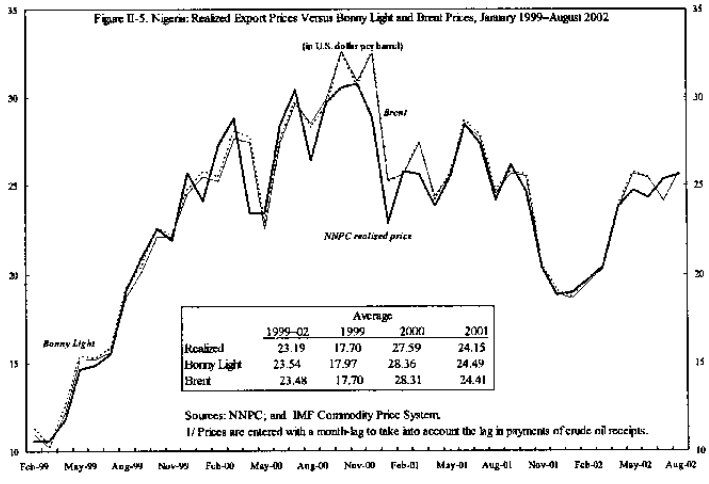
Crude oil receipts

24. Government revenues from crude oil sales are largely exogenous, determined by Nigeria's OPEC quota and international oil prices. However, actual production has tended to exceed OPEC quotas. Since January 2002, Nigeria has complied more closely with its OPEC quota and reduced its production of crude oil significantly (Figure II-4). Oil exports are also a function of domestic allocation: the larger the domestic allocation, the smaller the volume of crude oil available for exports. In 2002, domestic allocation was raised to 445,000 barrels per day, compared with 390,000 in 2001, thereby reducing further the NNPC's volume of exports. The NNPC's exports are priced on international markets as Bonny Light, with a small premium over the price of Brent. However, realized prices of the NNPC (or the National Petroleum Investment Management Services (NAPIMS), the marketing arm of the NNPC) are slightly lower than market prices (Figure II-5).



Royalty and petroleum profit tax

25. The MOU provides oil companies with the option of paying the lesser of the PPT and royalties under two different tax regimes. Under the first option, the PPT is calculated at a rate of 85 percent of profits. The royalty rates are 20 percent of onshore oil production, and between zero and 18.5 percent of offshore oil production, depending on depth. The total government take under this option is 88 percent (20 percent + 85 percent of 80) of the marginal dollar of crude oil revenue. For offshore oil, the government take is slightly lower. The second option—defined as the revised government take—calculates royalties and the PPT in a less direct fashion. Essentially, the PPT and royalty rates are applied to an adjusted tax base as follows. A tax reference price is arrived at by adjusting the realized price of oil by a factor that takes into account a guaranteed margin and a notional technical cost of producing oil. The margin is set



at US$2.5 or US$2.7 per barrel, depending on the level of capital costs. Royalties are then calculated on the value of production using this tax reference price. Similarly, the PPT is calculated based on the tax reference price. As an incentive to reduce operating costs, a tax inversion penalty of 35 percent was introduced in 2000. This tax inversion penalty raises the tax liability of producers if technical costs exceed certain thresholds, while rewarding them with lower tax liabilities if costs are below these levels. Figure II-6 shows trends in dollar-related oil revenues between January 2001 and May 2002.

Domestic crude receipts

26. The government receives payments from the NNPC for the domestic allocation of crude oil to NNPC. Crude is sold domestically at subsidized prices, with a two-month credit. Payments are made in local currency, using a subsidized exchange rate. In January 2002, in an attempt to move closer to market-determined prices, the government raised the price of domestic crude from US$9.5 per barrel to US$18, and the exchange rate from N 100 per dollar to N 110. Estimates of forgone revenues from the sale of domestic crude at subsidized prices are presented in Table II-1 below. In 2001, the estimated implicit subsidy reached N 250 billion (5.5 percent of GDP) and, for the first half of 2002, N 57.4 billion, in spite of the adjustment in the price paid by NNPC in January 2002.[5]

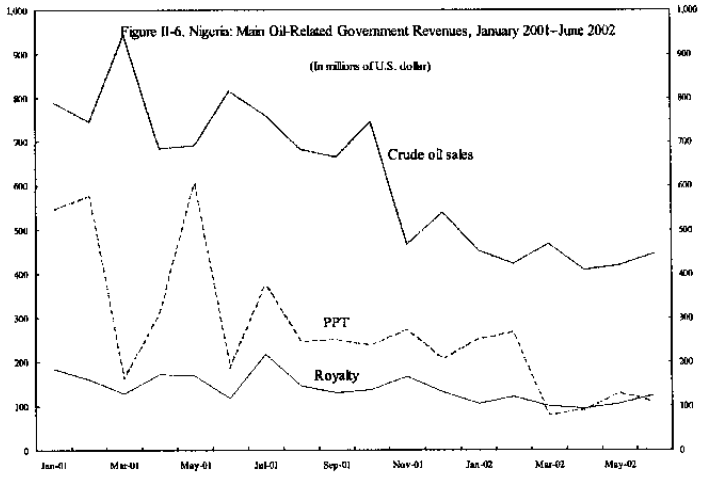


Table II-1. Nigeria: Implicit Subsidy to NNPC on Domestic Crude, 2001-02

	2001	Jan-02	Feb-02	Mar-02	Apr-02	May-02	Jun-02	H1 2002
Domestic allocation (millions of barrels)	142.5	13.2	12.6	13.2	13.9	13.6	13.4	79.9
Realized price for federation crude (U.S. dollar per barrel)	24.1	19.7	20.4	23.8	24.8	24.3	25.4	23.1
Price charged to NNPC for domestic crude (U.S. dollar per barrel)	9.5	18.0	18.0	18.0	18.0	18.0	18.0	18.0
Implicit price subsidy (U.S. dollar per barrel)	14.6	1.7	2.4	5.8	6.8	6.3	7.4	5.1
Market exchange rate (naira per U.S. dollar)	112.0	114.0	115.1	116.8	116.7	117.4	119.8	116.6
Exchange rate for domestic crude (naira per U.S. dollar)	100.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0
Implicit exchange rate subsidy (naira per U.S. dollar)	12.0	4.0	5.1	6.8	6.7	7.4	9.8	6.6
Total implicit subsidy (billions of naira)	250.0	3.5	4.7	10.6	12.6	11.9	14.2	57.4

Sources: NNPC; Central Bank of Nigeria; and staff estimates.

[5] The estimation does not take into account the two-month credit in domestic crude receipts.

Cash call payments and NNPC priority projects

27. Starting in 1995, gross proceeds from the sale of the NNPC's share of oil have been transferred immediately to the Federation Account at the Central Bank of Nigeria (CBN). Accordingly, the NNPC's share of monthly cash calls have been met from a budget appropriation. This mechanism was deemed necessary to increase federal government oversight over the distribution of revenues received by the NNPC. Under this system, the NNPC agrees to a work program with its joint-venture partners, and a cash call budget is approved as part of the federal budget process. Discrepancies between amounts approved by the NNPC and amounts approved by the budget, as well as delays in the budgetary process have led to the accumulation of cash call arrears.[6] These arrears directly affect output and raise the costs of petroleum operations in general. NNPC priority projects have also been funded out of the Federation Account. The Supreme Court ruled on April 5, 2002 that payments of cash calls as first charges on the Federation Account are unconstitutional. The decision of the Supreme Court has substantial implications for the NNPC, including the subsequent decision of the government to commercialize the operations of the NNPC starting on May 8, 2002. The current understanding is that the NNPC should receive the share of oil produced from each venture and directly provide its funding for payments of cash calls. Only the balance (i.e., net of costs) would then be transferred to the Federation Account. The NNPC priority projects are also to be funded directly by the NNPC.

Production-sharing contracts

28. Under the PSCs, the government retains the right to petroleum resources in the ground but appoints the investor as "contractor" to assist the government in developing the resources. The parties agree that the contractor will meet the exploration and development costs in return for a share of any production that may result. The PSC terms in Nigeria are based on a 1993-model contract, with a few exceptions that reflect earlier negotiations. All PSCs are contracts made between the NNPC and the investor. The PSC typically provides for a 30-year term, including 10 years for the exploration period.

29. The Nigerian PSC model offers advantages both to the government and the private investor:

[6] When payments of cash calls to JVCs are delayed, JVC operators may borrow the equivalent amount and charge the interest to the NNPC. To avoid high interest expenses, NNPC has moved toward more timely payments of cash calls. However, there has been some controversy regarding pre-1999 arrears. During the 1994-99 period, the military government accumulated significant arrears to JVC partners. The NNPC has recently estimated the stock of arrears for the period at US$500 million for the foreign exchange portion and at N 26 billion for the naira portion.

- PSCs allow the government to receive a significant share of production without imposing an obligation to commit budgetary revenues for the development of oil production (as opposed to required cash call payments under the MOU governing JVCs). The drawback for the government is the postponement of revenues from production.

- PSCs allow the development of underdeveloped offshore areas without the government incurring the exploration risk.

- PSCs provide the government with a framework within which it can encourage competition among existing and new investors.

- PSCs allow the economic terms for an area to be varied without resort to amendment of fiscal legislation. PSC royalty and tax terms are fixed,[7] but cost recovery and production sharing are negotiable.

30. For tax purposes, the production of oil can be defined as royalty oil, cost oil, tax oil and profit oil. Royalty oil is the first call on production under PSCs, and the rates levied on gross production vary from 16.67 percent for shallow-water areas (less than 200 meters), to 10 percent for inland basins and to zero when the water depth exceeds 1,000 meters. Almost all offshore PSCs signed to date cover deepwater blocks yielding low or zero royalty.[8]

31. Cost oil is the second call on production under the PSCs. All costs are expenses, except capital costs for tangible assets, which are recovered in equal annual installments over five years. Royalty oil is the only limit to the amount of gross oil that may be used for cost recovery. The absence of a cost oil limit is unusual in major oil-producing countries.[9] However, four characteristics of the Nigerian PSCs may limit revenue postponement. First, royalty oil is paid as soon as production starts. Second, capital expenditure is amortized over a five-year period, limiting de facto the volume of cost oil. Third, Nigerian PSCs are "ring-fenced," that is, the area over which costs of one development can be offset against the revenue stream of another is restricted. This feature reduces to some extent the postponement of government revenues. Fourth, the government typically receives signature and bidding bonuses from prospective contractors. Signature bonuses in deep water have now reached significant sums (in the US$25 - US$40 million range) while amounts in inland basins are

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[7] PSC royalty and tax terms have been fixed by Decree 9 of 1999.

[8] In addition to royalty oil, contractors must pay surface rentals, at relatively low rates (within the range of N 200-500 per km2).

[9] Some of the PSCs provide for recovery of costs of other blocks held by the contractor. While this feature creates a strong exploration incentive, it may induce a significant postponement of government revenues.

commonly around US$1 million or less.[10] Production bonuses are payable at threshold amounts of cumulative production from the contract area and are larger for inland basins than for deepwater contracts.

32. Tax oil corresponds to the settlement of PPT liabilities. The PPT rate is 50 percent, lower than the 85 percent under the MOU for JVCs.[11] Tax oil and royalty oil are apportioned between the contractor and the NNPC in the same proportions that profit oil (see below) is allocated during the relevant accounting period, in order to replicate conventional tax calculation.

33. Profit oil is split between the contractor and the NNPC on a sliding scale related to cumulative production from the contract area. With some variations across contracts, splits for inland basins are generally more favorable to the NNPC than deepwater contracts. Overall, PSCs are relatively generous to the contractor throughout, as they recognize the high risks of exploration and development activity. However, as profit oil sharing according to cumulative production is regressive with respect to decreases in costs or increases in price, very large discoveries may yield returns so high to the investor that PSC terms may not be sustainable, particularly as profitability is not necessarily correlated to the scale of production. An alternative production sharing solution would be to link the NNPC profit oil share to a scale determined by the contractor's achieved rate of return, on a field-by-field basis. This scheme would provide the investor greater protection from the discovery of less profitable fields, and allow the government to reap greater benefits from rich fields at high prices.

Implications of a shift in production from MOUs to PSCs

34. A shift in production away from MOUs toward PSCs may be expected because private oil companies have been investing large sums in offshore exploration and development and have a strong incentive to produce in order to recover their investment costs. The impact on government revenues needs to be carefully assessed by the Nigerian government, as revenues may be adversely affected in the transition period because of the deferment of tax revenues under the PSCs.

35. There is considerable uncertainty about the magnitude of the potential shift in production, its impact on cash call payments, the depth of the drillings, and the resulting

[10] This difference may reflect relative prospects of the different regions and is partly offset by tougher production-sharing terms for inland basins on the grounds that onshore costs are likely to be lower.

[11] Another difference is that the rate of investment tax credit or allowance is also 50 percent.

royalty rates to be applied; as a result, the exact impact of a shift is difficult to assess. Based on a number of assumptions, the following simulation shows that the reduction in government revenues could be significant over the next five years. [12] The simulation assumes the following:

- Production under PSCs is about 0.15 mbd in 2003 and rises to 0.34 mbd in 2007.
- The average royalty rate is 1.6 percent, as most production (75 percent) is assumed to be deep offshore, yielding a zero royalty rate.
- Given the absence of a cap on cost oil in Nigerian PSCs, but taking into account the amortization rule for capital expenditure, we assume that, during the first five years of production, 75 percent of all oil produced is exhausted through royalty oil and cost oil. The remainder is tax oil (PPT) and profit oil.
- We also assume that cash call payments are reduced in line with the reduction in JVC production.

36. The simulation shows that government revenues in 2003 would be 9 percent lower under the above assumptions than if all production is assumed to be under memoranda of understanding, and up to 21 percent lower in 2007 (Table II-2). After the recovery of cost oil, the negative impact would gradually decline and PPT and profit sharing would increasingly yield substantial revenues for the government. The simulation also shows that the reduction in cash call payments compensates partly for the revenue loss.

Taxation of the gas sector

37. As noted earlier, Nigeria's gas resources remain largely untapped. To promote development of the sector and to end costly gas flaring, the government has introduced a tax regime that combines penalties on flared gas and incentives for upstream development of the sector.

[12] The simulation is illustrative, and sensitive to a modification in the assumptions. For example, the average royalty rate is calculated at 1.6 percent, under the assumption that 75 percent of the production is deep offshore. If we assume that 50 percent is deep offshore, while 25 percent is produced in shallow waters (the remainder being produced at intermediate depths), the average royalty rate becomes 4.4 percent, and the revenue loss to the government is smaller than estimated.

Table II-2. Nigeria: Impact on Government Revenues of a Shift in Production from Memoranda of Understanding to PSCs, 2003–07
(In millions of U.S. dollars, unless otherwise indicated)

	2003	2004	2005	2006	2007
Production under MOU 1/					
Crude oil sales	6,250.2	5,826.3	5,866.4	5,779.9	5,963.7
Royalty	1,449.1	1,328.2	1,319.7	1,282.3	1,307.9
PPT	3,466.0	3,008.1	2,950.7	2,787.1	2,842.8
Total	11,165.3	10,162.6	10,136.8	9,849.2	10,114.4
Cash call payments	3,500.0	2,400.0	2,200.0	2,000.0	2,000.0
Production with shift toward PSCs					
(PSC as percent of total)	7.5	8.0	9.2	13.1	15.9
Crude oil sales 2/	5,479.6	5,064.2	4,999.0	4,576.9	4,473.6
Royalty	1,432.3	1,312.0	1,291.9	1,214.8	1,207.6
PPT	3,244.5	2,771.7	2,667.6	2,403.4	2,355.8
Total	10,156.3	9,147.9	8,958.5	8,195.1	8,037.1
Cash call payments	3,237.5	2,208.0	1,997.6	1,738.0	1,682.0
Revenue losses					
Crude oil sales	770.6	762.1	867.3	1,203.1	1,490.1
Royalty	16.8	16.1	27.9	67.4	100.3
PPT	221.5	236.4	283.1	383.7	487.0
Total	1,009.0	1,014.7	1,178.3	1,654.2	2,077.3
Gains on cash call payments	262.5	192.0	202.4	262.0	318.0
Total impact on government revenues	**-746.5**	**-822.7**	**-975.9**	**-1,392.2**	**-1,759.3**
Memorandum item:					
Oil price (World Economic Outlook projections)	25.0	22.5	22.0	21.0	21.0

1/ The current macroeconomic framework assumes that all oil production is done under memoranda of understanding.
2/ For simplicity of presentation, the NNPC profit share from the operations of PSCs is included into crude oil sales.

38. The structure of incentives is very generous by international standards. Gas producers have the ability to deduct operating and capital expenses against oil income. Investors in both the upstream and downstream gas sector also benefit from a five-year tax holiday, royalty exemption, and import duties/value-added tax (VAT) exemptions. The royalty rate is 5–7 percent, and exemption is granted if gas is transferred to downstream plants. Companies are liable for a 30 percent company income tax. Given the ability of investors to deduct all their gas expenditures against an 85 percent oil liability while paying only 30 percent tax on

their gas revenues in the case of associated gas, the tax regime may result in posttax profits that are greater than pretax revenues.

39. While it is difficult to estimate accurately the impact of tax incentives on government revenues, it is evident that revenue losses are likely to be substantial. Such a favorable regime reflects the high priority given to development of the gas sector in Nigeria. A simple simulation based on a US$1 per barrel tax offset[13] in the computation of PPT payments show that the reduction in revenue could be in the range of US$260 million in 2003, or about 0.6 percent of projected GDP (Table II-3).

Table II-3. Nigeria: Impact of Tax Incentives on PPT Payments on Gas, 2003-07
(In millions of U.S. dollars, unless otherwise indicated)

	No Tax Offset	US$1 per Barrel Tax Offset	Revenue Loss	As a Percent of Projected GDP
2003	3,466	3,202	264	0.61
2004	3,008	2,738	270	0.61
2005	2,951	2,676	275	0.60
2006	2,787	2,506	281	0.58
2007	2,843	2,557	286	0.56

D. The Downstream Oil Sector

40. The downstream sector has been characterized by chronic inefficiencies and shortages of retail petroleum products. Such inefficiencies have led to a questioning of the overarching role of the NNPC in downstream operations, and of the corresponding commitment of financial resources (e.g. the implicit subsidy on domestic crude allocation). The government plans to deregulate the sector in a number of ways, including: the liberalization of petroleum product retail prices; the liberalization of imports of petroleum products; and the privatization of refineries. Deregulation would imply the elimination of price subsidies, in particular on domestic retail prices. In the context of the rapid expansion of the upstream oil and gas sector, a thorough restructuring of downstream activities is considered to be critical. Deregulation would also create a level playing field in the downstream sector, providing the incentives for the NNPC to improve the efficiency of its refining operations. The modalities of the commercialization of the downstream activities of the NNPC are yet to be clarified.

Structure of the downstream sector

41. The NNPC is a major player in Nigeria's downstream oil industry. It has a monopoly in two main downstream segments—refining, and pipelines and storage depots— and is the main player in distribution and retail. The NNPC owns the country's four refineries, and has

[13] Tax offsets in the range of US$1–2 per barrel are common.

a significant shareholding in the larger marketing companies. While the importation of petroleum products was recently liberalized, the gap between international oil prices and the regulated domestic retail prices does not allow for profitable imports of petroleum products.

42. The combined refining capacity of the four refineries is 445,000 barrels per day, equal to the current domestic allocation of crude oil to the NNPC. However, the below-average performance of the refineries has been responsible for the country's reliance on imports to meet domestic demand. To complement the refineries, large investments have been made since 1979 in a network of pipelines and storage facilities for petroleum products in each of the major distribution zones of the country. Nominal pipeline capacity is 3,000 kilometers.

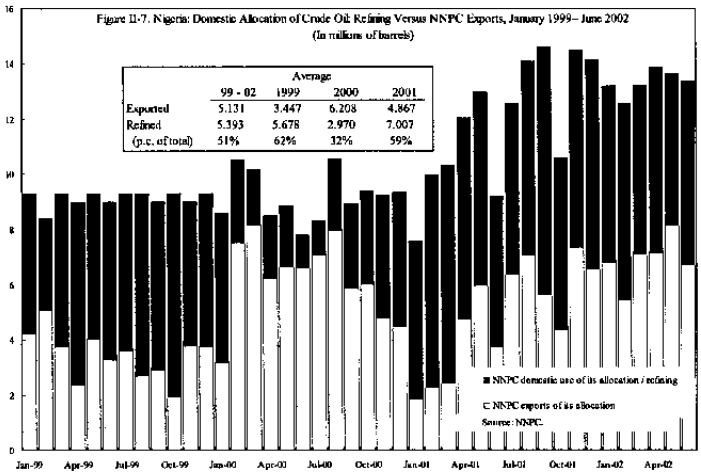
43. Distribution and retail facilities employ a fleet of road tankers to distribute petroleum products to retailers. The deterioration of the fleet and of the retail stations has made the distribution to consumers inefficient. Seven marketing companies account for about 60 percent of total petroleum product sales, with small independent operators accounting for the remaining portion.[14]

Issues and prospects

44. In recent years, petroleum product output has dropped well below nominal refining capacity. The domestic allocation of crude oil to the NNPC has been raised to nominal refining capacity in an effort to encourage domestic production of refined petroleum products. However, with about 50 percent of the domestic allocation being exported by the NNPC (Figure II-7) and a substantial portion of refined products for domestic consumption being imported, the objective is yet to be achieved. The net cost/benefit of diverting exports through the NNPC is debatable. The implicit subsidy on domestic crude (see section on fiscal regimes) works as a subsidy to cover the high costs of domestic refining operations and the obligation for NNPC to supply the retail market at below import parity prices. Further, recurrent shortages of petroleum products have encouraged black market activities. The gap between refining capacity and actual output is attributed to inadequate maintenance of plants and damage caused by sabotage, excessive fuel loss, and a suboptimal mix of products. In distribution and storage, capacity utilization is well below 50 percent.

[14] The main marketers and their relative shares are as follows: TotalElf (15.5 percent), African Petroleum (11.8 percent), National (8.5 percent), Mobil (7.4 percent), Unipetrol (6.8), Texaco (6.8 percent), and Agip (4.7 percent).

45. Several options that are either being considered or implemented by the government to improve the functioning and efficiency of the refineries require private involvement/ ownership to varying degrees.



- Turn-around-maintenance (TAM) contracts have been awarded to international oil companies for the improvement of refining capacity. While hard data on the impact of TAMs are unavailable, there are indications of increases in capacity utilization. In the long run, such improvements might not be sustainable without major improvements in the management capacity of the refineries.

- Consideration is being given to awarding management contracts while retaining public ownership. This solution entails the transfer of operatorship to the private sector.

- Complete or partial privatization represents another option. The NNPC could retain a minority share of the refineries, which could be justified on the grounds of maintaining or building indigenous capacity.

- Finally, the government has launched a program to issue licenses to private sector investors interested in the construction of new refineries.

46. The rehabilitation of pipeline and storage infrastructure would also be required to achieve the adequate delivery of retail products to the domestic market. Options similar to those suggested for the refining industry would be applicable to reform of the pipeline and storage aspects of the sector. All of these reform options will require some deregulation of the downstream petroleum sector, including a refocusing of the Ministry of Petroleum Resources and its agency, the Department of Petroleum Resources (DPR), which have responsibility for regulating the downstream sector.

47. Price regulation is an important area that needs reforming, including the following: the pricing of petroleum products delivered by the NNPC to the refineries; tariffs charged by the Pipeline & Products Marketing Co. Ltd (PPMC) to cover costs of transport, storage, and distribution; and ex-pump prices for retail products. The differential between domestic crude prices and international oil prices creates an incentive for the NNPC to divert its domestic allocation of crude oil to export markets. This is partly offset by the requirement that the NNPC meet any shortfall in the retail market by importing refined products. Domestic retail prices were also significantly lower than their import parity level in 2001. During the year,

gasoline was sold at N 22 per liter, as opposed to an average import parity price of N 30.7 per liter[15]. The total implicit subsidy to the consumer is estimated at N 68 billion in 2001. Diesel and kerosene were sold at N 21 and N 17 per liter, respectively. In addition to raising the price charged for domestic crude sold to NNPC, the authorities raised the domestic retail price of gasoline by 18 percent, on January 1, 2002. The prices of diesel and kerosene were also raised by 24 percent and 41 percent, respectively, on that date.

48. There has traditionally been substantial public resistance to increases in petroleum product prices in Nigeria. In contrast to the price adjustments in January 2002, a price hike in July 2000 was rolled back in response to a successful general strike organized by the National Labor Congress that was accompanied by mass public protests. The Petroleum Product Pricing Regulatory Committee (PPPRC) was set up in January 2002 to ensure that retail prices remain in line with international oil prices. Under the existing arrangement, the PPPRC was expected to review and adjust, if necessary, petroleum product prices every three months. Since January 2002, despite the significant increase in international oil prices have not been adjusted as the government has been reluctant to do so in an election period. While gasoline was priced above import parity at prices prevailing on January 1, 2002, the de facto elimination of the import subsidy was short-lived with the subsequent rise in international prices.

E. Governance

49. The key issues in governance are (i) monitoring and controlling effectively costs of JVCs and of companies operating under PSCs; (ii) administering a competent tax administration system in the oil sector; and (iii) ensuring a transparent accounting of all oil sector flows between oil companies and the Federation Account. Ultimately, an accounting of the government's uses of oil revenues will be essential, but this will require an overall strengthening of the public expenditure management systems of federal and state governments—an area that is outside the scope of this paper.

50. Weaknesses in the administration of the fiscal regimes in the oil and gas sector can lead to the undercollection of government revenues. Inadequate monitoring and ineffective tax administration also raise the risk of overestimating costs and, thus, lowering profit taxes. In addition, weaknesses in institutional capacity may lead to a failure to control cash call spending.[16] Strengthened transparency and accountability would ensure that Nigeria receives maximum benefits from the oil and gas sector.

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15 The calculation of the import parity price is based on the following variables: gasoline price FOB Italy, insurance and freight at US$25 per metric tons, and tax and marketing costs at N 8 per liter. The official exchange rate is used for conversion into domestic currency.

[16] In this section, we focus on administrative controls and governance issues related to the operation of the JVCs, since they account for 97 percent of Nigerian oil production.

Production and revenue collection

51. With respect to the first two governance issues, responsibility for fiscal control of the JVCs is shared among three government agencies:

- **The National Petroleum Investment Management Services (NAPIMS),** a subsidiary of the NNPC, holds the major equity interest in the JVCs (57 percent) and is responsible for the management of the government's petroleum interests, notably the control and the monitoring of costs of companies operating through JVCs and PSCs. The objective of NAPIMS is primarily to maximize returns from the government's upstream oil investments. While Nigerian costs per barrel are still low, compared with world standards, these costs have been constant over time, with little productivity gains. Improvements in internal auditing and monitoring could contribute to the reduction of costs. NAPIMS's performance also affects government revenues by providing inputs for PPT and royalty calculations, principally the JVC costs.

- **The Department of Petroleum Resources (DPR)** is responsible for issuance of licenses, royalty administration, and gas-flaring penalties. The administration of royalty payments is relatively simple, once price and volumes have been determined. Accountability and transparency in the DPR's operation are reinforced by a secure payment system, with companies depositing royalty payments directly into the central bank. The main difficulty for the DPR has been the administration of the reserve addition bonus (RAB[17]), which was deleted from the 2000 MOU.

- **The Federal Inland Revenue Service (FIRS)** is responsible for the administration of PPT and other direct taxes on oil companies, and also for the VAT. Within FIRS, the **Petroleum and Pioneer Department** (PPD) is responsible for the administration of taxes on oil companies. The PPT is assessed on the basis of profits arising in the calendar year, and paid in 12 monthly installments, with penalties for delays or nonpayment. Tax audits for the oil companies appears to be ineffective. Owing to the lack of trained staff, equipment, and institutional capacity, there is no annual audit strategy within the PPD. PPD audits are confined to collecting the total estimated tax and are mostly desk audits, in contrast with field audits, which would allow officials to physically examine the records and systems of companies. This situation poses a risk to government revenues, as the oil companies' classification of costs for purposes of PPT calculation is becoming increasingly complicated and would require trained inspectors to investigate potential abuses.

[17] The 1991 MOU allowed a company to increase its after-tax margin by claiming the reserve addition bonus (RAB) as a credit against its PPT liability. The amount of RAB was based on additional proven or probable reserves in excess of the current year's production.

52. In principle, the administrative roles of the three agencies are clearly distinguished. The same control and monitoring concepts are used by all three agencies and tie in well with industry accounting standards. This should ensure a system of cross-checks. At the revenue collection level, PPT and royalty are relatively straightforward to administer. Their structure has been long established, and the procedures have been tested over time. The corresponding legislation contains strong audit and information powers, magnified by a tough penalty system. Furthermore, the MOU was significantly simplified in 2000.

53. At the production level, the JVCs are governed by joint operating agreements, similar to those in use elsewhere in the world. As a dominant shareholder NAPIMS is in an especially strong position to enforce its rights. Three of the six JVCs contain other nonoperator partners, whose monitoring and control practices reinforce those of NAPIMS. Production is concentrated in the hands of a very small number of multinationals operating under constant public and government attention. As a result, firms are conscious that the continuation of their operations in Nigeria ultimately depends on the goodwill of the government. This situation provides incentives for firms to comply with the fiscal regimes governing their operations.

54. Nonetheless, governance in these areas can be strengthened in two key respects. First, institutional capacity is weak. Second, current operational procedures lag significantly behind international standards. Policy clarity and guidelines for sector development are needed in several key areas. These include upstream licensing, taxation and contracts, refining and product markets, and sector management. In this regard, the respective roles of the government, the NNPC, and the private sector will need to be clearly delineated. Third, given institutional weaknesses, the NNPC tends to substitute DPR as the main regulator of the industry, creating room for potential conflicts of interest.

55. Management of the oil sector could also be strengthened with regard to investment shortfalls, which are related in part to delays in payments of cash calls, subsidies and financial losses (in the downstream sector), the underutilization of refineries and product imports, and shortages. Improvement in the operational procedures related to administration of the fiscal regimes would require that urgent attention be paid to the availability of useful data, the frequency of audits, and the simplification of the current regime, which includes many special arrangements.

Accounting for revenue flows

56. As described above, the oil industry is very complex, involving a number of government agencies and industry players. This points to the need to develop an efficient and transparent accounting system for revenue flows and production data. Currently, there is a lack of coordination and of a reconciliation of data between government agencies. A World Bank review of oil sector flows for the period 1995-99 identified a series of revenue discrepancies: (i) the share of equity crude exceeded the documented disposal of crude oil, leading to an average annual shortfall of US$152 million; (ii) the realized price of NAPIMS was below market average, inducing an annual average shortfall of US$176 million;

(iii) payments of royalty recorded by the DPR exceeded those recorded by the CBN by US$71 million; and (iv) a discrepancy between PPT payments reported by FIRS and the CBN is estimated at US$20 million a year over the period. Over the first six months of 2002, these discrepancies were reduced. Nevertheless, the discrepancies persist with respect to crude oil export receipts between the Office of the Accountant General (OAGF), the CBN and the NNPC, and with respect to PPT payments between the CBN and FIRS. Data on crude oil production differ significantly between sources, in particular when figures quoted in industry reports are compared with those published by the NNPC. According to the NNPC, the average crude oil production from January to September 2002 was 1.840 mbd, compared with the 1.955 reported by OPEC in its publications.

57. These differences do not necessarily point to deliberate misreporting of data. Nevertheless, they are likely to raise doubts about the transparency of the oil sector in Nigeria. While the discrepancies, in many cases, can be explained—for example, discrepancies may in some cases reflect timing differences and lags in payments, difference in the nature and coverage of the data reported—a transparent reporting of such explanations would strengthen the credibility of oil-revenue management.

Table II-4. Nigeria: Oil-Related Government Revenues as Reported by Different Sources, December 2001 - August 2002
(In millions of U.S. dollars)

	Crude Oil Sales 1/			PPT		Royalty	
	OAGF	CBN	NNPC	CBN/OAGF 2/	FIRS	CBN/OAGF	NNPC
2001 Dec.	523	539	434	204	204	131	...
2002 Jan.	442	452	445	250	251	105	104
Feb.	398	422	346	266	273	121	113
Mar.	449	468	391	79	78	100	100
Apr.	387	408	402	91	91	95	95
May	389	418	418	129	129	105	104
June	428	445	450	109	108	125	125
July	147	62	555	170	171	120	120
August	...	...	...	154	116	108	79
2002 Average	415	436	409	156	152	110	105

1/ Data reported for July by the CBN and OAGF account for changes due to the April 4, 2002 Supreme Court ruling and are not comparable to previous observations. 2002 average is based on the first six months.

2/ On PPT and royalty payments, the CBN and the OAGF report consistent

Table II-5. Nigeria: Production of Crude Oil as Reported by Different Sources, December 2001 - August 2002
(In millions of barrels per day)

			Industry Sources		
	NNPC Reports	OPEC Quota	OPEC 1/	Platts	I. E. A. 2/
2001 Dec.	2.185	1.911	2.088	...	...
2002 Jan.	2.049	1.787	1.990	2.000	2.000
Feb.	1.849	1.787	1.938	1.960	1.910
Mar.	1.823	1.787	1.956	1.970	1.950
Apr.	1.820	1.787	1.961	1.950	1.900
May	1.769	1.787	1.942	1.900	1.930
June	1.750	1.787	1.916	1.870	1.910
July	1.600	1.787	1.928	1.920	1.950
August	1.970	1.787	1.959	1.950	1.990
Sept.	1.930	1.787	2.004	1.990	1.990
2002 Average	1.840	1.787	1.955	1.946	1.948

1/ OPEC reports on its website the average of production estimates from six industry reports.
2/ I. E. A. is the International Energy Agency.

Strengthening transparency and accountability

58. Currently, information on oil sector revenue flows is not easily accessible. While NNPC accounts are audited, the reports are not publicly disseminated. A simplified, consolidated picture of the operations of all the companies operating in Nigeria would contribute significantly to transparency and accountability. The publication of credible data and audits is a necessary step to ensure credibility in the management of oil resources in Nigeria. Key aspects of this would include the following:

- Data on liftings and sales of crude oil should be made available through monthly publication of production figures, audited and certified by an external and reputable auditor. Currently, operators report liftings and production figures to the DPR on a monthly basis. These are verified by the internal auditors of the operators and by the auditors of the joint operators. Consistent and reliable figures should be easily publishable. To ensure the credibility of the publication, good practice suggests that (i) the aggregation of the data at the DPR be carefully audited and certified; (ii) discrepancies between lifting and production volumes be accounted for; and (iii) publications be certified by a reputable external agent. In the spirit of the recent initiative by nongovernmental organizations, international oil companies could be encouraged to disclose information on revenue payments.

- Liftings and sales of the federation share of crude oil should be monitored and include an audit of the COMD (Crude Oil Marketing Department) performance. Discrepancies may exist for both the volumes of crude oil sales and the realized price. The following is recommended: (i) the reconciliation of the COMD data on lifting and production volumes, with data provided by joint-venture partners; and (ii) the

auditing of the performance of the COMD in marketing crude oil, with a special focus on procedures to ensure that crude oil is not underpriced.

- Cost control and control of the use of cash call payments should be reinforced, in particular through the use of NAPIMS "value-for-money" audits. NAPIMS, as a major joint-venture partner, has extensive control and auditing powers. However, concerns have emerged about uses of cash call payments and the effectiveness of internal auditing. NAPIMS does not produce an annual audit of the activities of the JVCs and relies on the NNPC annual audit—which is not an adequate substitute. Internal audits should be improved, with an annual audit strategy from NAPIMS. This requires a substantial strengthening of the institutional capacity of NAPIMS. External auditors, transparently appointed, should complement the internal assessment. Those external auditors should have extensive experience with, and reputation in, the petroleum sector, and be familiar with the technicalities of petroleum accounting.

- The administration of petroleum taxes should be strengthened through reconciliation, annual audits, and investment in institutional capacity building. The PPD has extensive control and information powers, and a set of applicable penalties. Although the administration of royalties and the PPT does not seem to raise major issues, improvements can be made in a number of areas. First, since information for royalty and PPT payments is provided in by the operating companies themselves, this should be reconciled with data provided by NAPIMS on both costs and production volumes. NAPIMS should submit its own profit estimates, to be reconciled with those of the JVC partners. Second, the PPD and the DPR should each define an annual audit strategy, with improved institutional capacity and effective tax audits for each company. In particular, the current practice of "desk audits" based on companies' documentation should be replaced by effective "field audits." Finally, as long as internal audit capacity is weak, internal audits should be complemented with external audits, which would follow the same rules as defined above (transparency, professionalism, competence, and reputation).

- The Crude Oil and Other Revenue Reconciliation Committee is charged with reconciling accounts and estimates from the various agencies. However, no significant output has been produced by the committee. The committee should work to ensure the consistency of data produced for and by the sector and fiscal agencies.

F. Conclusion

59. The oil and gas sector in Nigeria is poised for rapid expansion over the medium term. In order to maximize the benefits of the sector for the economy, several challenges will have to be addressed by the government. These include the following:

- Resolution of the tension between the objective of expanding capacity and the constraint of OPEC production quotas. While the government has stressed its commitment to OPEC, there is currently uncertainty in the oil industry with regard to

how the government intends to address the issue of rising excess capacity in the sector.

- Development of a global strategy for gas production. Earnings from gas production and exports are likely to exceed earnings from oil exports over the longer term. To realize this potential, the government will have to articulate a clear strategy for the sector, including the reform of the domestic power sector to take advantage of gas as a source of energy, the development of a domestic market for gas and gas products, and the promotion of exports of gas to regional and extraregional markets.

- Management of oil production under different fiscal regimes. Given the significant investments in offshore exploration and the rising excess capacity, oil companies may be expected to gradually shift oil production away from the MOU fiscal regime to PSCs. This shift could reduce government revenues significantly in the medium term because of the deferment of revenues under PSCs. A key challenge will be to properly estimate the revenue implications of the evolution of production under the different fiscal regimes, factor these into the medium term fiscal framework, and manage the transition to PSCs, in consultation with the oil companies.

- Deregulation of the downstream petroleum sector. While a start has been made in deregulating the downstream sector, critical reform areas remain. These include the full liberalization of petroleum product retail prices, the effective liberalization of petroleum product imports, and an improvement in the efficiency and privatization of refineries.

- Strengthening of governance in the sector. Key areas to address include (i) the development of a transparent accounting of production and revenue flows in the sector, including a methodology to publish consolidated audited annual reports and accounts of the national oil company, as well as private oil companies; (ii) the reconciliation of revenue and production figures of different sources within and outside the government; (iii) cost control and monitoring within the sector; and (iv) institutional capacity to administer tax policies.

III. Fiscal Policy Rules[18]

A. Introduction

60. Like many other countries dependent on mineral extraction, Nigeria faces two challenges when formulating fiscal policy. In the long run, the need to ensure that the fiscal stance is compatible with the sustainable consumption of oil resources; and, in the medium run, the need to prevent the revenue volatility from spilling over into the budget. Fiscal policy rules could play a role in countering both challenges by, in the long run, providing a measure for the sustainable consumption of oil resources, taking into account intergenerational equity concerns, and, in the medium run, aiming at stabilizing expenditure programs at levels consistent with the long-run target for the sustainable fiscal stance.

61. Past experience in Nigeria illustrates the difficulties of implementing fiscal policy in an environment with highly volatile revenue flows. Over the years, there has been a strong deficit bias and procyclicality in the fiscal policy, driven largely by oil developments. In periods with high oil prices, expenditure has been ratcheted up, which, in periods with low oil prices, has proved difficult to reverse. This has resulted over time, in growing fiscal deficits. The current revenue-sharing arrangement, whereby about half of oil revenue is allocated to the state and local governments, has facilitated an expansion of expenditure programs in lower-level governments, a tendency that has further constrained the ability of the federal government to stabilize overall expenditure. The fiscal volatility has been transmitted to the rest of the economy with negative implications particularly on the real exchange rate and real growth.

62. Despite the substantial oil resources that have been spent during the last 20-30 years,[19] there is little to show for in terms of economic development and poverty alleviation. The overriding concern now must be to break this pattern; however, this will remain a challenge since, as it has been pertinently put, "the fundamental drivers of the process—the politics of patronage, support of a large bureaucracy, and keeping a diverse and often fractious polity together—remain the same" (Eifert, Gelb, and Tallroth, 2002, p. 21). An effectively implemented fiscal policy rule, in principle, could play a role in overcoming these constraints on fiscal policy formulation by providing a mechanism for delivering a more stable and predictable budget.

63. This section is organized in the following way. Subsection B discusses in general terms the role fiscal rules can play in guiding fiscal policy formulation. Subsection C derives various measures for the sustainable fiscal stance in the long run, whereas Subsection D investigates two potential fiscal rules. Finally, subsection E addresses briefly complementary fiscal federalism reforms, oil funds, and the hedging of price risk.

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[18] Prepared by Thomas Baunsgaard.

[19] Oil receipts are estimated at US$228 billion during 1981-99 (Udeh, 2002).

B. Fiscal Policy Rules

64. There has been a growing interest in recent years, both in the academic literature and in policy circles, in the role explicit rules may play in strengthening the conduct of fiscal policy.[20] The key idea is that, in countries with a weak reputation for fiscal prudence, the introduction of fiscal rules, effectively binding the government to a certain preannounced fiscal conduct, may provide a credible policy framework that over time will contribute to stability and growth. A priori, there would seem to be a strong case for Nigeria's benefiting from the introduction of fiscal rules by allowing policymakers to send a strong signal about their intent to implement prudent fiscal policies as a break from the past.

65. Fiscal rules can take many forms but typically impose limits on the budget balance (either the overall or current balance), on expenditure (e.g., primary expenditure or the wage bill), or on public debt. For oil-producing countries, a specific objective of a relevant policy rule should be to delink expenditure from the fluctuations in oil prices while ensuring that the fiscal stance is compatible with the sustainable consumption of oil resources (see Box III-1 for examples of fiscal rules).

66. For countries with federal structures, an added complexity is how to apply fiscal rules at the subnational level. The practice and effectiveness differ across countries. Given the current revenue-sharing arrangement in Nigeria, this is a key issue that will have an impact on the effectiveness of any fiscal rule. The approach taken here is to investigate what can be achieved within the current federal arrangement, whereas Section IV discusses the potential role of fiscal federalism reforms. However, the credibility of any policy rule is likely to be enhanced if it can be supported by fiscal federalism reforms.

67. Country experience also suggests that the implementation of a successful policy framework is dependent on achieving a sufficient degree of transparency, with credibility being influenced by the specific design of the policy rule (e.g., whether it is formal or informal, legislatively binding, and what sanctions and enforcement are applicable). More than anything else, the critical determinant for the success of any rule is the political support and commitment that can be garnered. This may be particularly challenging in Nigeria's environment, with its strong currents of suspicion and tension between the executive and the legislative, as well as between the federal and subnational levels of governments. Related to this is the challenge of how to convince an electorate, impatient to benefit from the "democracy dividend," that there may be reasons to save some oil resources now and instead to focus on strengthening the quality and targeting of existing expenditure programs.

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[20] See Kopits (2001) and Kopits and Symansky (1998) for a comprehensive discussion of the issues.

C. Long-Run Fiscal Sustainability

68. In an economy dependent on nonrenewable resources (such as oil and gas), the critical issue for the fiscal stance in the long run is to ensure compatibility with the sustainable consumption of the resources. Intergenerational equity concerns will determine the distribution of the consumption between generations.

Box III-1. Examples of Fiscal Policy Rules

Many countries apply rules when determining fiscal policy. Best known perhaps is the Stability and Growth Pact in the European Union setting limits on the overall balance and debt. Brazil also has a rule restricting the overall balance and debt, whereas Argentina and Peru apply limits to the overall balance and primary expenditure. New Zealand has rules for the operating balance as well as debt limits.

Among oil producing countries fiscal rules are also widespread, though some countries only apply these to the operation of an oil fund. A case where the oil fund is well-integrated within the budget framework is Norway, where the petroleum fund (essentially a government account) was set up to support the achievement of intertemporal policy objectives. Net oil revenue are deposited into the fund and finances the non-oil deficit through a revenue transfer.

Some countries have rules for stabilization funds though these are not always well-integrated within the budget. Kazakhstan deposits revenue in excess of the budget reference price to the mineral fund; revenue shortfalls are compensated by transfers from the fund. Oman also deposits oil revenue in excess of the reference price into a fund, but in any given year the government may withdraw funding up to the amount of the budget deficit. Venezuela has had a mixed experience with its stabilization fund. The initial rules established that oil revenue above the threshold price should be deposited in the fund. However, as the central government remained in deficit in 1999 and 2000, despite the recovery in oil prices, it could only make deposits into the fund with recourse to other financing.

Kuwait has a savings fund where 10 percent of total government revenue is deposited, irrespective of oil or budgetary developments.

Sources: Davis et al. (2001), Kopits and Symansky (1998), and Kopits (2001).

69. The most common approach used to assess the long-run sustainability of fiscal policy in an oil-producing country is to adapt the permanent income hypothesis to the context of nonrenewable resources.[21] This implies that, as extraction proceeds, part of the natural

[21] For a comprehensive discussion of fiscal policy in oil-producing countries, see Barnett and Ossowski (2002), highlighting the importance of focusing on the non-oil primary balance. For recent applications of the permanent income hypothesis, see Liuksila, Garcia, and Bassett (1994), Chalk (1998), Alier and Kaufman (1999), and Davoodi (2002); and for a more general discussion, see Engel and Valdes (2000).

resources are saved and converted into financial assets in order to maintain wealth constant to finance future consumption after the natural resources have been depleted. The long-run target for government consumption should, therefore, be consistent with the objective of keeping constant the total stock of government wealth (oil and financial). In most instances, this will require maintaining relatively prudent non-oil primary deficits as a long-run target in order to save some current oil revenue and convert this into financial assets.[22]

70. The three possible targets that will be looked at more closely are as follows: (i) keeping the total stock of wealth constant in real terms; (ii) keeping constant real wealth in per capita terms; and (iii) keeping constant real wealth relative to real non-oil GDP. Figure 1 illustrates that whereas the three scenarios have different targets for real wealth over the long-run, all three scenarios imply a shift in the composition of real wealth from oil in the ground to financial assets. The assumptions underpinning the long-run simulations are discussed in Annex II.

Long-run target I: constant real wealth

71. Under the first target, a sustainable fiscal policy requires the consumption financed out of oil revenue to be consistent with the objective of maintaining the stock of oil-derived wealth constant in real terms over the long run. As the total oil wealth is equal to the net present value of the projected revenue stream, the target is to keep this constant in real terms over the long run. This will be achieved by adjusting the consumption of oil revenue (i.e., the non-oil primary deficit) to ensure that the total stock of oil in the ground and the financial assets accumulated from saved oil revenue will stay constant in real terms.

72. The first step is to project the expected oil and gas revenue over the long run, introducing an additional layer of uncertainty. Since both production scenarios assume a substantial increase in gas production, the estimate of oil wealth will clearly be very dependent on how the gas resources are taxed. Currently, as an incentive to develop the gas sector, a much lighter tax burden is placed on upstream gas development than on oil extraction. However, for the long-run simulations, it is assumed that the gas sector will be taxed similarly to the oil sector.[23] Under these assumptions, Table III.1 shows the projected average oil and gas revenue per capita at US$93 in the base-case scenario (in constant 2002 prices).

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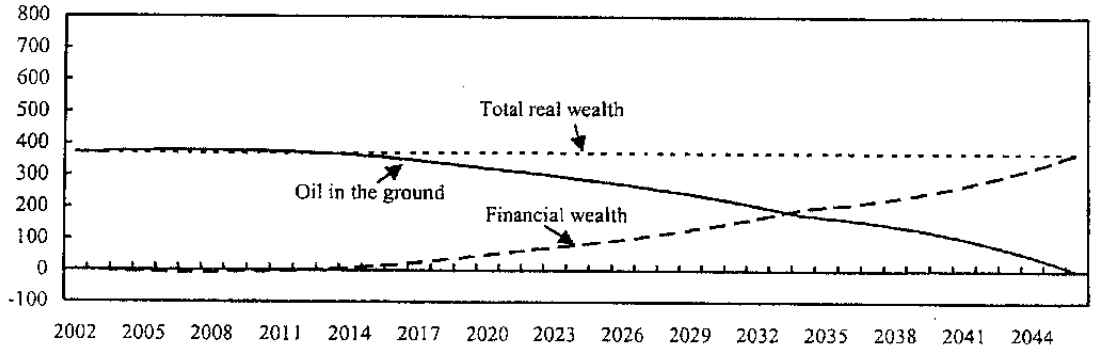
[22] The focus is on the primary non-oil balance excluding oil-related interest payments. As oil wealth is converted into financial assets, the non-oil balance will improve as interest receipts increase even though the underlying fiscal stance has not changed. Annex I provides a brief discussion of the different fiscal balances.

[23] This does not appear to be an unreasonable assumption, as the current fiscal incentives are intended to develop the gas sector and, therefore, would likely be phased out as this objective is achieved.

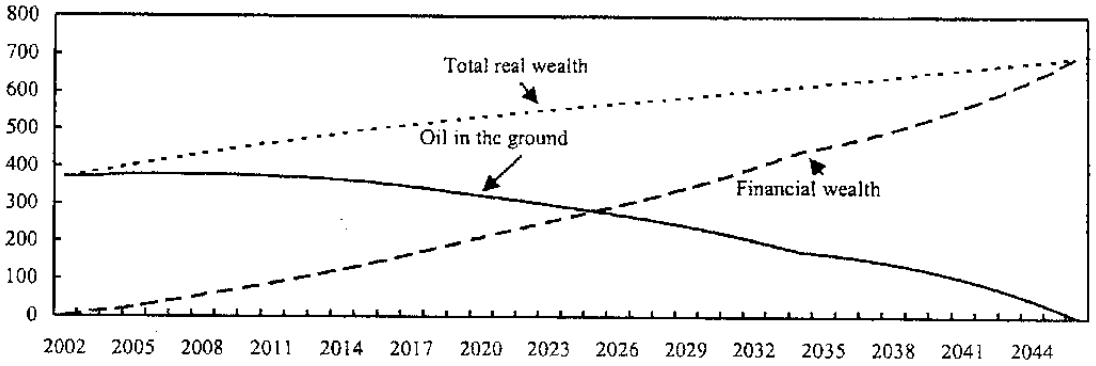
Figure III-1. Nigeria: Composition of Total Real Wealth

(In billions of 2002 U.S. dollars)

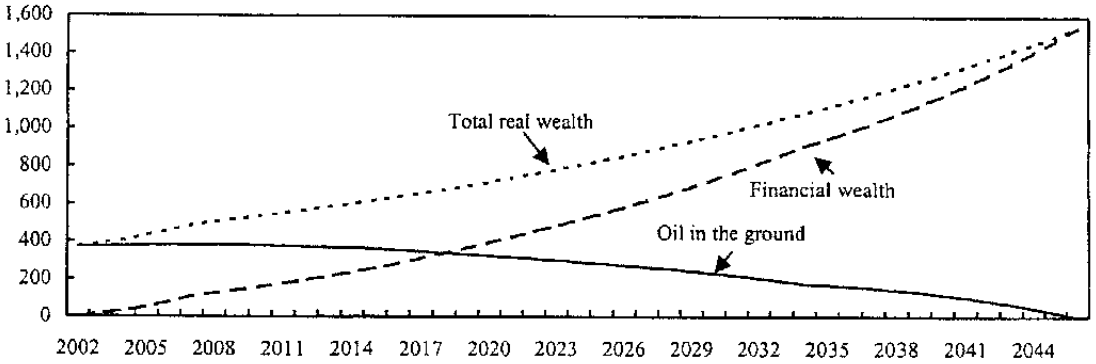
Long-run scenario I: Real wealth constant



Long-run scenario II: Constant real wealth per capita



Long-run scenario III: Constant wealth to non-oil GDP



Source: Fund staff simulations.

73. The next step is to calculate the maximum consumption out of the annual revenue or, conversely, the savings rate for oil revenue that is compatible with meeting the long-run fiscal target of keeping constant the total oil-related wealth. In the base case scenario, 20 percent of oil revenue is saved to keep real wealth constant. Having derived the maximum consumption of oil revenue that is compatible with the long-run fiscal target, this can be presented in terms of a non-oil primary deficit target, equivalent to an average non-oil primary deficit of 24 percent of non-oil GDP. The results are sensitive to the assumed price and production paths.[24] However, under reasonable production and price assumptions, an average non-oil primary deficit target of between 19-28 percent of non-oil GDP would preserve the stock of oil-derived wealth in real terms.

Table III-1. Nigeria: Long-Run Fiscal Sustainability Simulations, Annual Averages, 2002-45

	Constant real wealth	Constant wealth per capita	Real wealth/non-oil GDP
Oil revenue per capita (in constant U.S. dollars)	93.4	93.4	93.4
Oil consumption per capita (in constant U.S. dollars)	74.4	68.1	31.7
Savings rate (in percent of per capita oil revenue)	20.3	27.1	66.1
Non-oil primary fiscal deficit (in percent of non-oil GDP)	23.6	19.9	8.2
Annual change in real wealth (in percent)	0.0	1.4	3.3
Annual change in real per capita wealth (in percent)	-1.4	0.0	1.8
Annual change in wealth/non-oil GDP (in percent)	-3.2	-1.8	0.0

[24] The simulated high price scenario allows for higher consumption, which increases the average non-oil primary deficit to 28 percent of non-oil GDP. Conversely, the low price scenario translates into a lower average non-oil primary deficit target of 19 percent of non-oil GDP. With higher production, the savings profile changes with an average non-oil primary deficit at 28 percent of non-oil GDP.

Long-run target II: constant real wealth per capita

74. The real wealth target can be criticized, though, for ignoring the inter-generational distribution of oil wealth.[25] While this criticism has some merit, arguably in a country with large developmental needs, and presuming that the oil wealth would be spent productively, the intergenerational concerns to some degree could be accommodated if oil-funded spending improves the physical and human capital stock. Nonetheless, the intergenerational concerns can be addressed more directly by targeting constant real wealth in per capita terms. With a growing population, this will require higher savings of oil revenue, particularly in the early periods as financial assets are accumulated. Table III-1 shows that the average savings rate at 27 percent of oil revenue is higher resulting in a lower non-oil primary deficit at 20 percent of non-oil GDP

75. The sensitivity of the results can again be tested by simulating these under the different production and price assumptions. Relative to the constant real wealth target, under all scenarios savings will be higher over the 2002-20 period. The range for the non-oil primary deficit is correspondingly lower between 16-24 percent of non-oil GDP.

Long-run target III: constant wealth to non-oil GDP

76. The third target for a sustainable fiscal policy is to keep real wealth constant relative to non-oil GDP. Table III.1 shows that, with an assumed non-oil GDP growth rate of 3 percent in the long run, the required savings rate under all price scenarios will increase quite sharply to 66 percent of oil revenue per capita as a higher build-up of wealth is required to keep up with the growing non-oil economy. This lowers the non-oil primary deficit to between 7-10 percent of non-oil GDP under the different price and production assumptions. Given the need to accumulate large financial assets in the initial periods, consumption will correspondingly have to be compressed. This clearly contrasts with the short term desire of delinking the expenditure path from the swings in oil revenue. Moreover, delaying expenditure so dramatically may be difficult to defend in a low-income country with large developmental needs.

D. Policy Rules

77. Any fiscal policy rule should be consistent with the long-run target for a sustainable fiscal stance, perhaps with some additional precautionary element given the uncertainty affecting the long-run simulations. In addition, it should reduce the spillover on the budget from the volatility of the oil revenue flow. This is most clearly related to price swings but will also reflect uncertainty about oil and gas reserves as well as extraction cost, among others. A fiscal policy rule could reduce the procyclicality of the budget by smoothening fluctuations in the expenditure program caused by revenue volatility. If expenditure is

[25] As the population is projected to increase over the projection period, the stock of wealth in per capita terms will gradually be eroded.

broadly stabilized, the budget will be countercyclical (or at least neutral) in the face of oil revenue swings, thus reducing the volatility that is transmitted to the rest of the economy from the fiscal sector (see Box III-2).

78. The specific rules that will be considered here are as follows: (i) a permanent price rule targeting a balanced budget at a reference oil price of US$20 per barrel; and (ii) a non-oil primary balance rule targeting a constant 20 percent primary non-oil deficit relative to non-oil GDP. The non-oil primary deficit target is nested within the simulations of a sustainable long-run fiscal stance, which indicate that a non-oil primary deficit of 16-24 percent of non-oil GDP would be compatible with keeping real oil wealth constant in per capita terms.

79. The justification for the specific, price-based target is slightly different. Looking backward, the long-run historical average price has been about US$20 per barrel, which at first glance would provide some justification for maintaining this as the forward-looking price target as well.[26] However, as oil prices may not be mean-reverting (implying that prices may not return to a constant long-run mean) but rather can be affected by persistent shocks, the usefulness of using past oil prices for projecting future oil prices can be questioned. However, the permanent price rule is quite effective in achieving a non-oil primary deficit compatible with the long-run target for a sustainable fiscal policy under various price scenarios and has advantages in terms of its conceptual simplicity. Moreover, the authorities are familiar with the rule and have recently announced their intention to implement a rule with next year's budget.[27]

80. Both rules would allow Nigeria to carry out an expenditure program unaffected by oil price volatility. The impact of oil revenue swings would show up in the overall fiscal deficit, but only as an indication of the financing requirements for the non-oil deficit. The actual realized oil revenue would determine the extent to which the budget would be funded by current oil revenue or by oil revenue saved in the past, and the degree to which current oil revenue can be saved by building up financial assets.

81. Non-price related sources of volatility, however, would affect the rules differently. The constant non-oil primary deficit rule will effectively delink the budget from all sources of oil revenue volatility, including production swings, changes to extraction costs, changes to the oil taxation regime, and the impact of real exchange rate movements. In contrast, the

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[26] The average price per barrel of crude was US$19 over the 1970-2001 period; US$22 during 1980-2001, and US$20 during 1990-2001.

[27] In presenting the 2003 budget to the National Assembly, President Obasanjo stated that the government in 2003 will seek to establish a fiscal rule that stabilizes the levels of both capital and recurrent expenditure.

permanent price rule will only insulate the budget from oil price swings, although this is likely to be a very prominent source of volatility. Large non-price related shocks affecting oil revenue, however, can be accommodated by reparameterizing the fiscal price rule.

Box III-2. Fiscal Links to the Other Sectors in an Oil-Dependent Economy

The fiscal sector in Nigeria has been the main mechanism for transmitting oil swings to the rest of the economy. With a pro-cyclical budget, as expenditure tends to be correlated with oil revenue, the fiscal sector has provided no cushion against oil-related volatility.

This can be illustrated in a simplified example. If government expenditure increases in line with higher oil revenue, the non-oil balance will deteriorate in response to positive oil price shocks. The higher domestic demand pressure will tend to increase inflation, and cause the real exchange rate to appreciate, which is likely to put upward pressure on the interest rate. Combined with the more appreciated real exchange rate, investment and real growth in the non-oil economy will be reduced. If the increase in expenditure is only scaled back with a lag as oil revenue subsequently declines, the domestic financing needs of the budget will increase, further raising inflation and interest rates. A volatile fiscal policy will increase uncertainty about the macroeconomic impact of the budget, as exemplified by swings to the real exchange rate, which is likely to add a risk premium to the interest rate resulting in a further deterioration of the investment climate in the non-oil sector.

A fiscal rule attempts to break this cycle. By facilitating more stable expenditure, the budget becomes counter-cyclical in the face of oil price swings. If the oil price increases, the non-oil deficit will remain unchanged relative to non-oil GDP and will go down relative to total GDP (as the value of oil in GDP has increased). If the oil price falls, the non-oil deficit will still be unchanged relative to non-oil GDP, whereas it will increase relative to total GDP. The counter-cyclical budget under a fiscal rule will therefore provide a cushion against the transmission of oil price volatility to the rest of the economy.

One important caveat applies when a fiscal rule is initially introduced: without having built up sufficient savings of oil revenue in the past, it is not possible to keep expenditure constant when oil revenue declines since this will require domestic financing to increase (either increasing inflation or crowding out private sector credit), or lead to unsustainable external borrowing (which may not even be feasible for an externally credit-constrained economy). Moreover, if a permanent negative shock affects oil revenue the fiscal rule will have to reflect this. In both instances, expenditure is forced to adjust in response to negative oil revenue shocks.

Implementation and transitional issues

82. Implementation of any policy rule will require strong political support from both the executive and the legislature, as well as from subnational governments. In principle, Nigeria already follows a price rule when preparing the budget. In practice, however, this rule has not been adhered to: (i) when prepared at the targeted price, the budget is not balanced but

typically has a sizable deficit; and (ii) when executing the budget, the excess revenue (the difference between the budget reference price and the actual realized price) is not consistently saved in line with the movement in the oil price differential.[28] Without a strong political commitment, no fiscal rule can be successfully implemented, regardless of how well it is designed.

83. There are challenging transitional concerns that must be addressed when introducing a fiscal rule. To implement either of the rules, given the current expansionary fiscal stance, would require a substantial initial adjustment. Since this is unlikely to be achievable in the short run, a gradual transition period will be required (which is assumed under the "good-policies scenario"). A critical issue will be how this gradual adjustment can be implemented without undermining the credibility of the rule. One way to reduce the element of discretion would be to complement aiming at a medium-term permanent price rule with a preannounced target path for a gradual reduction in the non-oil primary deficit. This is a transitional rules-based arrangement that may be more credible than relying on the discretionary tightening of the fiscal stance.

84. Initially, it is possible to implement the policy rule only in an asymmetric manner. The idea of saving excess proceeds during periods of high oil prices is to build up a buffer to tap into as oil prices go down. However, as the rule is implemented, without a sufficient buildup of financial assets as a precautionary liquidity cushion, it might not be feasible to finance the non-oil deficit if prices drop below the reference price, as this would require excessive recourse to domestic financing (given the limited access to external credit). Arguably, this could call for a large upfront fiscal adjustment, so as to achieve a quick accumulation of financial assets, rather than make a gradual shift toward the targeted fiscal stance. However, high adjustment costs may prevent the swift scaling back of current expenditure programs, and this is also likely to be politically more difficult to achieve. The best a credit-constrained country can do is to target a gradual reduction in the non-oil primary balance, eventually building up a precautionary cushion of financial assets.

85. One issue that is likely to cause some discussion is the treatment of capital expenditure within any fiscal rule. Barnett and Ossowski (2002) provide two ways to think about capital expenditure in the context of a fiscal rule: (i) as productive investment generating a financial return; and (ii) as a consumer durable generating social welfare. In the first case, capital assets are included in the government's net worth implying a portfolio decision between converting oil assets into financial or physical assets. If the capital project has a higher return to government (in the form of increased future tax revenue) than the return on the financial asset, it would be justifiable to convert oil or financial assets into physical assets. However, this decision would be separate from any fiscal rule. It is probably rare, though, for government investment to generate sufficiently high returns to meet this

[28] For example, currently the budget is partially financed by drawing down the excess proceeds account, even though oil prices are at a relatively high level (above the reference price in the budget).

requirement. In the second case, capital spending is seen, in a perhaps more familiar manner, as generating a flow of social benefits. If the capital stock is at a sub-optimal level, this could provide a rationale for initially higher deficits until the capital stock reaches its desired level.

86. In the case of Nigeria, a case could be made that the capital stock is below the level required to provide sufficient social benefits for a growing population. However, capital expenditure has already grown quite rapidly since 1999 and there may be a declining marginal value of additional increases in the short term. Moreover, separating capital expenditure from the constraints of a fiscal rule is likely to lead to attempts to reclassify other spending as capital expenditure. Creative accounting could, therefore, be used to circumvent the fiscal rule.

87. Implementing any fiscal policy rule is likely to prove very difficult unless the fiscal adjustment required is shared between the federal and lower-level governments. This will require a mechanism through which the subnational governments can save their share of excess revenue when prices are high, and draw on these when prices are low. One possibility included in the draft Fiscal Responsibility Bill, which was recently prepared by a federal government working group, is to set up separate savings accounts at the appropriate level of government. To convince state and local level governments that their savings will not be lost in the federal system, it will be important to establish a credible fiduciary setup. However, it will be equally important to ensure that the subnational governments will not be able to prematurely tap into their saved funds in contravention of the fiscal policy rule. This is likely to require that the administration of the savings accounts be undertaken by an independent authority.

88. A decision will also have to be made on where to keep the oil savings. One could think that savings should be invested domestically to boost the local economy. However, there are convincing arguments why it is better to save oil revenue abroad. From a stabilization point of view, the government will draw on the savings account to finance the budget when faced with a temporary oil revenue decline. This is likely to result in large fluctuations in the balance of the savings account. If this was kept domestically, the volatility would therefore be transmitted to the financial sector. There is also a need to invest in sufficiently liquid assets that may not be readily available domestically. Moreover, keeping the oil savings abroad will automatically sterilize the monetary impact of the oil savings.[29]

Simulation findings

89. To illustrate the impact of adherence to a policy rule, a number of simulations have been carried out. These present different medium-term scenarios comparing the current gradual adjustment envisaged under the good-policies scenario (to be referred to as the

[29] Currently the CBN keeps an excess proceeds account with the Bank for International Settlements, where some excess revenue is saved (though not consistently with any fiscal rule), and drawn upon to finance the execution of the budget.

"baseline" here) with a hypothetical situation in which a fiscal policy rule was already being fully adhered to.[30] The detailed results from the simulations are presented in Annex III.

90. The results from the simulations of the fiscal rules are presented in a summarized form in Figure III-2 for the World Economic Outlook (WEO) price scenario. The base-case scenario envisages a gradual reduction in the deviation from the fiscal stance targeted under the fiscal rule, with the gap effectively eliminated in 2007 vis-à-vis the permanent price rule. This adjustment is achieved by gradual reductions in expenditure, given the difficulties of introducing large expenditure cuts in the short term, resulting in a gradual improvement in the non-oil primary deficit. In contrast, under the fiscal rules, the targeted expenditure level is lower.

91. In the low-price scenario (see Annex III for details), the expenditure in naira-terms is lower in the base case reflecting the automatic decline in oil revenue to subnational governments. In contrast, the expenditure paths under either of the two fiscal rules are unchanged in nominal terms, implying an unchanged non-oil primary balance. The policy rules change the fiscal stance from being pro-cyclical to becoming counter-cyclical (or at least neutral). The implication of following either of the fiscal rules with lower prices, however, is the need to finance a larger overall deficit. When introducing a rule, the ability initially to implement this in a fully symmetric fashion may be restricted without having built up a sufficient financial cushion.[31]

92. In the high-price scenario, all the windfall gains will be spent in the base case resulting in a higher expenditure path, whereas under either of the policy rules, the expenditure path will be unchanged (in nominal terms). The higher expenditure will substantially worsen the non-oil primary balance in the base-case scenario, whereas this balance is unchanged under the two policy-rule scenarios. Looking at the overall balance, we see that, under both fiscal policy rules, a large surplus will be maintained over the simulation period as excess oil revenue is saved. In contrast, under the base-case scenario, despite the high oil prices, the fiscal surpluses will be much more modest.

93. While both policy rules are quite effective at insulating the budget from oil price volatility, the behavior of the two rules as regards production swings is somewhat different. In the high-production scenario, where it is assumed that production will increase by 10 percent over the medium term, the permanent price rule will not prevent the higher oil

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[30] The rules will be simulated under different price scenarios (the current WEO price projection in addition to a high and a low price scenario) and a high production scenario.

[31] As Nigeria can be considered to be externally credit-constrained and there are limits to how much domestic debt can be absorbed locally without crowding out the private sector and pushing up interest rates.

revenue from being spent. Therefore, the non-oil primary deficit will be higher under the permanent price rule than under the non-oil primary deficit rule.[32]

94. Both the permanent price rule and the non-oil primary balance rule can reduce the average level of expenditure, as well as the variance of expenditure. Under all three price scenarios, the average non-oil primary deficit is close to 21 percent of non-oil GDP, following the permanent price rule, and 20 percent, following the non-oil primary balance rule. This compares with an average non-oil primary deficit of 26-32 percent of non-oil GDP without a rule. There are advantages to a permanent price rule in terms of its conceptual simplicity. However, the implementation of both policy rules will require excess revenue to be saved when oil prices are high, which need strong political commitment to be credibly implemented. Still, none of the policy rules require any further changes to the federal arrangements besides the introduction of a transparent mechanism for saving excess revenue.

E. Other Issues

Fiscal federalism reform

95. A major challenge for the formulation of a fiscal policy rule in Nigeria is how to involve the lower-level governments. Under current revenue-sharing arrangements, the budgets of the state and local governments are heavily influenced by oil revenue uncertainty and exhibit substantial procyclicality.[33] The effectiveness of a fiscal policy rule in stabilizing expenditure will be enhanced by involving subnational governments. The first-best option would be to delink the expenditure programs the state and local governments from revenue volatility. This could be achieved by replacing the current revenue-sharing arrangement by transfers from the federal government to the subnational governments (see Section IV).

96. However, reforming intergovernmental relations in Nigeria may become politically contentious, given the current mistrust among different levels of government (and between the executive and the legislative arms of the federal government). If the political constraints are insurmountable, consideration should be given to implementing less ambitious, second-best options. This will require looking for ways whereby lower level governments can be brought into a fiscal policy rule, without reforming the current revenue-sharing arrangement, such as suggested in the draft Fiscal Responsibility Bill.

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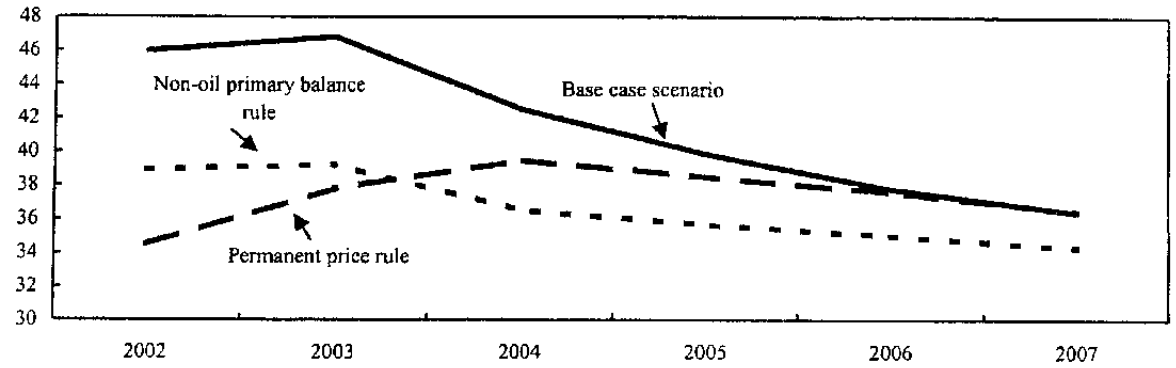
[32] This is, of course, lower than in the scenario without any fiscal rules as the difference in revenue between the reference price and the realized price will still be adjusted for.

[33] About half of oil revenue is transferred to lower-level governments. Expenditure programs carried out by state and local governments have expanded substantially in recent years (see Ahmad and Singh (2003) and Doe (2001)).

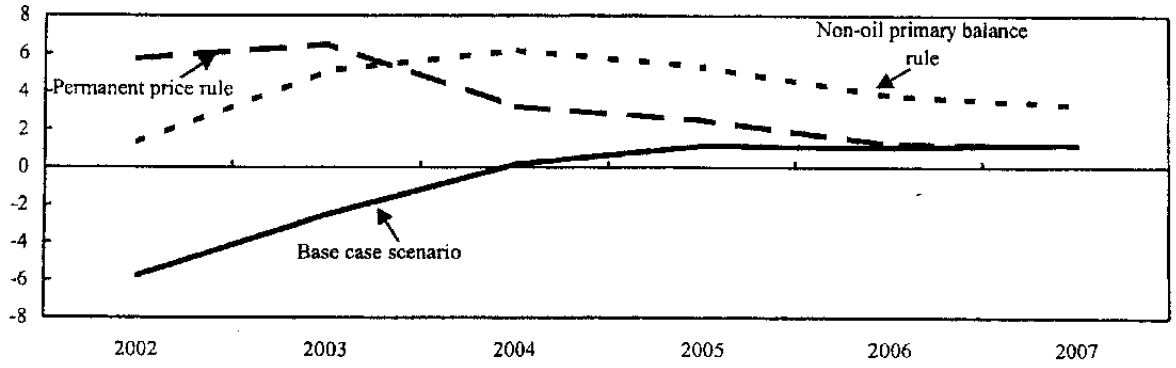
Figure III-2. Nigeria: Fiscal Policy Rules and WEO Price Scenario, 2002–2007

(In percent of GDP)

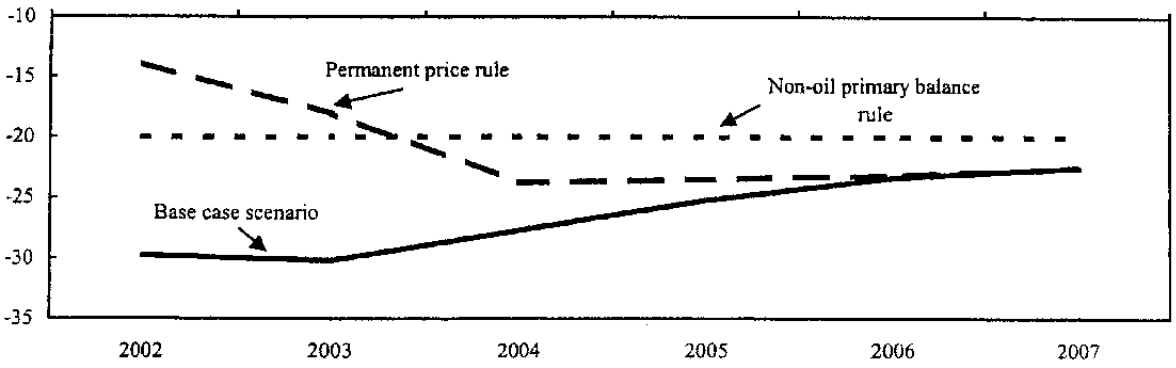
Total Consolidated Expenditure



Overall Balance



Non-oil Primary Balance 1/



Source: Fund staff projections

1/ In percent of non-oil GDP.

Oil funds

97. Often the discussion of stabilization efforts in oil-producing countries focuses on the role of oil funds.[34] Arguably, however, the institutional question of whether or not to have an oil fund is secondary to the need to adhere to a credible fiscal policy rule. On the one hand, an oil fund in itself is not a fiscal rule, and it does not place formal restrictions on the conduct of fiscal policy. On the other hand, any fiscal rule will require some mechanism for saving and investing, preferably externally, the excess revenue proceeds. The relevant question really is whether the establishment of an independent oil fund can provide an institutional setup that will foster more transparency and strengthen the commitment to the fiscal rule relative to a situation where, for example, the CBN is administering a savings account.

98. A case of an oil fund that, in theory, could provide such institutional support for a policy rule would be one that would receive all oil revenue and transfer to the budget the revenue consistent with that rule. Any excess oil revenue could then be saved in the oil fund, ideally with a clear determination as to the level of government to which the savings "belonged." For this set up to be effective the oil fund should not have its own expenditure program,[35] and it should be the only source of financing for the budget. However, the creation of such a fund would need to be supported by stringent transparency, fiduciary, and accountability mechanisms.

Hedging

99. It has been suggested that one way to avoid the destabilizing impact of oil revenue fluctuations on the budget is for a country to hedge its oil revenue on international capital markets (Daniel, 2001).[36] While in principle an attractive proposition, in practice, there may be problems implementing this. First, for a country with most of its oil revenue in the form of physical oil production (either from production sharing or through equity ownership), the national oil company could be expected to have a hedging program in place, if this is commercially feasible. Second, since private sector participants are already engaging in the hedging of their sales, the government may already be benefiting indirectly from hedging by taxing those participants. Third, the costs involved may be difficult to justify against competing budget demands. Fourth, for large producers, it may not be feasible to hedge a meaningful part of their production.

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[34] International experience with oil funds is mixed. Research suggests that an oil fund is no panacea for oil-related ills, and no substitute for a prudent fiscal policy (Davis and others, 2001).

[35] Nigeria had a mixed experience with the Petroleum Special Trust Fund, which (during 1994-99) used earmarked revenue from domestic crude receipts to execute its own expenditure program outside the federal budget.

[36] Using the same hedging instruments that oil companies are applying. See Kessler (2002) for a description of the energy derivatives market.

F. Conclusion

100. In an environment where credibility has been undermined by past fiscal profligacy, adhering to a fiscal rule could strengthen the formulation of a fiscal policy in support of stability and growth. Any fiscal rule would require some oil revenue to be saved to ensure long-run fiscal sustainability, including satisfying to some extent intergenerational equity objectives. Moreover, a rule should delink the execution of the expenditure program from the oil revenue volatility and so reduce the procyclicality and deficit bias in the budget. This will require sufficient precautionary savings to enable a buildup of financial assets in periods of high oil prices that can be relied upon to finance desired expenditure programs in periods of low oil prices. An issue will be the proper design of a savings mechanism that, ideally, would involve savings of excess revenue at all levels of government. In this connection, it will be critically important to assure subnational governments that their savings will be protected.

101. The choice of a specific policy rule is complex. Targeting a constant non-oil primary deficit may be conceptually superior in terms of insulating the budget from all sources of oil revenue volatility, while a permanent price rule will only insulate the budget against oil price volatility. Nevertheless, a price-based rule has advantages in terms of its conceptual simplicity. Arguably, delinking the budget from swings in the oil price would also constitute a substantial improvement over the current situation, although it would still leave room for further refinements. With either rule, given the current large deviation from the sustainable fiscal stance that is permissible, it will only be possible to implement it gradually (as illustrated in the good-policies scenario). Moreover, it may only be realistic initially to adhere to this rule in an asymmetric manner, whereby any decline in oil prices below the reference price would require offsetting expenditure adjustments.

102. A determining factor is the need, for any fiscal rule to be effective, to build up broad-based political support. To do so, one needs to better understand the nature of the obstacles that have seemingly been preventing Nigeria from adhering to the fiscal rule that, in principle, already underpins the budget. However, it is encouraging that the President in the 2003 budget speech announced the intention to establish a fiscal rule. A related issue is whether instituting a more formally binding fiscal rule could help to overcome these obstacles, which are likely to be political in nature and hinge on relations between the federal and subnational levels of government. The preparation of the draft Fiscal Responsibility Bill is an encouraging step by the authorities in that regard.

103. The extent to which intergovernmental reforms can be agreed upon to support the adherence to any fiscal rule is likely to be a difficult issue. The first-best option would be to introduce a fiscal policy rule in conjunction with reforms to intergovernmental relations. However, these reforms may be difficult to achieve in the short run. Therefore, there may be a need for second-best reforms. The draft Fiscal Responsibility Bill includes a mechanism to transparently save excess proceeds at various levels of government. This mechanism would increase the confidence of the states contributing to the fiscal policy rule that their savings accumulated during times of high oil prices could be drawn on during times of lower oil prices.

Measures of the Fiscal Balance[37]

The **non-oil balance** is an important measure of the fiscal stance. It approximates the domestic demand impact of the fiscal sector. Since increases in oil revenue do not reduce domestic demand (in contrast to increases in non-oil taxes) they can justifiably be excluded. Government expenditure, however, has an import component, and, therefore, this is only an approximation.

The **non-oil primary balance** (the non-oil balance excluding interest payments) may better reflect the discretionary effort of fiscal policy. This is also a key concept for the sustainability assessment.

The **overall balance** is important when measuring financing needs and the associated fiscal vulnerability. With a policy rule, swings in oil revenue would change the financing mix of the expenditure program (from oil revenue to other sources of financing, and vice versa). But changes to the overall balance and the associated financing needs provide a measure of the vulnerability of the budget to exogenous changes, including changes in the oil market and investor sentiment.

[37] For a discussion of indicators of fiscal stance in oil-producing countries, see Barnett and Ossowski (2002).

Assumptions for Long-Run Simulations

The long-run fiscal stance is simulated under four different scenarios for the oil and gas sector in 2002 constant prices (Annex Table III-1). The base case scenario projects an illustrative path for future oil and gas production assuming that the current proven reserves of oil and gas will be exhausted by the year 2045.[38] However, as the proven reserves of oil under these assumptions will be exhausted by 2033, sustaining this level of production requires development of the currently underutilized gas reserves as a substitute for oil. This production scenario is then replicated under three different sets of oil price assumptions. The base case assumes that the long run oil price in real terms remains unchanged from the projected 2002 level. Two simple alternative price scenarios are presented: a low case scenario with the long run price US$4 dollars below this level; and a high case scenario with the long run price of oil US$4 above.

In calculating the optimal consumption out of non-renewable resources, the initial focus would be only on the proven reserves of oil and gas. However, when there may be large probable or potential reserves (including undeveloped offshore gas), greater uncertainty will affect the simulations. Since new discoveries will increase the net worth of the government and hence allow it to run higher non-oil deficits over the long run, any calculation based only on proven reserves may result in a sub-optimal long-run fiscal policy stance. In principle, any new discoveries would require a re-assessment of the optimal long-run fiscal stance. To illustrate this, a (conservative) high case production scenario is included, where it is assumed that new finds over the medium term will increase the stock of oil and gas reserves by about 9.8 billion barrels. This allows for a higher annual production, particularly over the 2021-45 period, with an average long-run production of 3.6 million barrels of oil per day.[39]

In addition to oil-related variables, the determination of the sustainable fiscal stance is also dependent on other parameters, including the population growth rate (affecting the constant wealth per capita target) and the non-oil GDP growth rate (affecting the constant wealth to non-oil GDP target). The simulations will also be sensitive to assumptions regarding the long-run real interest rate (assumed at 4 percent).

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[38] The stock of proven reserves in 2001 amounted to 24.0 billion of barrels of oil and 22.1 billion of barrels of oil equivalent in natural gas (see BP Energy Review, 2002).

[39] Alternatively, it could have been assumed that the new finds would have extended the period until the reserves were exhausted.

Table III-1. Nigeria: Assumptions for Long Run Fiscal Policy Simulations

	2002–10	2011–20	2021–30	2031–45	2002–20	2021–45	2002–45
Oil price (in 2002 US$ per barrel)							
Base case oil price	25.2	25.2	25.2	25.2	25.2	25.2	25.2
Low case oil price	21.2	21.2	21.2	21.2	21.2	21.2	21.2
High case oil price	29.2	29.2	29.2	29.2	29.2	29.2	29.2
Oil/gas production (in millions of barrels per day)							
Base case (production of proved reserves)	2.4	3.0	3.1	3.0	2.7	3.0	2.9
Oil	2.1	2.5	1.9	0.3	2.3	0.9	1.5
Natural gas (in terms of oil equivalent) 1/	0.3	0.6	1.2	2.7	0.4	2.1	1.4
High case	2.6	3.4	3.7	4.1	3.0	3.9	3.6
Oil	2.1	2.5	1.9	0.3	2.3	0.9	1.5
Natural gas (in terms of oil equivalent) 1/	0.3	0.6	1.2	2.7	0.4	2.1	1.4
Potential new gas and oil reserves	0.2	0.3	0.6	1.1	0.3	0.9	0.7
Population (in millions)	150	182	206	234	167	223	198
Population growth rate (in percent)	2.5	1.6	1.1	1.0	2.1	1.0	1.5
Non-oil GDP (annual real growth)	4.7	3.0	3.0	3.0	3.8	3.0	3.3

1/ The million of barrels of oil equivalent is derived by multiplying the gas production in billion of cubic feet by 6.29 (BP Energy Review).

Simulations of Policy Rules

The **permanent price rule** is simulated by calculating a hypothetical oil revenue stream at an assumed permanent price of US$20 per barrel of oil. The expenditure path is then adjusted to achieve an overall balanced budget at the permanent oil price. In years when the realized oil price is higher than the permanent oil price, the excess proceeds are saved. These funds can then be tapped into in years when the oil price dips below the permanent price to reduce the need for expenditure adjustments offsetting the lower oil revenue. It is assumed that the deposits of oil revenue into the federation account are based on the permanent price instead of the realized price, with changes in discretionary federal expenditure closing the model, to achieve a balanced budget at the permanent oil price. In effect, this means that both federal and lower-level governments contribute to the fiscal adjustment by saving their share of excess proceeds.

The **constant non-oil primary deficit rule** is implemented by targeting a deficit of 20 percent of non-oil GDP. Transfers to the federation account (for revenue sharing) are adjusted every year to meet the targeted non-oil primary deficit. The same savings mechanism will be utilized as under the permanent price rule enabling the saved excess funds to be allocated according to the revenue sharing formula across the respective levels of government. The rule could also be implemented, however, by assuming that only discretionary federal expenditure is the adjusting variable. However, this would require substantial fiscal adjustment at the level of the federal government, which is unlikely to be feasible. It would also work counter to the objective of stabilizing expenditure. At the extreme, with high oil prices, this would require large reductions in federal expenditure to offset the automatic increases in spending at the subnational level.

The results from the simulations under the various price and production scenarios are presented in Annex Table III-2.

Table III-2. Nigeria: Short-run Fiscal Policy Rules: Illustrative Projections, 2002–2007

	2002	2003	2004	2005	2006	2007	Average
				(In percent of GDP)			
1. WEO price scenario							
Base case scenario							
Total consolidated expenditure	46.0	46.8	42.5	39.8	37.8	36.4	41.6
Overall balance	-5.8	-2.5	0.2	1.1	1.0	1.2	-0.8
Non-oil primary balance 1/	-29.8	-30.2	-27.7	-25.2	-23.4	-22.5	-26.5
Permanent price rule							
Total consolidated expenditure	34.5	37.8	39.5	38.5	37.6	36.4	37.4
Overall balance	5.7	6.5	3.2	2.5	1.2	1.2	3.4
Non-oil primary balance 1/	-13.9	-18.1	-23.8	-23.5	-23.1	-22.6	-20.8
Non-oil primary balance rule							
Total consolidated expenditure	38.9	39.2	36.5	35.7	35.0	34.3	36.6
Overall balance	1.3	5.1	6.2	5.3	3.8	3.3	4.2
Non-oil primary balance 1/	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
2. Low price scenario							
Base case scenario							
Total consolidated expenditure	47.0	47.4	43.8	40.9	38.6	37.1	42.5
Overall balance	-9.8	-6.7	-4.9	-3.7	-3.7	-3.3	-5.3
Non-oil primary balance 1/	-28.5	-28.5	-27.3	-24.8	-23.0	-22.2	-25.7
Permanent price rule							
Total consolidated expenditure	36.0	39.3	40.9	39.8	38.7	37.4	38.7
Overall balance	1.2	1.4	-2.0	-2.6	-3.8	-3.6	-1.6
Non-oil primary balance 1/	-13.9	-18.1	-23.8	-23.5	-23.1	-22.6	-20.8
Non-oil primary balance rule							
Total consolidated expenditure	40.6	40.8	37.9	36.9	36.0	35.2	37.9
Overall balance	-3.4	-0.1	1.1	0.3	-1.1	-1.4	-0.8
Non-oil primary balance 1/	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
3. High price scenario							
Base case scenario							
Total consolidated expenditure	48.6	49.5	46.3	43.7	41.6	40.1	45.0
Overall balance	-4.5	-1.3	0.3	1.3	1.2	1.4	-0.3
Non-oil primary balance 1/	-35.5	-35.7	-34.1	-31.3	-29.1	-28.0	-32.3
Permanent price rule							
Total consolidated expenditure	33.5	36.8	38.5	37.6	36.8	35.7	36.5
Overall balance	10.7	11.4	8.2	7.4	6.0	5.7	8.2
Non-oil primary balance 1/	-13.9	-18.1	-23.8	-23.5	-23.1	-22.6	-20.8
Non-oil primary balance rule							
Total consolidated expenditure	37.7	38.2	35.6	34.8	34.3	33.6	35.7
Overall balance	6.4	10.0	11.1	10.1	8.5	7.8	9.0
Non-oil primary balance 1/	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
4. High production scenario							
Base case scenario							
Total consolidated expenditure	48.4	51.0	47.4	44.6	42.3	40.7	45.7
Overall balance	-5.3	-0.6	0.7	1.6	1.4	1.5	-0.1
Non-oil primary balance 1/	-34.3	-36.8	-34.7	-31.8	-29.4	-28.2	-32.5
Permanent price rule							
Total consolidated expenditure	36.5	40.3	42.0	41.0	40.1	38.8	39.8
Overall balance	6.7	10.1	6.1	5.2	3.6	3.4	5.9
Non-oil primary balance 1/	-17.5	-22.2	-27.7	-27.2	-26.6	-25.9	-24.5
Non-oil primary balance rule							
Total consolidated expenditure	38.2	38.6	36.1	35.3	34.7	34.0	36.1
Overall balance	4.9	11.7	12.1	10.9	9.0	8.3	9.5
Non-oil primary balance 1/	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0

1/ In percent of non-oil GDP

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IV. Issues in Intergovernmental Finance in Nigeria[40]

A. Introduction

104. This section does the following two things. First, it highlights the key issues in the current fiscal federal system that will need to be addressed in the short and medium term in order to improve overall fiscal management in Nigeria. Some options for strengthening fiscal management in the context of a federal system are explored. In discussing fiscal federal issues, the paper complements the other section on fiscal rules. Second, the section draws on some recent examples of reforms to federal systems that might be relevant to Nigeria's system of intergovernmental finance.

Overview of current institutional arrangements in Nigeria

105. The federal system in Nigeria is based on three layers of government: the federal government, and the states' and local government. Currently, there are 36 states in Nigeria, plus the federal territory of Abuja, the capital. In addition, there are 774 local governments. While the 1999 Constitution recognizes local governments, most of their governance (such as structure, functions, and finance) is given over to the states. Nonetheless, direct allocations are made to local governments through the federation account—the repository of the major tax revenues (see below).

Expenditure assignments

106. The formal assignment of responsibilities among the different layers of government is similar to that found in large federal systems. The federal government is responsible for maintaining defense, foreign affairs, law and public order, railways, posts, communications, roads of national interest and air and sea travel. The states are responsible for providing education and health services and public works, although, in a few cases, these services are provided by the federal government. Local governments are responsible for providing local infrastructure services, such as water and sanitation. Local governments also participate in the provision of primary health care and education services. In most cases, however, local governments act as agents of the states.

Revenue assignments

107. States and local governments have three sources of revenues: (i) own revenues; (ii) revenues shared with the federal government; and (iii) transfers from the federation account. The assignment of revenue bases is broadly consistent with acceptable principles in intergovernmental finance, that is, mobile bases belong to the central authorities, while revenues assigned to subnational governments usually have links to the services these

[40] Prepared by Calvin McDonald.

governments provide. The one exception is the personal income tax, which, although having a mobile base, is assigned to the states. In addition to the personal income tax, states receive stamp duties, road taxes, and various fees. In most cases, however, the states simply administer these taxes, since the bases and rates are determined nationally. Local governments are assigned property taxes and various other fees, such as those for sewage and refuse collections. The proceeds from the value-added tax (VAT) are shared among the three tiers of government. The federal government receives 15 percent, the states, 47 percent, and the local governments, 38 percent. However, 20 percent of the amounts allocated to state and local governments are distributed according to the derivation principle, that is, according to the actual collection made in each individual jurisdiction. Another 50 percent is distributed according to the population, and the remaining 30 percent in equal amounts for all government units.

Intergovernmental transfers

108. Intergovernmental transfers are made from the federation account. Proceeds in this account accrue from oil revenues, the company income tax, and customs and excise duties. Until April 2002, certain "first charges" were deducted from oil revenues before they were shared with subnational governments. These first charges included external debt service, "cash calls" (the government's share in the production costs of oil) of the Nigeria National Petroleum Corporation (NNPC), expenditures for certain NNPC priority projects, expenditure of the National Judiciary Council, and the allocation of a share of oil revenue to oil-producing states based on the derivation principle. The allocations based on the derivation principle were set at 13 percent of oil revenues. In April 2002, the Supreme Court ruled, among other things, that the deduction of first charges before the sharing of oil revenues was unconstitutional. Since then, the federal government has modified its oil revenue sharing accordingly but has sought to share the external debt-service burden with states based on their share in the external debt (estimated at 24 percent of the total).

109. The basic shares of revenues from the federation account are 48.5 percent to the federal government, 24 percent to states, 20 percent to local governments, 1 percent to the federal capital of Abuja and 2.5 percent to the Ecological and Stabilization Reserve Funds. The remaining 4 percent is then shared among the three tiers of government in a second round.[41] The distribution to individual states and local governments are based on ten factors. The first is an "equality factor," which is essentially a lump-sum payment and accounts for 47.5 percent of the total transfers. Transfers based on population are accorded a weight of 30 percent, geographical area, 10 percent, and revenue effort, 2.5 percent. The remaining amounts are distributed based on "social development" factors, namely, the direct and inverse number of pupils enrolled in primary schools, the number of hospital beds, and an index of clean water and the quantity of rainfall.

[41]Since the Supreme Court ruling, the federal government has sought to increase its share of the federation account in order to compensate for the lost revenues occasioned by the ruling (see box).

Subnational borrowing

110. States are not prohibited from borrowing either domestically or externally. However, there is practically no borrowing from the central bank. States, however, do borrow from commercial banks, although recent regulations on provisioning against these loans have made it more difficult for banks to extend credit to states. The new regulations call for banks to provision against their profit-and loss account 50 percent of the credit advanced to states or local governments. This provisioning, however, does not apply to the banks' holdings of bonds that may be issued by states. Four states have issued bonds this year totaling N 12.5 billion. In addition, Lagos recently offered N 15 billion to investors, primarily to finance its debts of approximately the same size. While these bond issues have yet to create macroeconomic problems, a proliferation of state bonds could lead to an explosion in domestic debt and calls on the federal government to bail out states in the event of a default on bond payments. In this regard, policies (e.g., prudential regulations) may have to be developed on banks' holdings of state bonds.

111. All external borrowing by states have to be guaranteed by the federal government. Such borrowing is limited at 30 percent of individual state's share in the federation account, and this is held as collateral against default. In most cases, the federal government borrows externally directly and onlends to the states. As indicated above, the states' share in Nigeria's external debt is currently about 24 percent.

Why worry about fiscal federalism issues in Nigeria?

112. There are several reasons why the nature of intergovernmental fiscal relations in Nigeria matters. First, Nigeria has a high dependency on oil revenues, which is volatile. These revenues are distributed among the three tiers of government according to the principles described above and account for over 80 percent of total consolidated revenues. Second, the size of subnational spending in Nigeria is large. Over the last five years, this spending has averaged about 9 percent of GDP—or 48 percent of total consolidated government spending. Furthermore, a large part of subnational spending is devoted to wages (about 40-50 percent in 2001)—an arrangement that can be difficult to reverse during periods of declining oil prices. Third, states in Nigeria enjoy significant autonomy by law and traditionally have not been required to coordinate their fiscal policies with those of the federal government. Furthermore, states are not obliged to report on the execution of their budgets, and consequently little information is available in Nigeria on these budgets.

113. Nigeria, therefore, faces the challenge of managing fiscal policy in the context of highly volatile oil export prices, a task which is further complicated by the existence of a federal system. The past has not been encouraging. Following the oil booms of the 1970s, expenditures rose faster than revenues. The consolidated budget deficit has remained above 4 percent for most years since 1975 and was substantially higher in a number of years, particularly in the early 1990s. The absence of a predictable and sound medium-term fiscal policy at all levels of government has led to boom-and-bust cycles.

B. Fiscal Federalism in a Macroeconomic Context in Nigeria

114. Trends toward devolution of fiscal responsibility in countries typically reflect an evolution toward more democratic and participatory forms of government. Devolution can ensure closer correspondence of the quantity, quality, and composition of goods to local preferences.

115. The reason for this development is that, by being close to the consumers of government services, local decision makers can more effectively receive information from consumers. Distance, however, reduces the amount of information available to make good decisions. By being removed from the local community, distance also reduces the incentives for decision makers to care about the preferences of local consumers. This argument would suggest that the size of a country matters in determining whether a federal system would provide benefits to local consumers. Thus, decentralization of spending responsibilities can lead to efficiency and welfare gains.

116. Decentralization may also become necessary for political reasons. In Nigeria, for example, the frequent increases in the number of states have served as an instrument to mitigate regional and ethnic rivalries. At independence in 1960, Nigeria had 4 regions, which were subsequently transformed into 36 states. As oil revenues have become more important, demands have increased to distribute these revenues to the regions of origin. Starting in the 1940s and continuing after independence in 1960, several commissions and constitutional changes sought to establish revenue-sharing formulas—sometimes with unclear assignments of expenditure responsibilities (see Box IV-1 below).[42]

117. For a federal system to be preferable to a unitary system, the gains from the former have to be strong enough to offset the advantages economies of scale in the production of public goods and in the generation of tax revenues may give to keeping power in the hands of a central government. In a federal system, therefore, the centralized provision of public goods should be limited to those goods whose benefits extend nationwide or whose provision is subject to substantial economies of scale—such as defense and certain infrastructures.

Issues of equity and fiscal management

118. Federal systems can, however, present two major challenges. First, decentralization can entail costs in terms of distributional equity—normally an important goal of public finance and, second, decentralization can make macroeconomic management more difficult. Substantial disparities in the regional distribution of endowments, tax-raising capacity, or differential costs in meeting assigned expenditure responsibilities can lead to inequities in the provision of public goods and services. These so-called horizontal imbalances can be only mitigated through an effective intergovernmental transfer system. Also—at least in principle—the federal government can influence the decentralized delivery of goods and

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[42] For a discussion of the outcome of the various commissions and constitutional changes, see Ashwe, Chiichii (1986) and Ikein and Briggs-Anigboh (1998).

Box IV-1. The Evolution of Federation Account Revenue Sharing in Nigeria

Intergovernmental transfers are made from the federation account, which consist of oil revenues, the company income tax, and customs and excise duties. Transfers are meant to address both vertical and horizontal imbalances. Over the years, the principles of revenue sharing have reflected political changes; at times, favoring greater centralization of revenues, while at other times they have provided more resources for states, in particular, based on the derivation principle. Changes to revenue sharing have typically followed the reports of commissions or presidential decrees. The main highlights governing revenue sharing over the years are as follows.

Pre-independence (1946-59). While Nigeria was still following a unitary system, in 1946, the Phillipson Commission determined revenue allocation among the three regions using the criteria of derivation and "even development." Between 1951 and 1959, the Hicks-Phillipson and Chicks Commissions modified these criteria to include need, fiscal autonomy and national interest.

Postindependence (1959-68). This period was characterized by three main revenue allocation commissions: Raisman (1958), Binns (1964) and Dinns (1968). The allocation criteria were based on the continuity of existing levels of service, responsibilities of each regional government, population (added by decree in 1967), balanced development, and derivation. Regarding derivation, the Raisman Commission recommended that 50 percent of revenues should go to the region of origin.

Military/oil boom period (1968-80). Changes to the allocation formula were made mainly by decrees. The country was further reorganized into 12 states. In general, derivation suffered a setback as it was seen as accentuating regional imbalances. In 1970, under a decree, 50 percent of oil revenue was allocated to the Distributive Pool Account, 45 percent to states based on derivation, and 5 percent to the federal government. In 1971, offshore oil revenues were allocated to the federal government, and in 1975 (again under decree) onshore revenues to the states of origin were further reduced to 20 percent.

1980–99. In 1980, the Okigbo Commission revised the revenue-sharing formula as follows: 55 percent to the federal government, 30 percent to states, 8 percent to local governments and 7 percent to special funds. Horizontal allocations among states were determined with population and a minimum standard for national integration each receiving a weight of 40 percent; a social development factor, 15 percent; and an internal revenue effort, 5 percent. The Revenue Act of 1982 modified the sharing formula slightly, giving states and local governments larger shares at the expense of the special funds.

1999 Constitution. The allocations based on the derivation principle was set at 13 percent of oil revenues. The basic shares were as follows: 48.5 percent to the federal government, 24 percent to states, 20 percent to local governments, and 7.5 percent to special funds. The constitution also provided for grants-in-aid to minimize disparities in social services among states. Transfers to states were to be based on ten factors.

April 2002 Supreme Court ruling. The deduction of "first charges" (e.g., external debt service, "cash calls" to cover the government's share in the production costs of oil, and expenditures on NNPC priority projects) before the sharing of oil revenues was ruled unconstitutional. Offshore oil proceeds were ruled to belong to the federal government. Since then, oil revenue for sharing is net of the production costs of oil, and debt service is no longer treated as a first charge. The states have been called upon to meet their share of external debt service (estimated at 24 percent of the total). The federation account has been distributed as follows: 54.68 percent to the federal government; 24.72 to states; 20.6 percent to local governments. The Federal Capital Territory and the Ecological Fund would be funded directly by the federal government.

October 2002 National Assembly legislative changes. The natural derivation grant had been calculated at 60 percent of total oil production (the assumed onshore proportion of production). In October, the National Assembly enacted legislation that would allow the derivation grant to be calculated on the basis of 100 percent of oil production.

services by setting overarching standards or mandates and the use of certain transfers, in order to ensure the level and standards of goods and services provided by subnational governments.

119. Ahmad and Singh (2002) have calculated horizontal imbalances (that is, fiscal deficits before transfers) in per capita terms in Nigeria for 1998. Their findings show that the largest imbalance is more than four times the size of the smallest. As indicated above, these imbalances can result from differences in revenue mobilization capacity. For example, Lagos' internally generated revenue and revenue from the derivation of the VAT in per capita terms amounted to 27 times that of Bauchi in 1998. Ahmad and Singh (2002) conclude that the present transfer system does not do an effective job of redistribution. Using income per capita and the number of hospital beds per capita as indicators of need, they find little correlation between transfers from the federation account and these indicators. They also find that the current mechanism does not provide for any distinct pattern of redistribution among regions. Differences in transfers per capita are much greater within states in the three large regions than among eastern, northern and western states.

120. The inability of the present intergovernmental transfer system to address inequities poses a significant challenge to Nigeria as it develops a poverty reduction strategy. Some studies (for example, Thomas and Canagarajah, 2002) show large variations in the incidence and depth of poverty across states in Nigeria. Changes in poverty over time have also varied by state and by region. During 1985-86 and 1992-93, for example, Thomas and Canagarajah (2002) found that poverty declined in all areas, except the north. Furthermore, although the improvement was most marked in the south, important exceptions were Sokoto, Kano, and Rivers States. While the use of the budget by itself does not provide the solution to poverty, an effective intergovernmental fiscal system can play a significant role in addressing poverty and other inequities.[43]

121. The devolution of expenditures with a large impact on aggregate demand can complicate macroeconomic management. This is the case even if states and local governments are constrained by their revenue-raising capacity or borrowing powers. For example, shifts in the composition of subnational expenditures toward items that have a relatively large impact on aggregate demand, such as transfers to individuals with a high propensity to consume, can run counter to the stabilization objectives of the federal government. More important, in Nigeria, the current fiscal federal structure makes it difficult to manage fiscal policy at the consolidated government level.

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[43] A proper assessment of the links between the budget and poverty requires, as a minimum, information on the composition of spending by function, both at the federal and subnational levels. Functional categories of spending (e.g. on health and education) are non-existent at the federal and state levels. Limited and incomplete information is available on the functional categories of capital spending by local governments based on surveys carried out by the Central Bank of Nigeria.

122. While revenue-sharing arrangements with coefficients set in law or in the Constitution—as is the case in Nigeria—provide the subnational governments with predictable revenue flows, they cause considerable rigidity in the formulation of fiscal policy. Fiscal tightening, for example by the federal government, can be easily undermined by subnational government spending. Fixed revenue shares can also have procyclical effects, with higher revenues increasing the capacity to spend in times of boom and lower revenues causing a collapse of spending during economic downturns.

C. Stabilizing Intergovernmental Finance in Nigeria

Policy coordination at the national level

123. Stabilizing intergovernmental finances is a challenge that many countries have faced in recent years. Among developing countries, Argentina, Indonesia, and Russia have had to introduce reforms to their federal systems in order to improve macroeconomic management and redistribution policies. In some countries, the reforms have been extensive. In Russia, for example, the thrust of the reforms has been to recentralize revenues while relying on transfer mechanisms to meet the spending needs of subnational governments.

124. In Russia, these reforms have involved increasing the centralization of revenues (including shifting VAT to the center and abolishing a number of funds receiving earmarked revenue), with the intent of allocating expenditures to subnational governments in a more equitable fashion and exercising greater central control over the execution of subnational budgets. On the expenditure side, policy changes (including the implementation of transfers linked to fiscal capacity and expenditure needs) have been complemented by expenditure management reforms.

125. While such radical reforms may not all be politically feasible at this time in Nigeria, given the existing constitutional arrangements, there is at a minimum, scope for greater macroeconomic coordination, and the strengthening of budgetary processes and control. Expenditure management reforms (at all levels of government) were particularly effective in Russia in enhancing macroeconomic management. Nigeria could also learn from the Russian attempts to address equity issues through expenditure policy reforms and through a reform of the transfer formula. Of more relevance to Nigeria is the need to set expenditure norms and standards for subnational governments to follow.

126. Greater macroeconomic coordination and a strengthening of budgetary processes would, in the main, not necessarily require changes in the existing Constitution or the tax-sharing rules. Large federal systems pursue coordination through institutional forums to discuss macroeconomic policies. This is done, for example, in Australia, through the Premiers' Conference and the Loan Council, and in Germany through the Financial Planning Council. In cases such as these, the main lines of budgetary policy would be discussed each year, usually within the context of a medium-term framework, in advance of the preparation of national and subnational budgets. Agreement would be reached on the main macroeconomic assumptions and the key budgetary aggregates for the federal and

subnational budgets. The same forum would monitor the implementation of agreed plans during the year and approve any significant modifications in light of current developments.

127. Effective coordination of fiscal polices among the three tiers of government will, however, require a strengthening of the entire public expenditure management process in Nigeria. This includes planning and budget preparation, budget implementation, cash management, debt management, reporting, and auditing. In particular, for coordination to be meaningful, all tiers of government will need to adopt modern, comprehensive, standardized, and transparent budget classification systems and accounting rules.

128. Adoption of a fiscal responsibility act along the lines of other countries such as Argentina's and Brazil's, can also strengthen macroeconomic coordination. In the case of countries that have adopted such acts, limits are set on borrowing at all levels in terms of debt-service ratios and debt-revenue ratios together with other kinds of restrictions. In Brazil, for example, the debt service ratio has to be less than or equal to 15 percent of total revenues or current surplus, whichever is less, while the debt-revenue ratio has to be less than or equal to 27 percent of total revenue. Additional restrictions require the debts to be long-term credits for investment purposes only. Furthermore, restrictions are placed on external borrowing.

129. In general, international experience suggests that countries follow four basic approaches to borrowing by subnational governments: (i) reliance on market discipline (e.g., Canada); (ii) a cooperative approach among all levels of government (Australia and Germany); (iii) rules-based approach (e.g., United States and Spain); and (iv) administrative control-based approach, typical of unitary systems (e.g., United Kingdom and Japan). The main considerations involved in adopting any of these approaches would be how to preserve macroeconomic stability, manage the monetary impact of the borrowing, and ensure the ability to repay. Furthermore, the capacity of local governments to manage their debt and institute effective public expenditure management systems that are transparent and accountable would be critical.

130. Given Nigeria's level of development, it would be advisable to follow a conservative, rules-based approach, which would include the following: (i) barring subnational governments from borrowing from the central bank; (ii) prohibiting external borrowing by states, except through the federal government, as at present; (iii) restricting borrowing to new investments that have a well-defined minimum social and economic return; (iv) establishing prudent debt-level limits and debt-service ratios; and (iv) coordinating borrowing among all tiers of government.

131. Nigeria has recently taken initiatives in the direction of harmonizing fiscal policies among the three tiers of government and of strengthening financial discipline at subnational levels, by introducing a draft Fiscal Responsibility Bill in the National Assembly. These initiatives reflect the authorities awareness that policy coordination across various levels of government should be at the core of macroeconomic management in a country like Nigeria. Among other things, this draft bill proposes that the annual federal budget be prepared in the context of a three-year medium-term "rolling plan," that the budgetary planning process of

all three tiers of government be derived from this underlying rolling plan, that sanctions for the nonremittance of revenues be collected at the subnational level, and that expenditure be based on conservative revenue estimates, the setting of debt ceilings on each tier of government and the restriction of borrowing to capital projects. The bill also proposes the setting up of a Fiscal Monitoring Council to monitor and ensure application of the provisions of the bill. This initiative takes Nigeria in the right direction, and, should the bill be approved by the National Assembly, it could lay the basis for a more effective intergovernmental fiscal system.

More far-reaching reforms to the tax-sharing system

132. Given the volatility of oil prices and the difficulty that this poses for macroeconomic management, a key issue for Nigeria is the appropriateness of the present oil revenue-sharing rule. As indicated above, the present rule results in procyclical fiscal policies and complicates the adoption of a fiscal stance at the subnational levels that supports the federal government's.

133. To address this problem, elements of flexibility could be included in the sharing arrangements, which, in turn, could complement fiscal rules that are developed at the federal level (see the section on fiscal policy rules). For example, transfers could be related to a moving average of the federation account revenue over a few years. While a moving-average type of transfer rule would not fully protect subnational governments from adjusting during periods of negative shocks, it would nonetheless give them time to make the necessary changes in their expenditure policies. This approach, therefore, allows for an intermediate path to be taken to stabilize a permanent shock—or, for that matter, a shock whose permanence is not known. Recent federal agreements in Argentina and the constitutional amendment in Colombia contemplate an eventual stabilization on the basis of a moving average. (see Gonzalez Losenblatt, and Webb (2002)).

134. Another option would be to require subnational governments to set up stabilization funds to even out fluctuations in the revenue flows. In the United States, most states have "rainy day" funds, which are drawn down during cyclical downturns and reconstituted during periods of boom (see Stotsky and Sunley (1997)). These funds could complement similar fiscal rules at the federal level. To ensure consistency with the practice of the federal government, the rule for saving could be predicated on the same medium-term assumptions on the trend price of oil as used by the federal government.

Addressing states' expenditure needs and redistribution issues

135. A radical departure from the present transfer system, which relies on the sharing of volatile oil revenues would be one that assured states that the provision of at least a minimum set of essential public services would be financed. This approach would require a new transfer system based on the costing of a minimum set of essential functions and estimates of overall expenditure needs and own-revenue capacities. This approach could complement a rules- based fiscal policy aimed at attaining fiscal balance when oil prices approach their

medium-term average. In other words, the federal government would guarantee that the minimum expenditure needs would be met when oil prices experienced a downturn, while excess revenues would be saved when oil prices were above their medium-term average. The estimation of expenditure needs could be based on the familiar indicators—some of which are used in the current transfer formula. These could include population, population density, income per capita, and certain social indicators in the education and health sectors.

136. To address redistribution issues, the transfer framework would include general purpose grants and special purpose transfers. General purpose transfers would aim to equalize state and local governments' fiscal capacities, in order to provide public services at similar levels of own-revenue efforts. Special purpose transfers would aim to meet nationally determined objectives and to correct for spillovers.

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V. Conduct of Monetary Policy in Nigeria[44]

A. Introduction

137. Monetary policy has faced increasing difficulty in recent years maintaining price stability. In part this reflects the lack of prudent fiscal policies and the burden fiscal deficits have placed on monetary policy. The goal of this section is to discuss the key challenges facing the monetary authorities in Nigeria; review the current framework for implementing monetary policy; and identify weaknesses in the current policy framework and possible remedies.

B. Challenges Facing Monetary Policy in Nigeria

138. Monetary policy in Nigeria can play a key role in contributing to a stable macroeconomic environment. Excess money has a significant impact on inflation (Figure V-1). The Central Bank of Nigeria (CBN), however, faces several daunting challenges that undermine its ability to conduct effectively monetary policy:

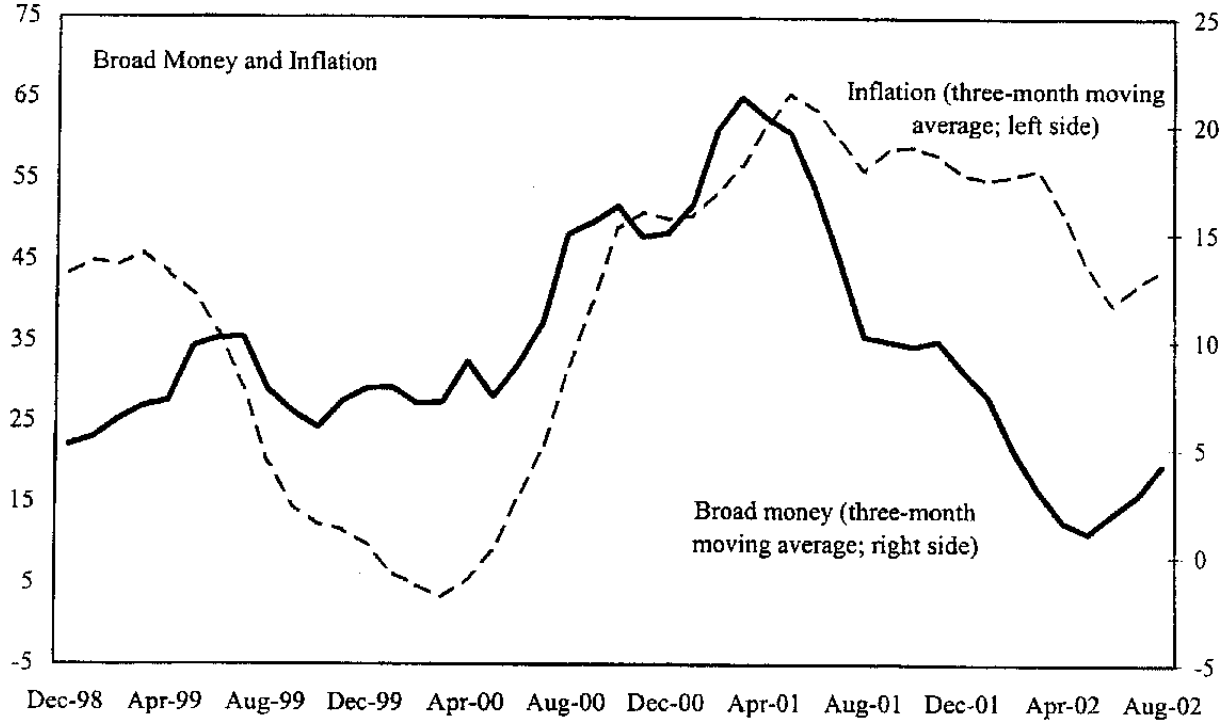
- **Fiscal dominance and volatility**. As the previous sections have discussed, fiscal policies have contributed to macroeconomic instability. The highly volatile nature of oil revenue and the lack of a sound, prudent, fiscal policy rule to deal with these fluctuations complicates the conduct of monetary policy.

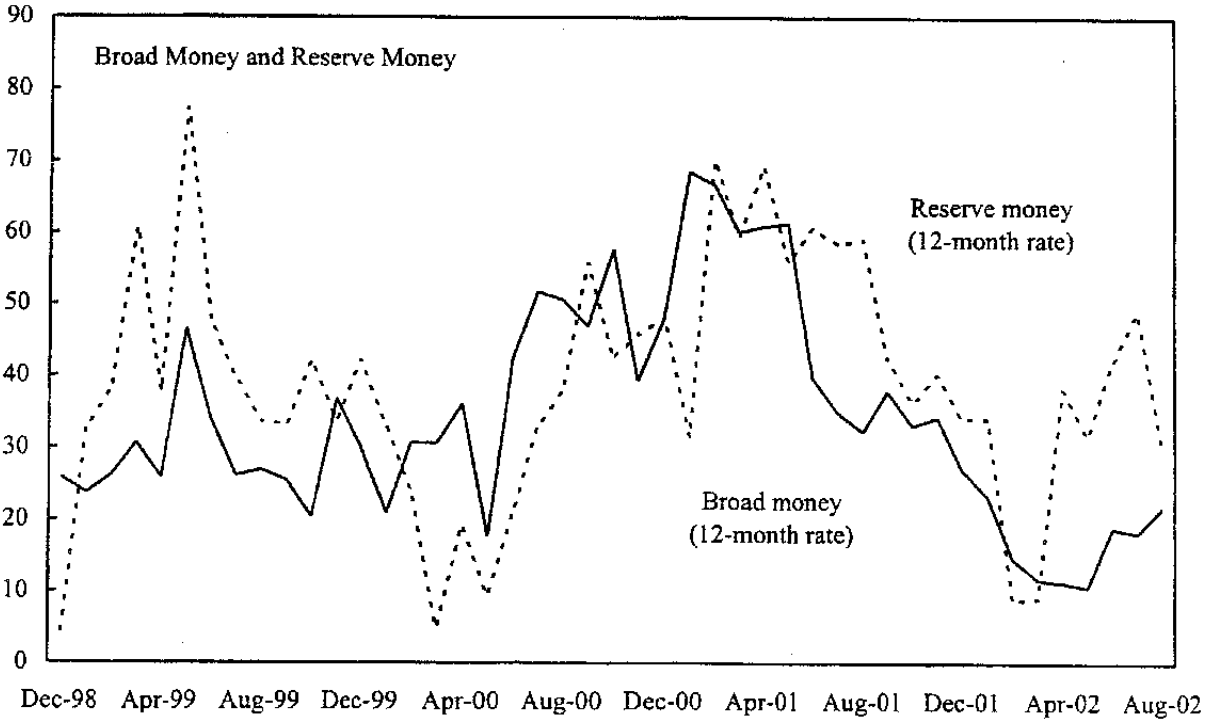
- **Banking sector unsoundness**. The large presence of unsound banks in the financial system and their poor governance practices further weaken the transmission mechanism of monetary policy. Their high non-performing loans (NPLs) and operational inefficiencies have, among other factors, contributed to the large spread between deposit and lending rates, discouraging financial intermediation and savings.

- **Underdeveloped financial markets and instruments**. The effectiveness of monetary policy is also undermined by the lack of developed financial market and instruments. As a result, the CBN faces obstacles in sterilizing the large liquidity injections originating from expansionary fiscal operations.

[44] Prepared by Jeanne Gobat.

Figure V-1. Nigeria: Money and Inflation, December 1998–August 2002
(Percent change; unless otherwise indicated)





Sources: Central Bank of Nigeria; and Fund staff estimates.

- **Exchange Rate Regime**. The exchange rate regime has not, in the main, provided the support to the CBN's monetary policy framework. In particular, the inflexibility in exchange rate policy has made it more difficult to respond to external and domestic shocks, also, changes in the exchange rate affect domestic prices and nominal income. Understanding this transmission process and the choice of exchange rate regime are essential to the appropriate design and implementation of monetary policy.

C. Monetary Policy Framework

139. The primary objectives of monetary policy are the maintenance of price and exchange rate stability.[45] The CBN has selected monetary targeting as its operating framework to achieve price stability. A broad measure of money (M2) is the intermediate target because this, of the various money indicators, has historically displayed the most stable relationship with nominal income.[46] The CBN's monetary base is the operating target.[47] Instead of forecasting demand for base money, bank reserves, currency, or credit, as a way to link base money to the broad money target, the CBN relies on the money multiplier approach, which assumes a stable relationship between base and broad money (Figure V-2). The CBN converts the annual broad and base money targets into quarterly and monthly targets by accounting for past trends and seasonalties.[48]

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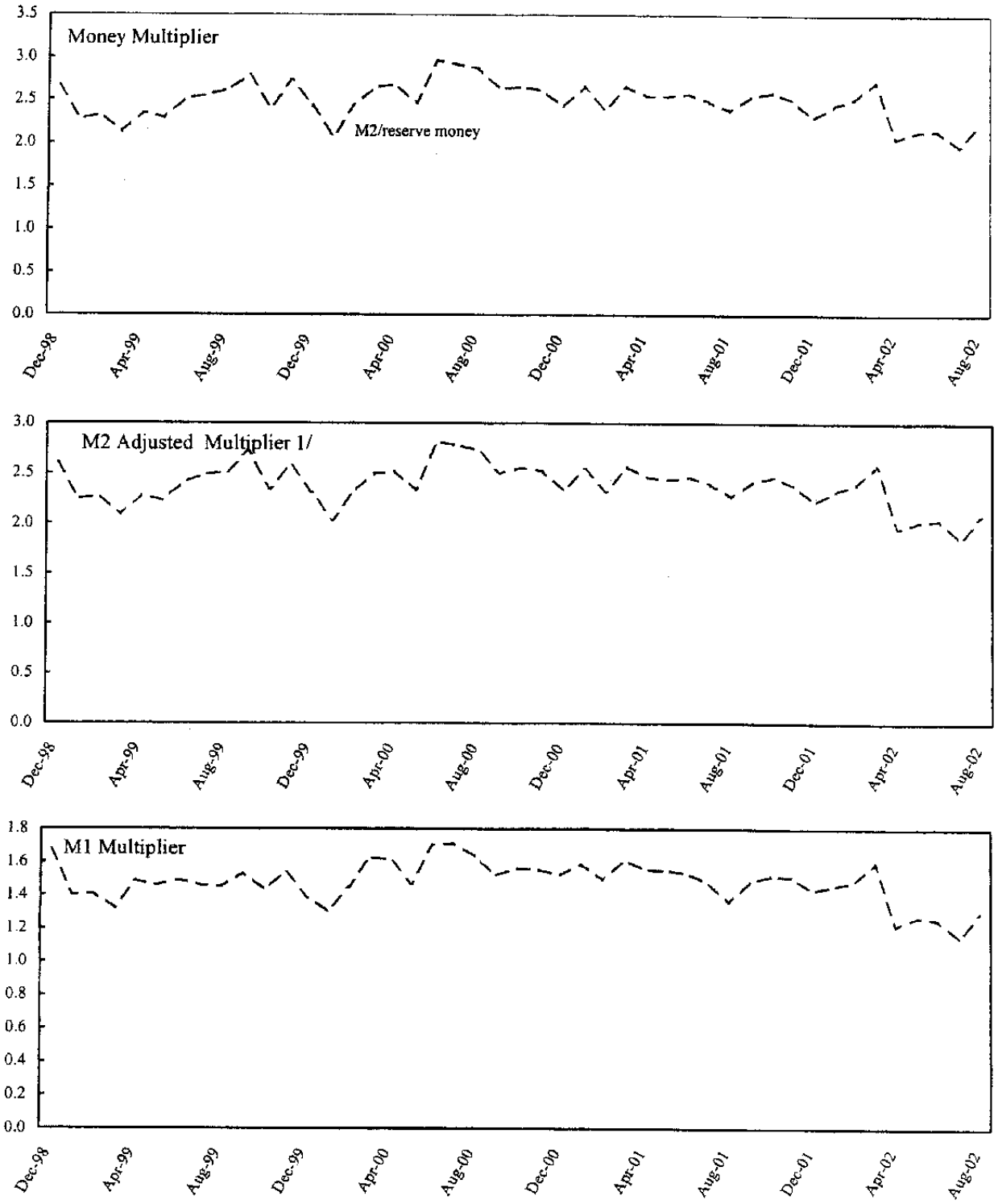
[45] These objectives are spelled out in the circular on Monetary, Credit, Foreign Trade and Exchange Policy Guidelines of the CBN. The sole focus on the price stability objective in the 2002 circular represents a shift from past practices, which gave greater weight to other objectives such as sustainable growth and employment growth.

[46] Empirical studies confirm the central role of real income in broad money demand. Income elasticity has been found not to be significantly different than unity, (Moser (1995), Moser, Rogers and van Til (1997), Kuijs (1998), and Amadi (1999)).

[47] Starting in 2002, the CBN moved to a two-year planning horizon. Broad money growth is targeted to reach 15.3 percent at end-2002 and 15 percent at end-2003, consistent with real growth projections of 5 percent in 2002 and 6 percent in 2003 and average inflation of 9.3 percent and 8 percent in the same two years. Real GDP and inflation are policy objectives of the government and, at times, have been ambitiously set, given domestic and external developments.

[48] The authorities capture trend and seasonality factors by taking the ratio of month-end base money to month-end broad money for the past three years and then taking a simple average of these ratios.

Figure V-2. Nigeria: Developments in Monetary Multipliers, December 1998–August 2002



Sources: Central Bank of Nigeria (CBN); and Fund staff estimates.

1/ M2 adjusted takes out foreign exchange deposits held with commercial banks (which are included in the broad money definition of the CBN's M2).

140. The CBN targets bank reserves[49] rather than short-term interest rates. Given the segmented, thin money market, bank reserves are more predictable and easier to control than interest rates. The CBN also adjusts reserve targets in advance of foreseen shocks. The CBN influences bank reserves through a variety of instruments. In principle, the framework aims to keep bank reserves steady (thus mopping up excess reserves) while allowing short-term interest rates to fluctuate. However, the main source of liquidity creation outside the control of the CBN has been changes in net credit to the government.

140. In practice, the CBN has not adhered to its monetary targeting rule. The monetary policy stance has generally been accommodative in the face of expansionary fiscal policies and aggregate demand pressures. The CBN has not forcefully used its instruments to mop up excess bank liquidity resulting from fiscal expansion. As a result, liquidity has typically exceeded targeted levels. Base and broad money objectives have been persistently breached (Table V-1). Furthermore, the CBN has not allowed interest rates to fully adjust in order to stem aggregate demand pressures for fear of crowding out the private sector and impacting non-oil GDP growth. Also, the exchange rate has not been allowed to play the role of shock absorber

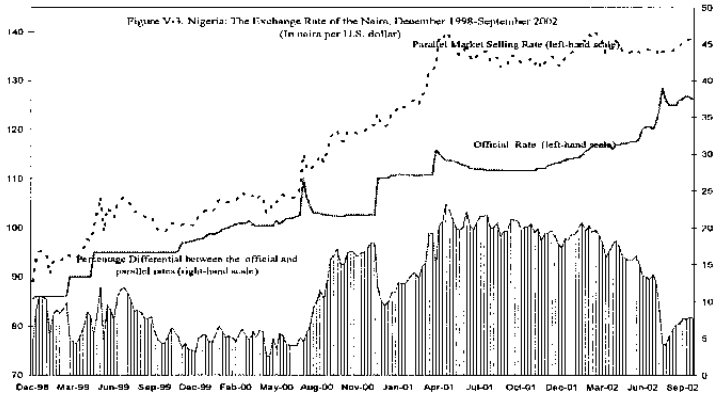


Table V-1. Nigeria: Outcome of Monetary, Financial, and Other Related Targets

	1997		1998		1999		2000		2001	
	Target	Act.	Target	Act.	Target	Act.	Target	Act.	Target	Act.
Growth in GDP	5.5	3.2	4.0	2.4	3.0	2.7	3.0	3.8	5.0	3.9
Inflation rate	15.0	8.5	9.0	10.0	9.0	6.6	9.0	6.9	7.0	18.9
M2	15.0	16.9	15.6	23.3	10.0	31.4	14.6	48.1	12.2	27.0

to terms of trade shocks. Rather, the exchange rate has been tightly managed, visible in sharp changes in international reserves, and the widening in the premium of the parallel exchange rate (Figure V-3).

[49] Bank reserves and liquidity are used interchangeably. Bank reserves consist of required reserves, demand deposits held at the CBN, and vault cash (the latter being excluded from the cash reserve requirements held with the CBN).

141. As a result, the CBN has faced difficulties over the past decade in meeting its monetary and inflation objectives. The implementation of inconsistent fiscal and monetary policies, as well as the CBN's passive stance with respect to expanding liquidity in the financial system, has contributed to the CBN's inability to control monetary expansion and to pressures on the exchange rate.

Instruments of monetary policy

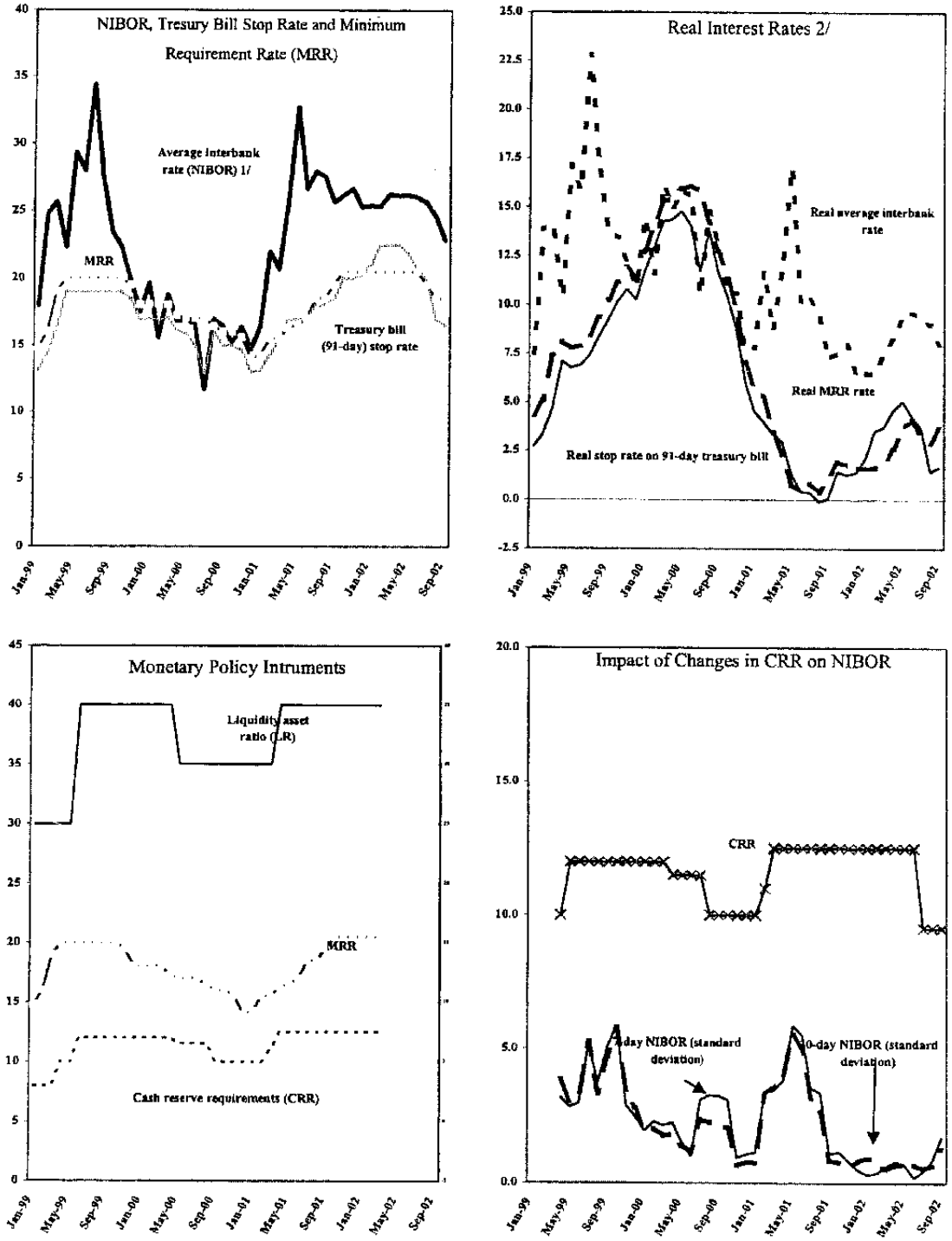
142. In implementing monetary policy, the CBN uses a mix of instruments to achieve its monetary objectives. These include reserve requirements, liquid asset ratios, open market operations and the discount window. Starting in the early 1990s, the CBN has gradually moved away from interest rate and credit controls, although at times it still attempts to influence these variables through moral suasion or directed lending. Among the current instruments of liquidity management, the CBN actively uses open market operations and the discount window.

143. Through its regulatory powers, the CBN exerts direct control over bank liquidity by imposing a statutory cash reserve requirement (CRR) on banks' total liabilities and a liquidity asset ratio (LR). While not used at high frequency, both have been effective for monetary control purposes. For instance, in the face of persistent excess liquidity in the financial system, the CBN raised both sharply in 2001: the CRR was raised in two steps from 10 percent to 12 ½ percent and the LR in one step from 35 percent to 40 percent (Figure V-4).

144. The CRR forms part of banks' reserves with the CBN. The cash reserves that are deposited with the CBN are partially remunerated at market interest rates at levels in excess of 8 percent (i.e., between 8 percent and 12.5 percent).[50] The CRR, however, is not applied uniformly to all deposits, as foreign exchange deposits are not subject to the requirement. Excluding certain deposits can create incentives for banks to shift deposits from one category to another. Furthermore, unlike in many countries using reserve requirements, the calculation of the cash reserve requirement is not based on averaging during the maintenance period—the average of daily positions—but on total liabilities (demand, savings, and time deposits) at a point in time (mid-month and end-month). This tends to lower banks' ability to flexibly

[50] The CRR was lowered to 9.5 percent in July 2002. However, this only applied to banks that raised their lending to the private sector by 20 percent since the end of June 2002.

Figure V-4. Nigeria: Developments in Key Short-Term Interest Rates, January 1999–September 2002
(In percent, unless otherwise indicated)



Sources: Nigerian authorities; and Fund staff estimates.

1/The interbank interest rate is a weighted average of the 7-day call rate (49 percent weight) and the 30-, 60-, and 90-day rates (20 percent weight each).

2/ Adjusted for annual average consumer price index inflation.

manage their daily liquidity needs, and they may end up holding more reserves than required. The average method, on the other hand, permits banks to use part of their reserves over the maintenance period to smooth out short-term fluctuations in liquidity conditions.[51]

145. CRRs serve several functions. For liquidity management purposes, the CBN uses them to absorb excess liquidity in the banking system generated through an expansion of government deposits from oil proceeds. The monetary effect is realized through their impact on banks' marginal demand for bank reserves. The higher the ratio, the smaller the amount banks have freely available for credit expansion. They are also used to signal a change in the stance of monetary policy. Since not fully remunerated, they are also a source of revenue for the CBN (seignorage). Like in many developing countries with underdeveloped financial markets, reserve requirements can be appealing: they are administratively easy to implement and monitor; they are reliable and, hence, enhance the predictability of demand for bank reserves.

146. Reserve requirements, however, introduce distortions and are not viewed as ideal for short-term liquidity management. If not fully remunerated or remunerated below-market rates, they tax financial intermediation as banks shift the burden onto their customers by raising lending rates and lowering deposit rates. In addition to the high level of nonperforming loans, they are one of the contributing factors to the high interest rate spread found in Nigerian banks (at end-September 2002, about 24 percentage points). Frequent changes for short-term monetary control purposes are costly as they require banks to shift portfolio compositions, and they can be disruptive, especially in a thin market and where liquidity is unevenly distributed among banks. Frequent changes also undermine the CBN's ability to target broad money.

147. The LR functions similarly to the CRR in that it limits banks' ability to create credit as banks are required to hold a minimum share of their liabilities in eligible liquid assets (such as vault cash, excess reserves, treasury bills, and CBN certificates). As such, they influence the demand for financial instruments and, hence, the interest rate structure. Their very high level—beyond the precautionary level of reserves banks desire to hold voluntarily for liquidity and prudential purposes—may have contributed to misreporting. The LR also provides a source of captive demand for government securities. The high ratio effectively lowers the cost of borrowing to the government, and it can lead to fiscal indiscipline and in the process, undermine the effectiveness of monetary control. The high LR has also stifled secondary market trading, as banks are discouraged from actively managing liquidity. Countries that have been pushing for secondary market reforms have been lowering their LRs (or removing them entirely) and replacing them with other prudential regulations and a risk-focused, forward-looking supervisory framework. While the LRs serve a limited prudential role, especially if the securities and interbank markets are thin, they generally are viewed as an ineffective monetary policy instrument.

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[51] Alexander. Balino, and Enoch (1995).

148. In line with international trends, the CBN has, since the early 1990s, been moving to a greater reliance on market-based operations to manage its day-to-day liquidity operations. There are two main types of indirect instruments that are being used: open market operations and the discount window.

Open market operations

149. The primary objective of the CBN's open market operations is to minimize fluctuations in bank liquidity with the aim of aligning bank reserves with bank reserve targets and broader monetary aggregate objectives. A secondary objective is to help market development. The CBN transacts predominantly in short-term government paper—91-day treasury bills—and since 2001 also in its own paper.

150. The CBN conducts open market operations through the primary and secondary markets as well as through its own discount window. Primary and secondary market operations take place once a week.[52] The secondary market operation follows the primary as it is largely used to reverse unwarranted liquidity injections that have been made during the week through the discount window, a smaller amount of subscriptions by banks in the primary auction, and/or the CBN's actions in the foreign exchange market. While the CBN has actively used secondary open market operations to sterilize excess liquidity, it has been unable to do so effectively. In part, this is because of the thin secondary market, but also because the CBN has been reluctant to take a loss on the treasury bills it has picked up in the primary market at below-market interest rates (see discussion below).

151. Faced with excess liquidity in the financial system, the CBN in early 2001 began issuing its own security with 180 day and 360 day maturities. Because of an attractive interest rate (a substantial differential between the issue rate of the CBN certificates and the primary treasury bill rate) the initial issues were oversubscribed, and, by August 2001, their outstanding amount reached N 85 billion (17 percent of average base money in 2001). As the differential with the treasury Bill rate gradually narrowed, the market lost interest in CBN certificates. In April 2002, the CBN discontinued the practice of rolling over the maturing certificates. However, in late October, the CBN began considering the launching of its own open market operation paper (OMO bill) to mop up liquidity in the secondary market.

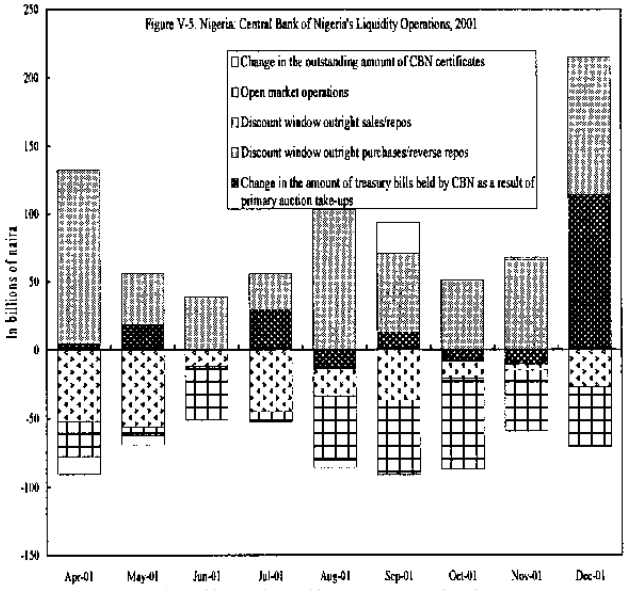
152. There are clear advantages for the CBN—but also some disadvantages—to issue its own paper. The CBN paper is a flexible way to manage short-term liquidity since the terms of issuance are at the discretion of the monetary authorities. This can enhance the CBN's control over its monetary operations in the face of undue pressure from the government to keep borrowing costs low. The CBN paper is also useful in signaling a change in the stance of monetary policy—a separate objective from that of public debt management. The CBN paper provides for flexibility, especially when securities are scarce and the secondary market

[52] The key participants are the larger and more liquid banks and the discount houses.

is thin. Further, the instrument allows for a fine tuning of market intervention. The use of the paper, however, comes at a cost. It lowers central bank profits, particularly if the central bank has to issue large amounts to sterilize excess liquidity in the financial system. Hence, while useful for managing short-term liquidity, the CBN paper may not be effective in addressing the excess liquidity problem stemming from expansionary fiscal policies.

Discount window

153. As an alternative to open market operations in the primary auction and secondary market, the CBN operates a discount window. Most importantly, the discount window allows for unlimited outright sales of securities or repurchase agreements (Figure V-5). Treasury-bills serve as the underlying asset for the bulk of these transactions.[53] Although most of the transactions are outright sales or purchases, repurchase agreements have also been used, but remain ineffective since a short-term withdrawal of liquidity does not address the underlying problem of excess liquidity. The CBN's policy rate—the minimum rediscount rate (MRR)—is applied to all these transactions. In this role, the discount window allows banks to manage their liquidity needs rather than use the money market. The MRR is used to signal a change in the monetary policy stance. In 2001, in an effort to tighten the stance, the CBN raised the MRR from 14 percent to 20.5 percent, with five separate increases. Finally, the discount window serves as a lender of last resort function: banks can borrow reserves at a markup to the MRR.



154. There are downsides to the current modalities governing the discount window, as banks, unlike in open market operations, initiate access and have unlimited access to rediscounting. There is also no incentive for them to go to the interbank market since the MRR tends to be below average interbank rates. On occasions, the MRR has also fallen below the treasury bill rate creating an almost risk-free arbitrage opportunity. If not properly coordinated on a daily basis, and across instruments, this situation can lead to substantial, unwarranted base money creation and undermine money targeting. In addition to

[53] Under a repurchase agreements, the CBN injects domestic currency against the purchase of a domestic asset through a contract specifying the resale at a given price at a future date (the repurchase rate). In a reverse repurchase agreement, the CBN sells an asset against domestic currency, temporarily withdrawing liquidity, but buys the asset at a future date.

undermining money market growth, the activities at the discount window do not foster transparency and market efficiency.

D. Weaknesses in the Implementation of Monetary Policy

155. A number of factors undermine the CBN's ability to conduct monetary policy effectively. First and foremost, the CBN's inability to meet its objectives is inextricably linked to the dominance of fiscal policy and the government's large borrowing needs.[54] The operational level, the role of the CBN as banking and fiscal agent of the government has also infringed on its ability to control monetary base expansion. The lack of coordination, fiscal surprises and deficit financing all considerably complicate the conduct of monetary policy. Furthermore, the CBN has not always allowed key market parameters, such as interest rates or the exchange rate, to adjust to imbalances. The easy access to the discount window undermines the CBN's ability to manage bank liquidity and interbank market development. There are also weaknesses in the CBN's forecasting framework and implementation. Finally, the weak financial condition of commercial banks and their poor governance have undermined the CBN's ability to conduct monetary policy.

156. In mid-July 2002, the CBN moved to a new Dutch auction system to allocate foreign exchange to the market. This has enhanced the flexibility in the exchange rate, with the premium on the parallel rate narrowing sharply to below 10 percent. Greater flexibility in the exchange rate system removes a key distortion undermining effective monetary control. It also makes inconsistent policies, such as overly expansionary fiscal policies, more visible to the public.

Banking agent of the government

157. The CBN acts as banking agent of the government. The government sells all its foreign exchange earnings to the CBN. The federal government holds the capital account of its line ministries with the CBN, while all other accounts (e.g., to pay for salaries of public sector employees or overhead costs) are held with the commercial banks. The two lower tiers of government, the state and local governments, hold their deposits with commercial banks.

158. A number of issues arising from this arrangement complicate the conduct of monetary policy. First, any drawdown, if not predicted, can give rise to unwanted liquidity expansion. The larger the proportion of government deposits held with the CBN, the more destabilizing will movements in the monetary base be, especially if the drawdown is not coordinated in advance with the monetary authorities (Figure V-6). A key problem has been the lack of coordination and information exchange between the treasury and the CBN. Improvements in this area could minimize the impact of fiscal surprises and unwarranted liquidity expansions.

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[54] Ogwuma (1993) and Nnanna (2002).

159. Second, owing to their sheer size, the disbursement of public sector deposits can lead to significant and volatile changes in bank liquidity, thereby impairing the CBN's ability to sterilize the impact that given the shallow money market, the lack of intervention instruments, and the ensuing impact intervention could have on interest rates and the real economy. This points to the need to develop broader and more liquid markets. The lack of such markets explains in part the continued use of the CRR and LR to sterilize excess bank liquidity.

160. Finally, the CBN faces the problems of irregular payments with respect to timing and size on cash calls due to the joint-venture companies of the government in the oil industry and the frequent ad-hoc changes to the revenue sharing rules among the tiers of government. These factors can be sizable and undermine the CBN's ability to forecast and control bank liquidity and, hence, credit to the economy.

Financing of the fiscal deficit

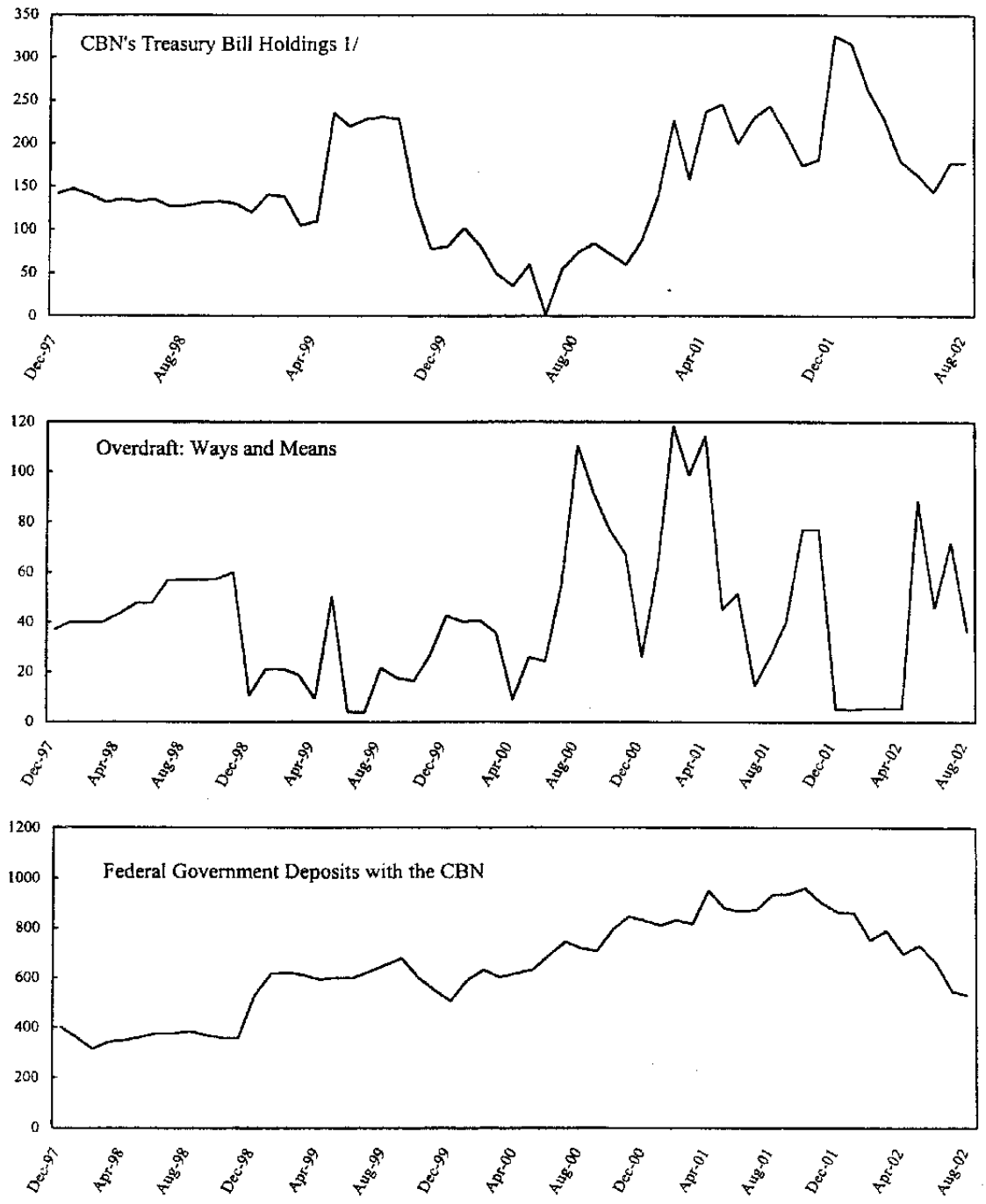
161. The CBN's financing of the fiscal deficit is another source of monetary expansion. As stipulated under the Central Bank of Nigeria Act, the CBN may grant temporary advances to the federal government to fill shortfalls in government revenues. The federal government can borrow on average up to 12.5 percent of the previous year's revenue (equivalent to N 80 billion in 2002, or 1.5 percent of GDP). This outstanding advance must be repaid by the end of the fiscal year (equivalent to the calendar year) in which it was extended. Failure to do so denies the federal government access to the CBN facility the following fiscal year.

162. However, the practice has been to automatically securitize the CBN outstanding advances into treasury-bills at the end of each year. Because interest rates are, at times, kept below market-clearing rate (see below), the CBN is forced to pick up the new amount of debt issued, although by law it is not required to do so. At end-2001, an additional N 119 billion in new debt was added to the previous stock. While not in violation of the CBN act, the practice of granting quasi-automatic extensions for the overdrafts and the high access limit to the overdraft facility allows for a significant monetization of the fiscal deficit. These factors also infringe on the CBN's ability to control money and suggest that the CBN may lack full independence. Consideration could be given to lowering the limit on the overdraft balance and to removing the CBN from its role as net buyer of government securities in the primary market. [55]

[55] Several countries have introduced restrictions or have passed legislation prohibiting central bank financing of the fiscal deficit. For instance, the overdraft limit in Mexico was set at 1½ percent of the budget, and the central bank can buy government paper only by placing bids at the primary auction for replacing maturing debt. See Fielding (1999) and Mehran and others (1998).

Figure V-6. Nigeria: CBN's Exposure to the Federal Government, December 1997– August 2002

(In billions of naira)

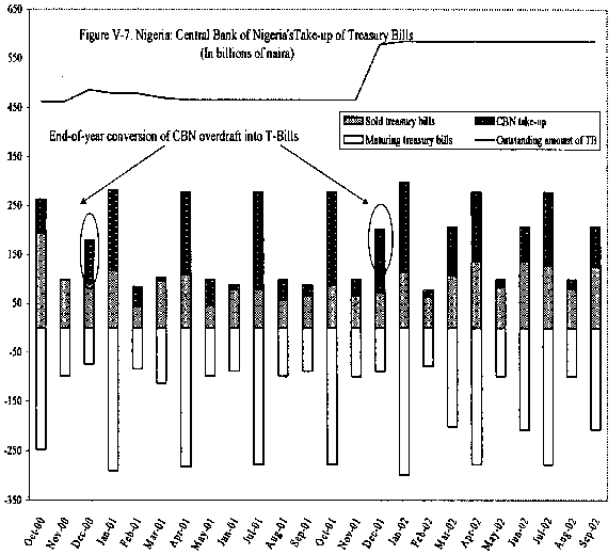


Source: Central Bank of Nigeria (CBN).

1/ Changes in the CBN's treasury bill holdings can be due to the CBN's take-up in the primary market, secondary market operations, outright sales/purchases, and repayment of treasury bills via the discount window. The CBN's holdings can also change through the practice of automatically converting the government's overdraft into treasury bills in the last month of the calendar year.

Fiscal agent of the government

163. Until recently, the CBN was responsible for managing the debt of the federal government. The responsibility has been transferred to a newly constituted Debt Management Office (DMO).[56] About 60 percent of the federal government's outstanding stock of domestic debt (N 1.01 trillion at end-2001) is structured in the form of 91-day treasury bills.[57] Most of the public debt is (or has been) held by the CBN. At end-2001, the CBN held about 60 percent of the government's outstanding stock of debt. The government's current domestic debt strategy has been to rollover the amount maturing on its 91-day treasury bills. The short-term nature of the debt implies that every three months, an amount equivalent to about one fifth of GDP comes due for repayment, and that the government borrows the same amount to pay off the maturing debt and interest payments.



164. The CBN has played the role of underwriter of government securities in the primary market, taking up the undersubscribed amount in the weekly primary auctions (Figure V-7). In order to keep borrowing costs low on the government's sizable stock of short-term debt (about 14 percent of GDP), the CBN has administratively set the stop rate—the rate at which it accepts bids. At this rate, the market has not always cleared, and then the CBN finds itself not only rolling over the maturing stock of treasury-bills that it holds but adding new treasury-bills that the financial institutions do not want to roll over at below-market-clearing rates to its outstanding stock of treasury-bills. This has increased net credit to the government and has expanded base money beyond desired levels. The CBN typically finds itself unable to unwind these transactions in the

[56] The DMO is operational although the draft legislation that proposes the creation of the DMO (the DMO Act) and the repeal of Article 34 of the CBN Act, dealing with the role of the CBN in debt management—is still being considered by the National Assembly.

[57] The rest of the public debt stock is held in treasury bonds and development stocks. Treasury bonds were introduced in 1989 as a means of avoiding payment of market interest rates. The bonds were issued at 5 percent. Given the low interest rates, investors did not purchase the bonds, and as a result, the CBN took up the entire issue. During the military era, bonds were issued whenever the government wanted to raising money at artificially low rates.

ensuing secondary open market operations in part because of thin trading, the narrow investor base, and the lack of interest (since the open market operation rates are tied to the below-market clearing rates set in the primary auction). The below-market rates in the primary market, aside from distorting the cost of capital, undermine monetary control.

165. The passage of the DMO act and the repeal of Article 34 of the CBN act—which deals with the role of the CBN in debt management—would be a step toward ending the CBN's past practice of automatically subscribing treasury-bills not taken up by the public. Other important reforms are being considered. These include: (i) restructuring of current maturities on 91-day treasury-bills to avoid the problem of bunching; (ii) establishing market-pricing mechanisms to remove distortions and attract new nonbank investors;[58] (iii) lengthening the maturities by restructuring the existing debts; and (iv) introducing alternative instruments, such as indexed bonds, to compensate for exchange rate or inflation risk. These reforms would not only help strengthen the government securities market, provide a basis for conducting open market operations, but also help improve the government's cash management. However, a well-functioning capital market can only develop in an environment supported by stable macroeconomic policies and a healthy banking system.

Banking sector soundness

166. The weak financial condition of the banking sector and the poor governance practice, are undermining the interbank market and financial intermediation, as well as the effectiveness of monetary policy. The large share of banks in financial distress has contributed to a segmentation of the interbank market, as healthy banks are unwilling to lend to the weak ones.[59] As a result, liquidity is unevenly distributed. Larger established banks typically hold excess liquidity and smaller, more distressed banks tend to experience liquidity problems. Poor governance practices, such as misreporting and systemic underprovisioning, have exacerbated this problem.

167. These factors and others, such as inefficiencies in operating the court system (delays and backlogs) and difficulties in foreclosing and collecting nonperforming loans, are among the factors contributing to the wide spreads and have led to financial disintermediation (as reflected in, for example, a low M2/GDP ratio and a large share of cash-driven transactions; see Figure V-8). This has hampered the ability of monetary policy to influence credit demand conditions and the real economy.

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[58] Given the limited number of private institutional investors and insurance companies, the CBN is often the major subscriber and holder of government securities. Only larger and healthy banks (with excess liquidity) and discount houses are underwriting the primary issues of the government.

[59] At end-2001, reported non-performing loans for the banking system amounted to 16 percent of gross loans.

Forecasting liquidity and money multiplier

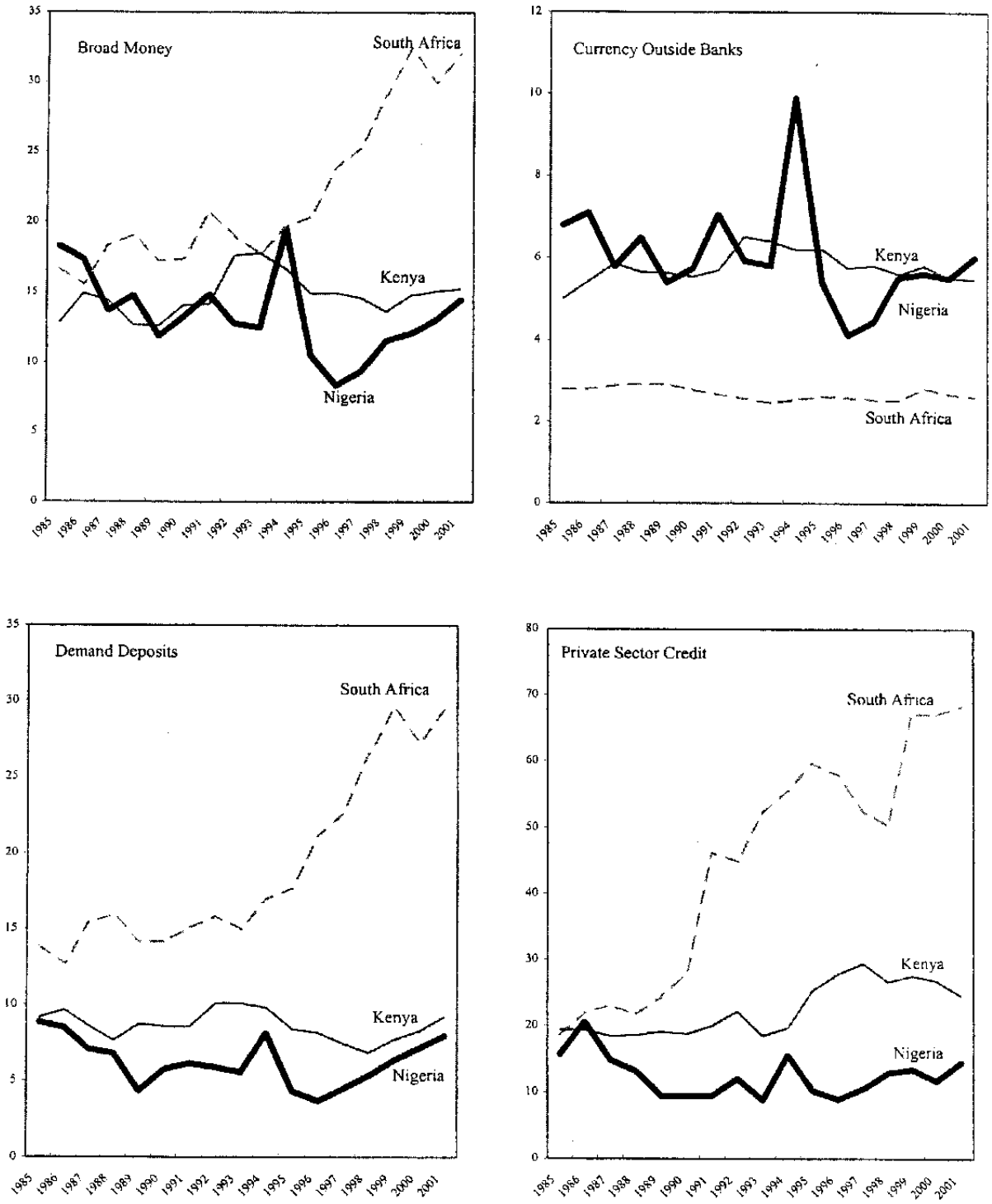
168. The transmission of monetary policy is a complex process operating through various channels, with long and variable lags. Understanding this channel is crucial to the task of appropriately designing and implementing monetary policy.

169. There are a few shortcomings in the area of forecasting. First, the CBN's liquidity projections are undermined by the government's inability to prepare accurate cash-flow and expenditure projections. Shortfalls in revenue can result in wide swings in the overdraft advances of the government with the CBN. Furthermore, the cash-flow, expenditure, revenue, and funding instruments of the government are neither regularly updated nor shared with the central bank on a timely basis. These are all essential elements of liquidity projections, since variations in the net government position account for most of the "autonomous" changes in money creation and expansion in bank liquidity.

170. The CBN's liquidity operations are also scattered across several instruments and markets (primary auctions, secondary open market operations, discount window and foreign exchange market). The use of multiple instruments and the ease with which banks can access the discount window place a huge burden on good coordination and centralization of liquidity information within the CBN. More restrictive access—by raising the cost of borrowing from the CBN above interbank rates and above treasury bill rates—could strengthen the CBN's control over the discount facility. The CBN also does not yet rely on formal models to estimate the demand for bank reserves, currency, and credit. Developing liquidity-forecasting abilities could improve the CBN's decisions on the amount of liquidity to inject or withdraw. Having good liquidity projections will allow for a centralization of information on all liquidity operations and the impact that these will have on bank liquidity.

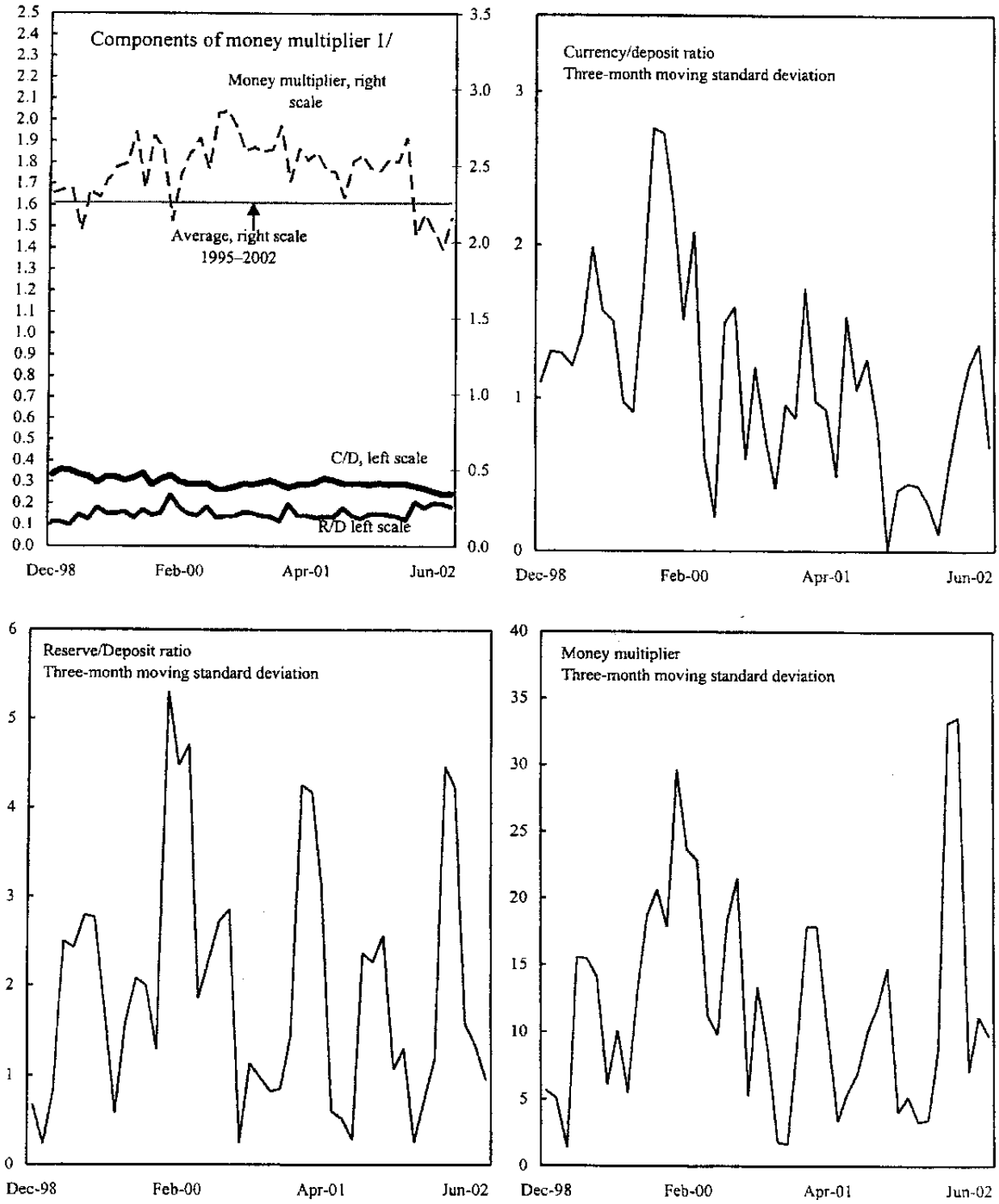
171. The authorities also need to be wary of structural changes that could affect the transmission mechanism. For instance, a greater reliance on indirect instruments, or an increase in the flexibility of the exchange rate, may alter the transmission mechanism. Also, the frequent changes to the LR and the CRR could alter the demand for reserves and affect the money multiplier, making it more difficult to target M2 (Figure V-9).

Figure V-8. Nigeria and Selected Comparators: Broad Money, 1985–2001
(In percent of GDP)



Sources: IMF *International Finance Statistics;* and Fund staff estimates.

Figure V-9. Nigiera: Developments in Money Multiplier, December 1998–August 2002
(Seasonally adjusted; in percent)



Source: Fund staff estimates

1/ C is currency outside banks; D is total deposits in the banking system (includes foreign exchange, time and savings deposits); and R is bank reserves held with the CBN.

172. To help strengthen its current liquidity management framework, the CBN is developing a small-scale macroeconomic model with key behavioral relationships. This can help policymakers understand the transmission channels, serve as a basis for policy discussions, and assist in supporting monetary and inflation forecasts. However, coordination and on-time information sharing between the CBN and the government would have to improve to enhance the CBN's ability to predict and meet its monetary base target.

E. Conclusion

173. While recognizing that the CBN operates in a difficult, volatile environment, there remains considerable room to improve the effectiveness of monetary policy in Nigeria. An increasing reliance on market mechanisms will be key to this improvement.

174. Moving to a more flexible exchange rate regime has enhanced the effectiveness of monetary policy. The CBN could consider introducing modalities that would improve the current operational framework—such as a restriction of access to the discount window, and greater reliance on secondary market operations, Among others, these steps would encourage banks to manage their liquidity positions more actively through the interbank market. Furthermore, strengthening banking soundness and bank's governance practices would encourage financial deepening, thereby enhancing the transmission channels of monetary policy.

175. Market-clearing interest rates on primary sales of government securities would also provide a better mechanism for making expansionary fiscal policies more visible to the public and for allocating capital in the economy. While this mechanism may raise the borrowing costs, the government would benefit from a better-functioning financial system. Over the medium term, the LRs and CRRs should be gradually lowered.

176. However, the mere setting of monetary targets and market mechanisms, and the enhancement of the CBN's operational effectiveness will not be sufficient to guarantee the achievement of price stability over a sustained period. Sound and predictable fiscal policies, based on implementing a fiscal policy rule, along with consistent exchange rate policies are essential for the successful operation of monetary policy and for development of functioning financial markets.

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VI. Trade and Openness Policies in Nigeria[60]

177. This section first briefly reviews trade performance in Nigeria, noting in particular the slow growth of oil exports since the 1970s and the marginal contribution of non-oil exports. Export promotion policies appear to have been, at best, ineffective. We then survey developments in tariff policies in Nigeria—where average tariffs are among the highest in the world—drawing attention to developments in relevant comparator countries. We also focus on nontariff barriers, trade-related exchange rate issues, and institutional factors affecting trade. A concluding subsection notes that, despite progress in recent years, Nigeria has lagged comparator countries in liberalization, and a more determined medium-term program of trade and exchange policy reform is warranted to spur faster non-oil export growth and associated income growth.

A. Developments in Nigeria's Trade

178. **Over the past two decades, Nigeria's export performance has weakened against broad comparator groups**. Nigerian export value growth peaked during the 1970s, when oil price increases coincided with a rapid volume increase of oil exports. Subsequently, the U.S. dollar value of total exports and oil exports increased at rates of between 2.3 percent and 2.9 percent per annum (decadal average growth for the 1980s and 1990s, Table VI-1). Export growth weakened relative to non-oil developing countries and to African countries during the 1980s and the early 1990s (Figure VI-1). Over the long term, unsurprisingly, Nigeria's export receipts are most closely correlated to those of developing country oil exporters.

179. **Oil and gas have accounted for 95 percent of Nigerian export value since the 1970s, and growth has been slow since the 1980s**. Oil export prospects depend significantly on the potential to expand Nigeria's OPEC quota faster than the increase of total OPEC supply, and on the ability of OPEC quotas to support trend increases in oil prices. In all likelihood, notwithstanding significant unused production capacity in Nigeria, the prospects for relaxing both oil export price and volume constraints are limited, particularly in view of the significant excess capacity across OPEC and subdued global demand. Therefore, Nigeria's export prospects may depend critically upon diversifying the export base away from oil and gas.

[60] Prepared by Christopher Lane.

Table VI-1. Nigeria: Long-Term Export Growth, 1971-2000 1/
(Average annual growth in U.S. dollars, in percent, unless otherwise indicated)

	Total	Oil and Gas	Non-Oil and gas	*Of which*:			
				Export agriculture 2/	Other agriculture 3/	Manufactures 4/	Other and unclassified
1971-1980	30.4	43.8	3.7	3.7	-0.7	8.3	18.2
1981-1990	2.4	2.7	-2.2	-2.9	-4.1	2.8	-4.5
1991-1995	2.3	2.3	2.3	0.0	6.6	3.4	2.3
1996-2000	2.9	2.9	2.5	1.1	4.1	2.0	6.9
Memorandum item: Average export value (millions of U.S. dollars)							
1996-2000	16,694	15,758	937	343	246	273	75

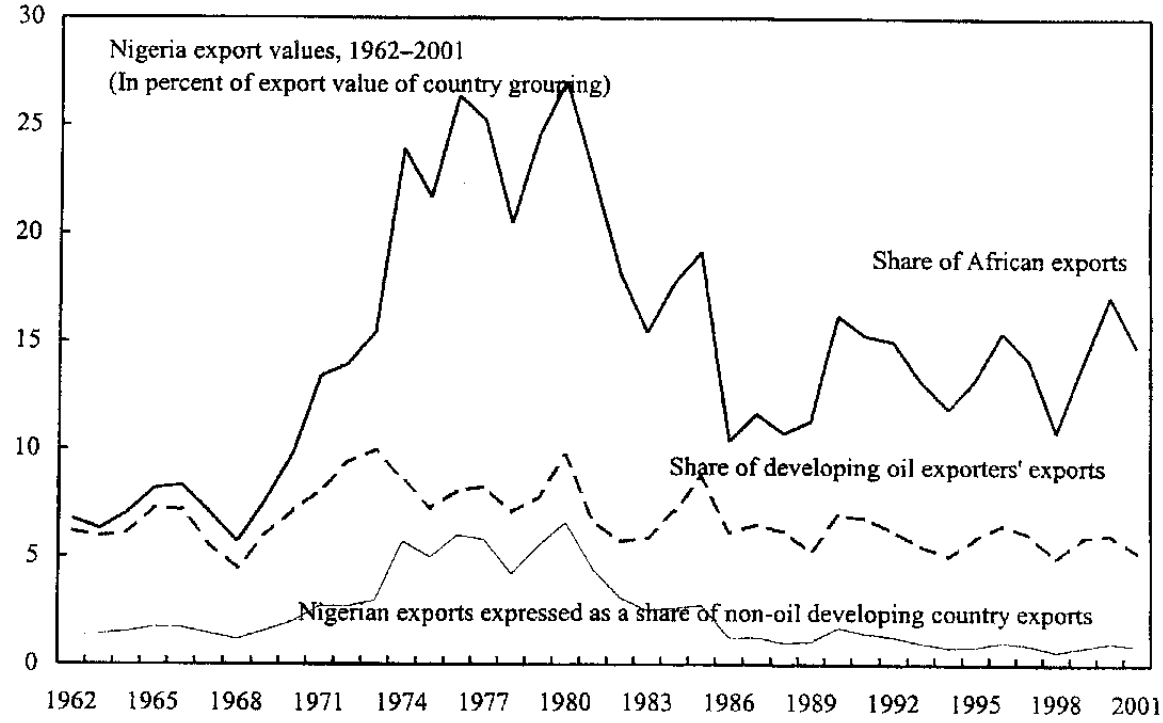
Source: World Bank, World Integrated Trade Solution (WITS) trade database.
1/ Using partner trade data. Growth expressed as annualized annual average of period average value, compared with previous period average value.
2/ Coffee, cocoa, spices, oilseeds, and rubber.
3/ Noncash crop agriculture.
4/ Principally manufactures and chemicals.

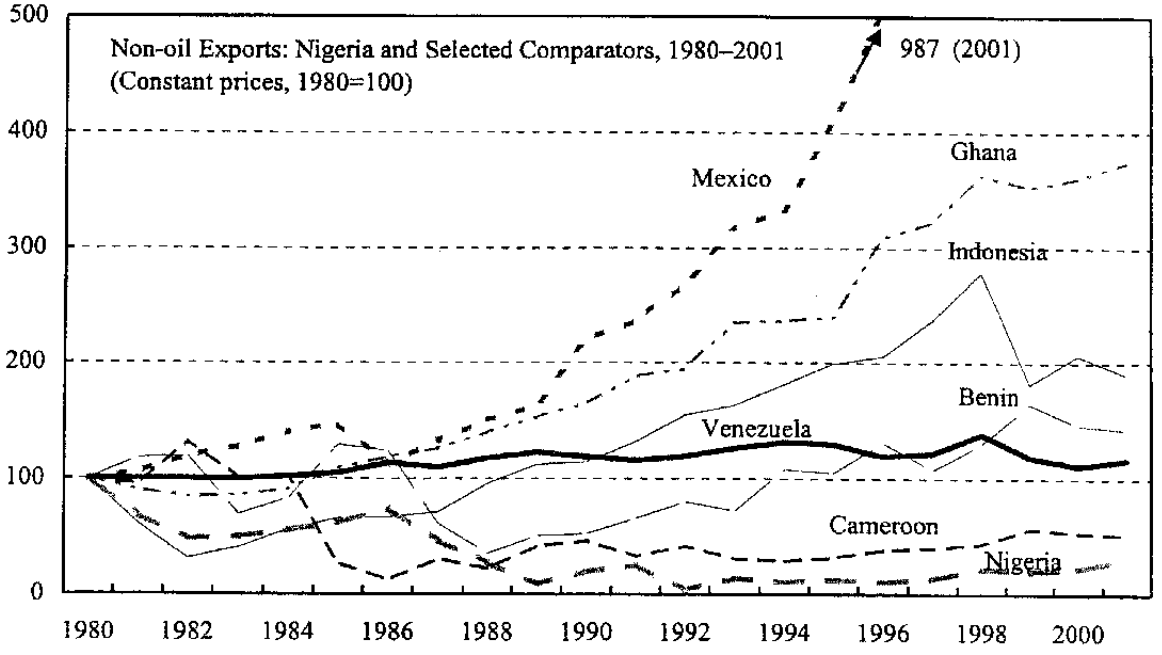
180. **Nigerian non-oil exports have a very small base for future expansion.** Non-oil exports have accounted for 5-6 percent of export value for the past three decades, equivalent to 2 ½ percent of GDP in more recent years (1996-2000). Traditional agricultural cash crop exports (2.1 percent of exports in 1996-2000) have faired poorly over the past 40 years; meanwhile, other agricultural products increased in importance during the 1990s (rising to 1.5 percent of export value), and manufactures have shown some promising recent growth rates, albeit from a small base (rising to 1.6 percent of export value).[61]

181. **From a comparative perspective, Nigerian non-oil export volumes have been disappointing**. The trend decline of real non-oil exports in Nigeria is also exhibited by some other African oil-exporting economies (Algeria, Angola, Cameroon, and Gabon). However,

[61] Export data shown in Table VI-1 are compiled from partner trade statistics. After adjusting for the c.i.f. factor, the value of non-oil exports is approximately double the value reported by the Central Bank of Nigeria. This may likely reflect informal border exports, as discussed in Bio Soule, *Prospects for Trade Between Nigeria and its Neighbors* (Paris: OECD, 2001).

Figure VI-1. Nigeria: Export Trends





Source: IMF, World Economic Outlook database.

oil exporters with large populations (a relevant comparator group including Indonesia, Venezuela, and most markedly, Mexico), have diversified their export base and seen real increases in non-oil exports. Another comparator group—or, alternatively, a control group—of nearby coastal west African states (Benin, Côte d'Ivoire, and Ghana) exhibits stronger non-oil growth than Nigeria. We now turn to a comparison of trade and exchange policies that help to explain the divergence of trade performance.

B. Export Policies

182. **Nigeria has a wide array of export facilitation and promotion policies that have not functioned efficiently in view of the non-oil export volume declines, and appear to be undermined by the exchange rate-related and institutional weaknesses discussed below.** The "manufacture in bond" scheme, which rebates 20 percent of export value (for selected exports), is used by about 200 companies to offset tax liabilities; however, few data are available to assess its magnitude or trade impact.[62] A duty drawback scheme, administered by customs, is reported by the authorities to be operating well and benefiting companies producing textiles, selected household products, food products, and leather products (no data are available on the operations of the scheme). There is one export processing zone in Calabar, and a second zone is envisaged in Port Harcourt; the authorities reported that four factories were operating in these zones. An export grant scheme has been introduced in 2002 in agriculture (5 percent on agricultural cash crop exports) but the take-up of the scheme has not been assessed. Similarly, trade facilitation measures are advancing slowly: the Economic Community of West African States (ECOWAS) Trade Liberalization Scheme (ETLS) has not been ratified in Nigeria, and requests for duty-free importation from ECOWAS states have to be approved by the Ministry of Finance; the ECOWAS interstate road transit convention has not been implemented; no progress has been reported on facilitating intra-ECOWAS trade (such as the removal of checkpoints and border posts, and visa–free travel to Nigeria); and the ECOWAS certificate of origin protocol has not been ratified by Nigeria. Without the use of these legal instruments, customs administration cannot effectively enhance trade with Nigeria's ECOWAS neighbors. Finally, as discussed below, export bans remain on a significant range of products.

C. Tariff Policy Developments

183. **During the 1990s, Nigeria lagged most countries in lowering import tariffs and tariffs remain among the highest in the world.** Tariff peaks above 40 percent protect much

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[62] Customs monitors the production of exports, and the bond is signed prior to export. When export proceeds are certified as repatriated by the exporter's bank and the export promotion council, an application for refund is made on a Central Bank of Nigeria MXP form. Rebates approved (20 percent of export value) are applied to future tariff payments. The rebate was increased from 10 percent to 20 percent in January 2001.

of domestic manufacturing. This subsection first discusses tariff protection in a cross-country context and then considers the tariff protection of domestic Nigerian producers.

184. **Tariff policies became more liberal in Nigeria in the mid-1990s, in part as a result of the country's impending accession to the World Trade Organization (WTO) in 1998.** Tariffs replaced some significant import bans (on maize, vegetable oils, gypsum, and household items), and there was a phased reduction of tariffs on a range of imports, particularly primary and intermediate goods, in the context of a five-year tariff schedule published in 1995 (although frequently amended thereafter). Some tariff peaks were eliminated, and the principle of equal tax treatment of domestic and imported goods was established (with the introduction of nondiscriminatory excises).

185. **Tariffs remain very high by international standards, and, since 2000, tariff policies have increased effective protection.** Tariffs on inputs have continued to decline, but tariffs on finished goods have increased, substantially in some cases. The trade-weighted tariff has declined marginally from 18½ percent to 17½ percent between 2000 and 2002 (using 2000 weights), but the simple average tariff has increased from 29 percent to 34 percent during the same period.[63] The simple average tariff, including other duties and charges, has increased to 37 percent, close to the highest tariff rate in the world.[64]

186. **A "tariff gap" has opened between Nigeria, on the one hand, and regional trade partners and selected oil exporters, on the other, as the latter have lowered tariffs more than Nigeria** (Figure VI-2). The tariff gap that has opened against ECOWAS and West African Economic and Monetary Union (WAEMU) partners results in part from progress in introducing common external tariffs in WAEMU and, to a lesser extent, in ECOWAS. For example, Benin has 4 tariff bands, at 0, 5, 10, and 20 percent. By comparison, Nigeria has more than 20 bands, rising to 150 percent. Both regimes employ tariff escalation, with the lowest tariffs on inputs, capital goods, and selected merit goods, and the highest tariffs on finished goods. Significantly lower tariffs in neighboring countries encourage informal transit trade, especially through Benin, thereby undermining revenues and the protective nature of tariffs.

187. **The tariff gap with Indonesia has widened markedly, as Indonesia pursued policies to lower import tariffs and diversify exports away from oil** (Figure VI-3). There has been a significant decrease in Indonesian trade weighted average tariffs over the past two decades: starting from a similar base as Nigeria's of close to 25 percent in the early 1980s, these tariffs fell to 3 percent in 2000. After some initial liberalization in the mid-1980s, meanwhile, Nigeria's trade weighted tariffs were increased to 34 percent in 1990 and were

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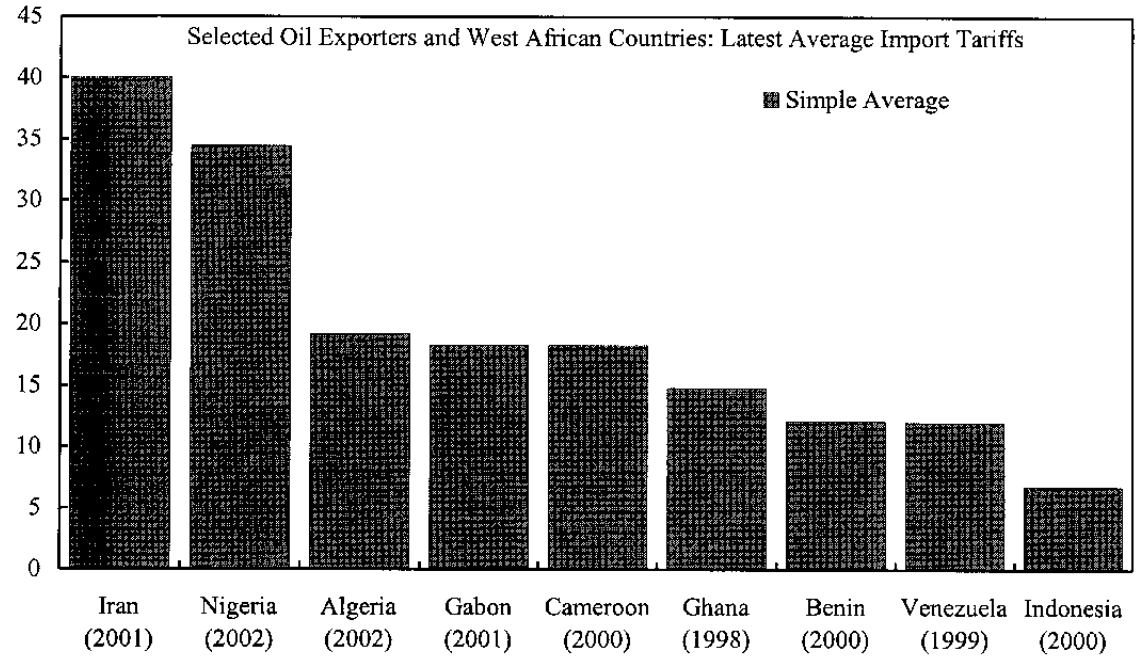
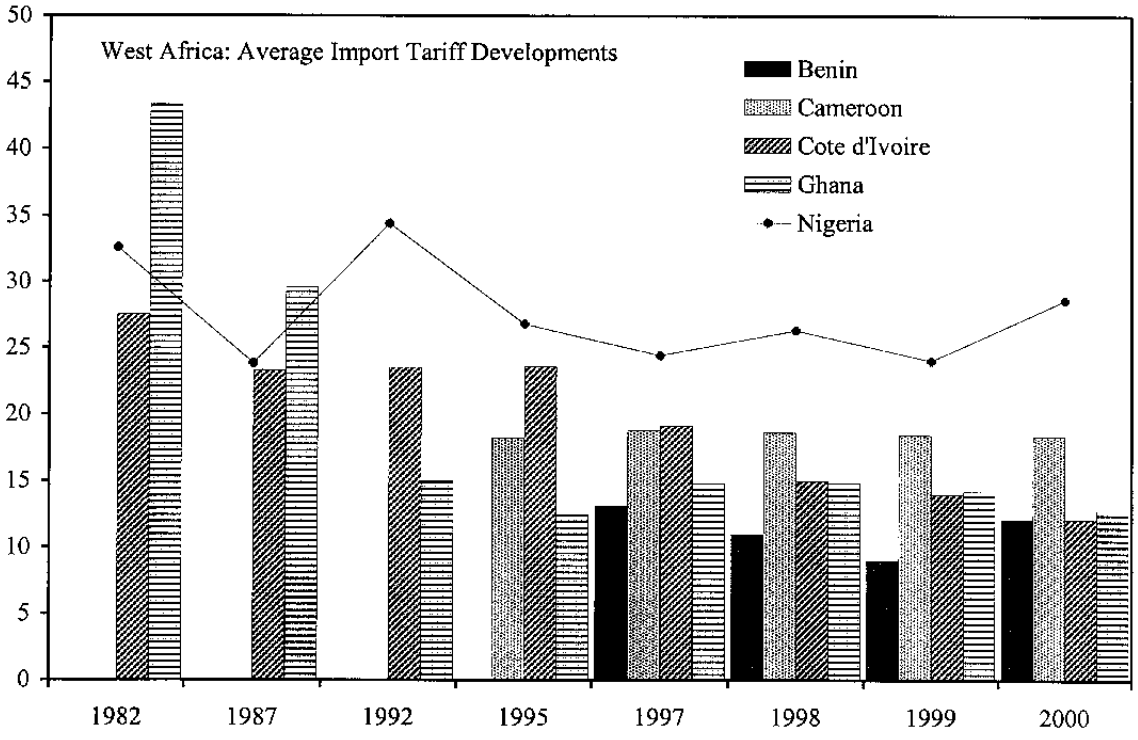
[63] Average of four-digit level tariffs, based on the approved changes in the 2002 budget and subsequent circulars.

[64] According to the latest available data on 183 Fund members, 11 countries have average tariffs, including other duties and charges, over 30 percent (Egypt, Morocco, India, The Bahamas, Burundi, Syrian Arab Republic, Tonga, Zimbabwe, Nigeria, and Comoros).

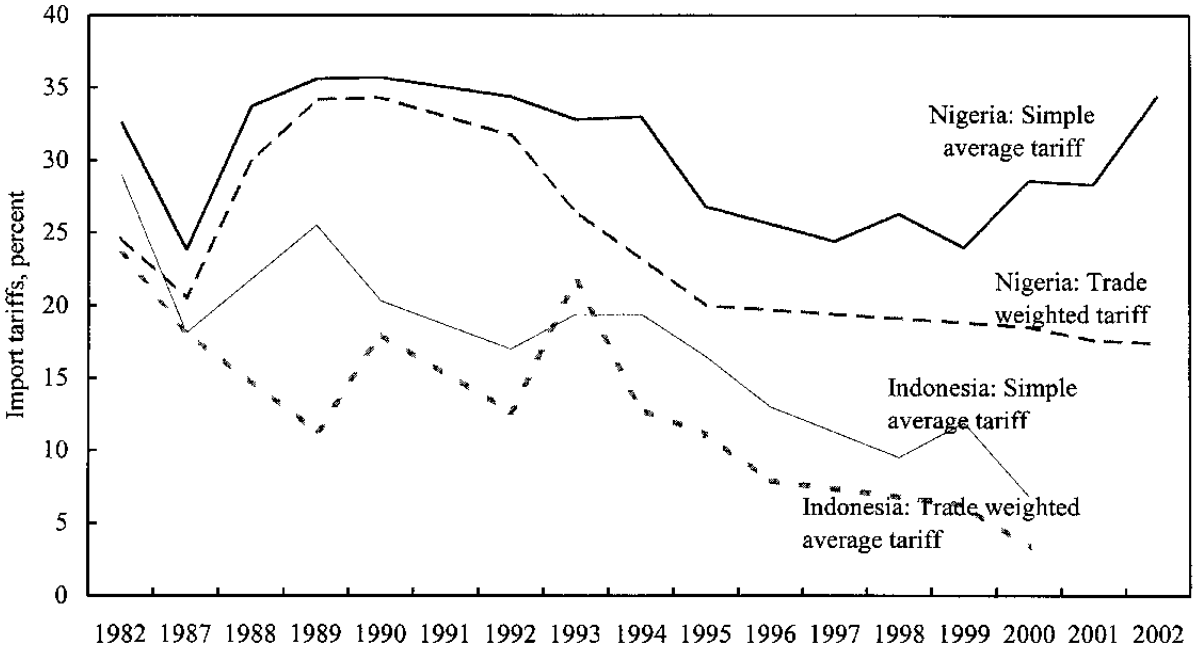
Figure VI-2. Nigeria: Import Tariff Comparisons





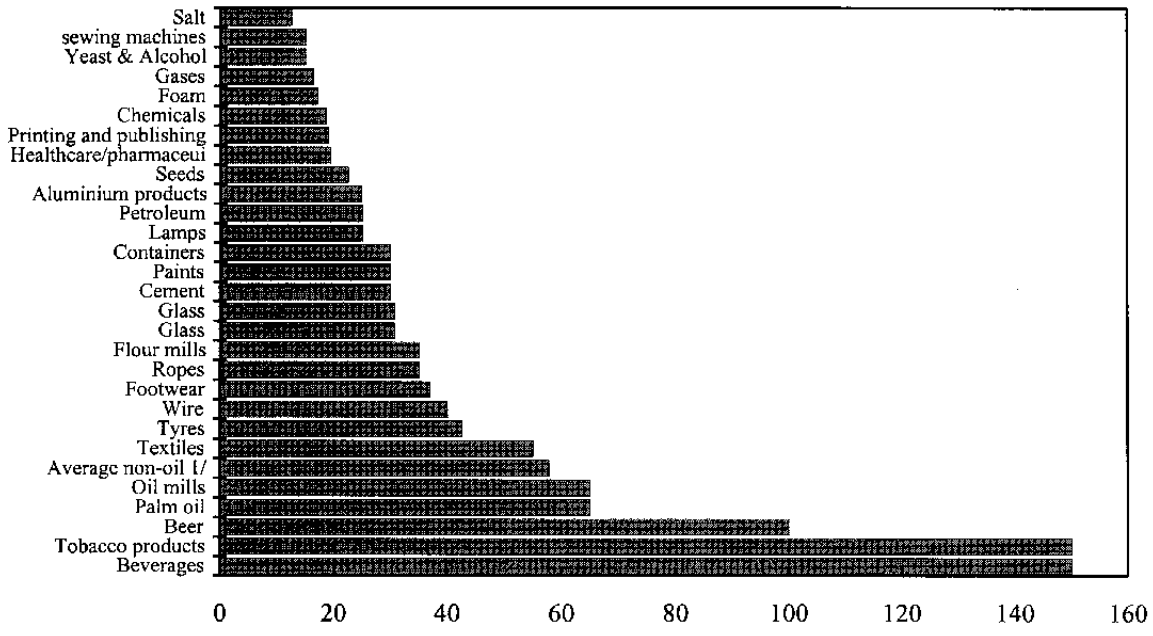
Sources: UNCTAD; WTO; and Fund staff calculations.

Figure VI-3. Nigeria and Indonesia: Import Tariff Developments, 1982–2002
(Import tariffs in percent)



Source: IMF staff reports drawing on WTO, UNCTAD and authorities' data.

Figure VI-4. Nigeria: Tariff Protection Estimates for Publicly Listed Companies



Sources: Nigerian Stock Exchange; Ministry of Finance; and Fund staff estimates.
Note: 1/ Weighted by stock market capitalization.

subsequently reduced to 17 percent, somewhat below the average of two decades ago. Developments in 2001 and 2002 have reversed, partially, the liberalizing steps taken around the time of WTO accession. The widening gap between trade weighted and average tariffs in Nigeria reflects prohibitively high tariffs on selected tariff lines, which effectively discourage imports, thus biasing average tariffs downward.

188. **The Nigerian authorities have given high tariff protection to finished goods while gradually lowering tariffs on raw materials and intermediate inputs (a practice known as tariff cascading).** Three-fourths of imports (by value) face tariffs of 20 percent or less (Table VI-2), and the trade-weighted average tariff has declined from 18.5 percent in 2000 to 17.4 percent in 2002, largely reflecting cuts on input tariffs. However, as discussed below, tariff cascading results in very high levels of effective protection for domestic producers.

Table VI-2. Nigeria: Imports by Tariff Band, 2002
(In percent)

Tariff Range		Share of 2000 Imports
From	To	In Tariff Band
0	5.0	18.6
5.1	10.0	23.2
10.1	15.0	22.6
15.1	20.0	12.0
20.1	25.0	8.0
25.1	30.0	6.9
30.1	50.0	4.8
50.1	100.0	3.6
100.1	150.0	0.3

Source: Ministry of Finance; and COMTRADE database.

189. **Large domestic manufacturers in Nigeria enjoy particularly high protection and this may be a key factor in explaining the weakness of non-oil exports** (Figure VI-4). Most large companies in Nigeria produce finished goods using imported intermediate inputs. A good measure of overall tariff protection for domestic producers is the tariffs applied to the finished products of publicly quoted tradable goods listed on the Nigerian Stock Exchange, weighted by market capitalization. This measure indicates that the average protection on finished goods is 58 percent, excluding the oil sector, in 2002, an increase from the 49 percent registered in 2000. The high tariffs reflect the predominance of breweries and food, beverage, and tobacco firms in the capitalization of the stock market and their applicable tariffs, in the range of 82-100 percent. The high tariff protection for domestic producers suggests that either profit margins are particularly wide or that domestic producers are not cost competitive against foreign producers. With a few exceptions, the lack of exports

from domestic finished goods manufacturers suggests that lack of price competitiveness is the major factor.

190. **A more appropriate tariff structure for Nigeria would appear to be one with low, uniform, and nondiscriminatory rates.** Nigeria's medium-term policy objective of achieving regional trade integration through the adoption of a common external tariff with ECOWAS would mark a move in this direction, even though the country would retain a fairly high maximum tariff of 20 percent on finished goods while also discriminating in favor of regional producers. The liberalization would most likely be more significant vis-à-vis the rest of the world than with regional trade bloc partners, in view of the significant external tariff reductions entailed; much of the intraregional trade already appears to be evading customs procedures, as evidenced by the underreporting of Nigerian exports. Moreover, participation in ECOWAS does not represent a strong boost to competition overall, as the region has also lost a significant market share to other non-oil developing countries since the 1980s. This strategy might be complemented by the use of duty drawbacks for exporters of capital and intermediate goods, although the experience with such schemes in Nigeria has not been proved effective.

191. **Given the scale of the tariff reductions needed in some sectors to converge with the common external tariff of ECOWAS, a medium-term tariff reform would need to be complemented by actions to enhance productivity growth.** Figure VI-5 shows an indicative schedule of tariff reduction for 2002-07 aimed at converging with the ECOWAS common external tariff and focusing on goods produced by large, publicly listed firms. Complementary policy actions that could be taken to enhance competitiveness would include exchange rate adjustments, institutional reforms, and structural reforms; these actions would cut costs especially in ports, and in the roads and power sectors. These issues are discussed below.

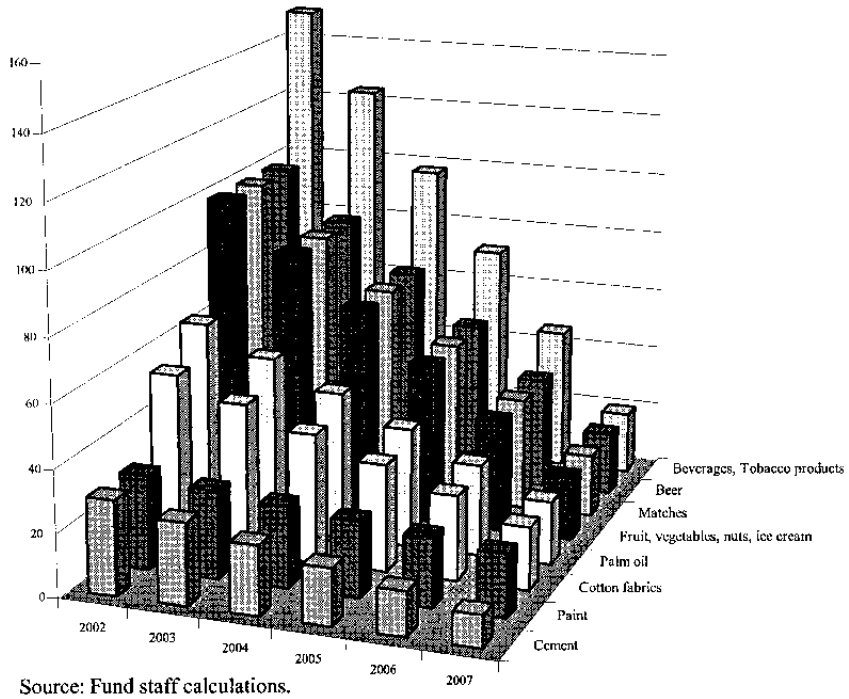
D. Nontariff Barriers (NTBs)

192. **Despite progress made in the context of accession to the WTO toward reducing import and export restrictions, Nigeria retains a number of significant barriers.** Although NTBs have been reduced significantly in Nigeria since 1995, a significant proportion of agricultural production remains subject to trade prohibitions, particularly import or export bans (Table VI-3). Some import prohibitions have been replaced with high tariffs, in line with Nigeria's WTO commitment to eliminate trade prohibitions by 2001.[65] Nonetheless, a significant proportion of trade remains affected by NTBs: 41 percent of staple food production and 15 percent of nonstaple food production are subject to export or import prohibition, and the export of timber is prohibited (except one species). Policy reversals, such

[65] Export prohibitions on cassava, the largest staple crop, rice, and beans were removed in 1995, and on beer in 1998. Import prohibitions that have been removed include maize (1999) and vegetable oils (1999).

as in the recent case of the reintroduction of the import ban on printed fabrics, send confusing signals to domestic producers.

Figure VI-5. Nigeria: Tariff Convergence with ECOWAS
(Indicative schedule for selected domestically produced products; tariff rate in percent)



Source: Fund staff calculations.

Table VI-3. Nigeria: Selected Export and Import Prohibitions, 2002

Prohibited Imports	Prohibited Exports
Millet and sorghum	Rawhides and skins (including unfinished leather)
Wheat flour	Yam tubers
Printed fabrics	Palm kernels
Used refrigerators, air conditioners, and Compressors	Timber and unprocessed wood, except Gmelina
Vehicles over 5 years old	Scrap metal
Selected spirits	Unprocessed rubber
Secondhand clothing	
Meat (excl. poultry)	
Textile materials containing hazardous chemicals, such as chloride	
Bulk vegetable oil	

Source: Ministry of Finance.

193. **Nigeria's NTBs are generally higher than those in neighboring countries.** IMF staff assessments of the restrictiveness of NTBs for Nigeria and selected comparator countries are shown in Table VI-4. Compared with francophone west African neighbors, Nigeria's NTBs appear more restrictive, which suggests potential problems in enhancing regional trade integration. But a broader comparison with oil exporters indicates that trade restrictions are a fairly common occurrence and perhaps underscores Nigeria's similar overall trade performance to that of developing country oil exporters. Perhaps surprisingly, Indonesia had until recently a fairly restrictive set of NTBs, which began to be dismantled only in the years after the Asian crisis; however, Indonesia's restrictions were not generally

Table VI-4. Nigeria and African and Oil Exporter Comparators: Nontariff Barriers, 2002

Country	IMF NTB Rating 1/	Comments
Nigeria	2	Import and export prohibitions.
Benin	1	State trading in cotton liberalized in 1999.
Cameroon	1	Export ban on timber and logs.
Chad	1	No significant NTBs.
Ghana	2	Significant nontariff charges.
Niger	1	Some licensing for petroleum products, carbonated drinks, beer, and printed wax cloth.
Algeria	1	Ban on used vehicle imports.
Angola	1	No apparent NTBs. Trade licensing removed prior to July 2000.
Bahrain	1	No significant NTBs.
Brunei	2	Export licensing rice, salt, sugar, and alcohol. Import ban on concrete. Restrictions on import of salt, sugar, and rice.
Equatorial Guinea	1	Export taxes.
Gabon	1	No significant NTBs.
Iran	3	Import restrictions for protective purposes, discretionary tariff exemptions, tight foreign exchange restrictions, restrictive licensing requirements for some imports, and positive list for import and export licensing. State trading monopolies.
Oman	2	Seasonal bans on fruit and vegetable imports, imports of eggs and milk.
Trinidad and Tobago	2	Quantitative restrictions and licensing for livestock, meat, fish, sugar, oils and fats, and vehicles.
United Arab Emirates	1	No significant NTBs. Some import licensing requirements.
Venezuela	2	Bans on agricultural goods, used tires, clothes, and cars. Variable duties on 142 lines. Reference prices on textiles and footwear.
Indonesia	2	Quantitative restrictions on goods and exclusive import rights. In 1998 NTBs affected 10 percent of imports, 40 percent of non-oil exports, including rubber and timber and 30 percent of production. In 1999 NTBs on rice and sugar were replaced by high tariffs.

Source: IMF, based on Article IV staff reports.

1/ 1= not restrictive; 2 = restrictive; 3 = highly restrictive.

intended to address the overvaluation of the exchange rate. Nigeria also has relatively high nonduty charges on imports that augment tariff protection.[66]

E. Trade-Related Exchange Rate Issues

194. **In Nigeria, a segmented exchange market remains a major impediment to openness.** A history of fixed or inflexible exchange rates with generally high inflation has caused periods of very significant exchange rate misalignment, dating back to the 1970s. The public sector allocation of foreign exchange at an overvalued official rate fostered a multiple exchange rate system, including parallel markets. This also arguably led to other trade policy interventions through tariffs and NTBs to protect domestic producers from otherwise uncompetitive exchange rates. From 1993 through end-1998, parallel market premiums were high, often over 100 percent. Following the devaluation at end-1998 and the adoption of a more market-oriented exchange rate arrangement, the parallel premium has been reduced but remains significant (7.2 percent in 1999, 9.0 percent in 2000, and 18.3 percent in 2001) and still acts as an effective tax on legitimate exporters.[67] The introduction in July 2002 of a Dutch auction in the foreign exchange market has underpinned a narrowing of the premium to under 10 percent. The ongoing liberalization of other countries' exchange rate systems, for example, the recent exchange rate unifications in Pakistan and Iran, means that de facto multiple exchange rate arrangements are now confined to relatively few developing countries—primarily those with extensive state control or in situations of civil strife. Nigeria thus appears increasingly an outlier in maintaining a segmented exchange market.[68] Progress in reducing tariff peaks, NTBs and institutional bottlenecks would assist in eliminating the remaining exchange market premium.

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[66] The main charges are as follows: a port surcharge of 7 percent of duty (equivalent to 2.3 percent of the simple average tariff); an administrative charge of 1 percent of f.o.b. import value for preshipment inspection; ECOWAS community levy of 0.5 percent of import value; and product-specific levies on cars (2 percent) and sugar (5 percent).

[67] Exporters are required to sell export proceeds at the export proceeds rate, which is similar to the interbank rate.

[68] Countries with segmented exchange markets in 2002 include Afghanistan, Cambodia, Laos, Mauritania, Myanmar, Sierra Leone, Somalia, Syria, Turkmenistan, Uzbekistan, and Zimbabwe.

F. Institutional Factors[69]

195. **The positive impact of trade and exchange system policy reforms could be undermined by significant weaknesses in the institutional arrangements underpinning trade**. While a survey of legal, regulatory, and supervisory procedures is beyond the scope of this section, observers cite numerous institutional impediments to trade that are more formidable than in most developing countries. Key issues highlighted are the following:

- **Slow and costly customs clearance**, in part resulting from the 100 percent destination inspection, which is a particular impediment to trading perishable goods. Import clearance takes 10-25 days and export clearance 7-10 days. The cost of clearance of a container in Lagos ports is estimated to be US$200, three times the cost at any other West African port.

- **Weak customs control and enforcement**. Antismuggling efforts are weak, with no well-resourced units patrolling border areas. Nigeria does not have an effective visa system to prevent unlawful transshipment and the use of counterfeit documents. Such a visa regime is required for apparel and textile preferences under the U.S. African Growth and Opportunity Act (AGOA).

- **Sometimes or often an arbitrary approach in application of standards, labeling, testing, and certification regulations.**

- **Burdensome and costly bureaucratic procedures.** For example, seven agencies have the power to inspect imports and exports in ports, and there are excessive documentation requirements for permission to import, and thereby obtain foreign exchange.

- **Ineffective patent and trademark protection**, although some recent intellectual property rights cases have been successfully prosecuted in Nigeria.

- **Weak contract enforcement and due legal process**.

196. **Medium-term trade policy reform would be buttressed by a strengthening of relevant trade-related institutions**. Such an effort would address morale, training, and funding. Key agencies involved include: customs administration, the trademarks office, port authorities, the National Agency for Food and Drug Administration and Control, and commercial courts.

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[69] This section draws upon the U.S. government's annual publication *Foreign Trade Barriers*, available via the Internet at www.ustr.gov. See also "An Assessment of the Private Sector in Nigeria," (unpublished; Washington: World Bank, 2002).

G. Conclusions

197. **There is a broad policy agenda for enhancing Nigeria's trade and non-oil export growth prospects.** Policies to facilitate and promote exports would benefit from rationalization and simplification. Actions to narrow and then eliminate the tariff gap with neighboring countries and other competitors would be a significant step forward, such as the proposed medium-term regional trade integration with ECOWAS, which would eliminate tariffs within the region and substantially lower external tariffs. A longer-term goal of uniform, low, and nondiscriminatory tariffs should also be considered.

198. **In order to achieve such a result, a new medium-term program of tariff liberalization is urgently needed to replace the current ad hoc practice of tariff adjustment**. The distortions created by NTBs and nonduty charges remain significant, and would appear to hamper a wide range of non-oil exports and raise the cost of imports; a dispassionate review of the costs and benefits of NTBs would therefore be appropriate.

199. **A flexible and unified exchange rate would help to address the competitive pressures of trade liberalization**, and to offset the residual trade policies that inhibit trade.

200. While somewhat beyond the scope of this analysis, **a parallel strengthening of institutions dealing with trade issues would be beneficial**, including a lighter, more evenly applied regulatory hand, by allowing economic incentives to guide investment, production, and trade decisions. Strengthened institutions would also help exporters avail themselves of already existing incentives, such as the incentives granted in the 2000 U.S. African Growth and Opportunity Act and the Generalized System of Preferences, and would accelerate the removal of bureaucratic obstacles to intraregional trade.

201. **Trade liberalization would also strengthen institutions** by reducing the scope for discretionary rents that are associated with access to the parallel exchange market, duty concessions, and/or tax evasion, and that are encouraged by prohibitively high tariffs or trade bans.

VII. Debt Sustainability Analysis[70]

202. **This section considers the prospects for achieving external debt sustainability in Nigeria against a background of 20 years of arrears accumulation, debt restructuring, and rescheduling.**[71] In recent years, Nigeria has limited its cash debt-service payments to levels comparable to or somewhat lower than those of developing country oil exporters, sub-Saharan countries and African Heavily Indebted Poor Countries (HIPCs), while discriminating among its creditors and continually accruing new arrears. As a result, most international financing sources are closed to Nigeria, and debt-service payments have not significantly reduced the level of debt.

203. **Two illustrative rescheduling scenarios are presented**, neither of which is meant to suggest or prejudge a particular outcome for any future debt-restructuring agreement that Nigeria may enter into with its external creditors. The scenarios are based on achievement of ambitious growth rates, which would require implementation of a wide range of appropriate macroeconomic, structural, and governance measures over an extended period, and somewhat higher cash debt-service payments than made in recent years. Preferred creditors (multilaterals) hold a relatively small share of Nigeria's debt, and most of the remaining debt is eligible for Paris Club-type rescheduling. The analysis concludes that a single concessional flow rescheduling would only provide stopgap debt relief. A concessional stock-of-debt operation could provide a comprehensive solution to Nigeria's long-standing debt problems in a good policy environment.

A. The Origin and Development of External Debt in Nigeria

204. **The origins of Nigeria's external debt problems date back to policies pursued during the 1970s oil boom,** that led to extreme vulnerability to downturns in the oil price. Successive governments emphasized heavy investment in public works, primarily aimed at building import-substituting industries. Public investment was financed by oil export earnings, some domestic financing, and relatively modest external borrowing, primarily from multilateral and bilateral sources. The exchange rate was fixed to contain external inflationary pressures. Over time, the real effective exchange rate appreciated substantially as demand pressures raised prices of nontradable goods. The appreciated exchange rate biased domestic investment in favor of projects that were capital intensive and relied heavily on imported inputs, while agriculture suffered as the rate of return to farmers fell.

205. **In an environment of poor governance, dwindling external finance, and infrastructure deficiencies, a majority of the projects financed by public borrowing**

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[70] Prepared by Christopher Lane.

[71] This section extends the debt sustainability analysis in IMF Country Report No. 01/131, 8/6/01 (available via the Internet: http://www.imf.org) by lengthening the period analyzed from 2010 to 2020, and considers a wider range of rescheduling options and sensitivity tests.

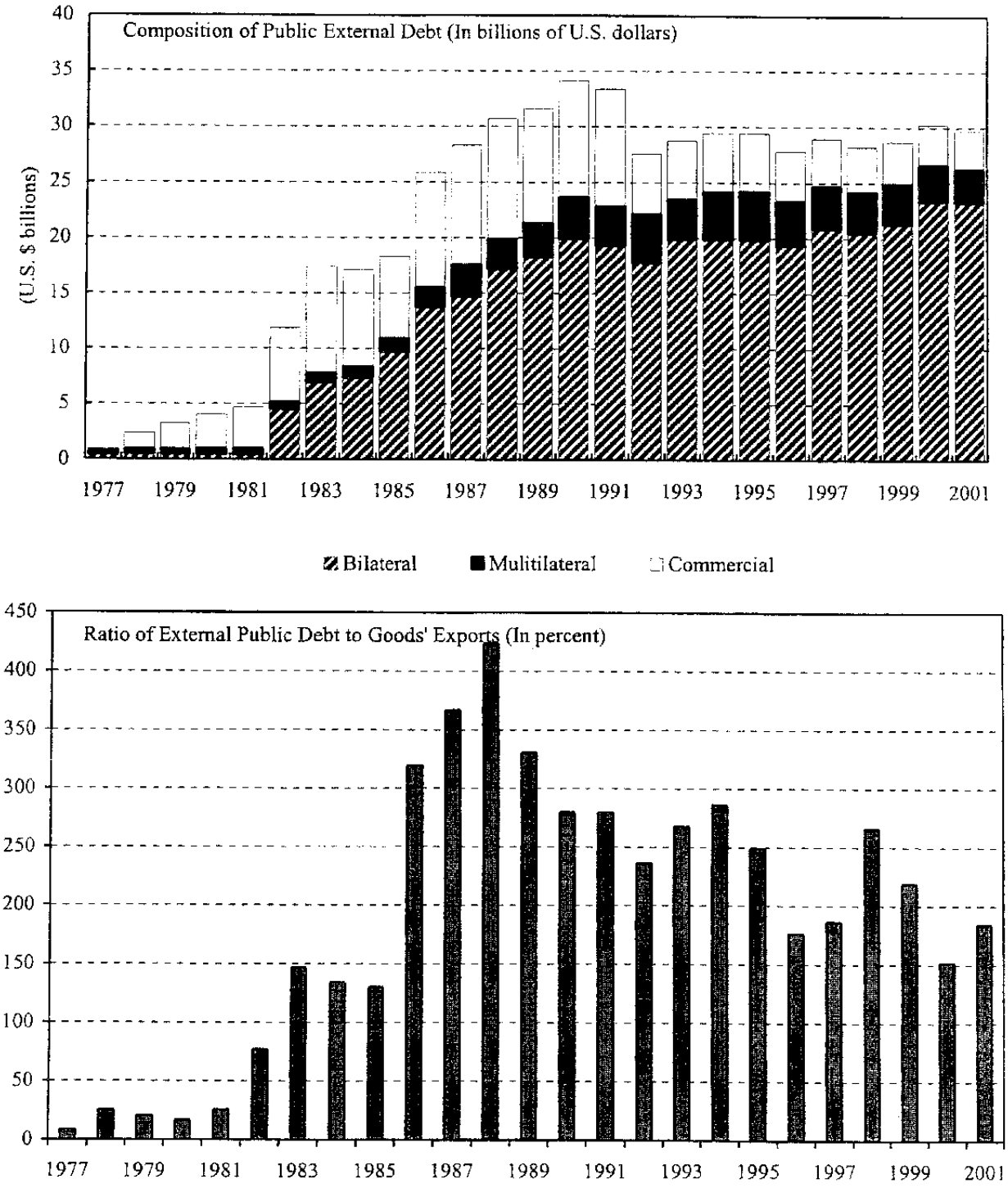
during the late 1970s and 1980s have failed. A study carried out by the Federal Ministry of Finance in 1996 of commercial external loans from bilateral and commercial creditors (amounting to about 70 percent of external debt outstanding in 1996) has documented in detail problems encountered by externally financed projects.[72] Typically, loans were incurred by state governments with federal guarantees, and the lender obtained insurance from an official export credit agency. Many of the projects have not been completed, owing to cost overruns or lack of finance, as external lending was progressively reduced during the 1980s. Of those projects completed, many are inoperative owing to a lack of power or other missing links in the manufacturing sector. Completed physical and social infrastructure has typically been neglected through nonexistent or inadequate maintenance. In some cases, imported goods financed by loans could not be located. No significant project that was completed and documented by the official study appears to have generated foreign exchange-denominated sales. The authorities have taken note of past deficiencies in project management and now apply a due process test to many federal-financed capital projects. However, much remains to be done at the state level of government.

206. **Most of Nigeria's external debt was contracted in the 1980s.** Oil export receipts declined by over 50 percent between 1980 and 1982 (from US$24.9 billion to US$11.9 billion) and then by half again in 1986 (to US$6.4 billion) on account of lower world prices and smaller export volumes. The majority of Nigeria's external public debt was accumulated in the 1980–86 period, during the civilian Shagari and military Babangida administrations, when the debt stock (including late interest) increased five-fold from US$5 billion to US$25 billion. Over this period, the debt service-to-exports ratio increased from 6 percent to 72 percent, and the ratio of external debt to goods exports increased from 17 percent to 320 percent (Figure VII-1).

207. **From 1982 on, restrictions on access to foreign exchange led to the accumulation of arrears and the successive rescheduling and restructuring of trade credits and commercial bank debt.** A policy of prioritizing payments of medium- and long-term credits, including through the centralized allocation of foreign exchange, led to the accumulation of arrears on short-term trade credits, particularly in 1982-83 and 1986. The federal government offered promissory notes issued by the Central Bank of Nigeria (CBN) and guaranteed by the federal government for eligible uninsured trade credits in 1983. The promissory notes were restructured in 1988, with a face value of US$4.9 billion. Insured claims were assumed by the federal government as debts to Paris Club creditors. Debts to London Club banks were restructured in successive agreements reached in 1984, 1987, 1989,

[72] Federal Ministry of Finance, "Report of the Evaluation of Projects Financed with International Capital Market Loans/Credits by Federal and State governments, March-July 1996," (unpublished; Abuja: Federal Ministry of Finance, 1996). No studies of projects financed with concessional credits or domestically are available.

Figure VII-1. Nigeria: External Public Debt Developments, 1977–2001



Sources: Fund staff estimates; and WITS trade database.

and 1992. The final agreement in 1992 involved a debt-reduction operation in which the Nigerian authorities bought back US$3.4 billion commercial debt at a 60 percent discount (i.e. eliminating US$2.0 billion and paying off US$1.4 billion), exchanged an additional US$2.0 billion at par for collateralized par bonds maturing in 2020 (also known as Brady bonds), paid US$0.4 billion in arrears, and paid US$0.2 billion for principal collateral. Overall, the debt-reduction operation reduced London Club bank debt from US$5.8 billion to US$2.0 billion, including payments by Nigeria of US$2.2 billion, and reduced significantly Nigeria's total debt stock.

208. **Nigeria also agreed to several nonconcessional reschedulings with Paris Club creditors, beginning in 1986.** Reschedulings took place in 1986, 1989, and 1991 during Stand-By Arrangements with the Fund, rescheduling in total US$14 billion of arrears and eligible medium- and long-term debts.[73] In the context of continued weak oil prices and the authorities' payment priorities, reschedulings were followed by renewed arrears accumulation, and the overall debt stock continued to rise as late/penalty interest was added to the debt stock.

209. **From 1992, Nigeria's external debt stock stabilized as debt-service payments were broadly equivalent to total interest due.** The authorities limited actual debt-service payments to a ratio of net oil revenues. As a result, arrears increased sharply in years when oil revenues declined, such as 1994-95. The authorities also sought to remain current on debt service due to the largest commercial creditors (par bonds and promissory notes) and to multilateral creditors (principally the World Bank and the African Development Bank Group) and did not pay official bilateral creditors. This prioritization led to a gradual increase in the share of bilateral debt in total external debt to almost 80 percent by 2002, almost entirely on commercial terms. Nonetheless, debt indicators on balance have improved over the past decade as the average oil price—and, in parallel, government revenue and GDP—rose from its low level in the second half of the 1980s.

210. **In light of its continued debt-servicing difficulties Nigeria's access to new credits has remained extremely limited over the past decade.** Access to bilateral credits was cut off, and lending from commercial creditors has been minor, very sporadic, and at market interest rates. Beginning in 1993-94, the African Development Bank and the World Bank lent to Nigeria on concessional terms, with total disbursements of about US$850 million over the period to 2001 (about 3 percent of total debt outstanding at end-2001).

211. **Following democratic elections in 1999, the Obasanjo administration sought to normalize relations with creditors.** Following approval of a Stand-By Arrangement in July 2000, Nigeria reached agreement with the Paris Club in December 2000 on a fourth nonconcessional rescheduling of almost the entire stock of Paris Club debt outstanding.

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[73] The 1986 rescheduling covered maturities on public and publicly guaranteed debt with an initial term of at least one year contracted before end-October 1985, and arrears outstanding at end-September 1986.

Arrears of US$21.3 billion—representing over 90 percent of the total debt to the Paris Club—and maturities falling due in the period August 2000-July 2001 of US$ 0.3 billion were rescheduled.[74] Bilateral agreements have been completed with only three of the fifteen Paris Club creditors, in respect of about 13 percent of the debt rescheduled, but discussions are advanced with several other large creditors. Two agreements fix interest rates for the remainder of the loans, thereby lessening the likely volatility of future debt-service obligations. Table VII-1 shows the impact of the rescheduling on debt-service payments due.

Table VII-1. Nigeria: Debt-Service Ratios, 1999-2002 [1/]
(In percent, unless otherwise specified)

	1999	2000	2001	2002 Proj.
Debt service, due before rescheduling/exports of goods and nonfactor services	30	15	17	18
Debt service, due after rescheduling/exports of goods and nonfactor services	30	8	13	18
Debt service, paid/exports of goods and nonfactor services	12	8	11	6
Debt service due/ consolidated government revenue excluding grants (after rescheduling)	38	18	13	17
Debt service/GDP (after rescheduling)	11	4	6	7
Debt/GDP	87	72	70	71
NPV debt/exports of goods and nonfactor services 2/	226	189	158	155
Debt/consolidated government revenue excluding grants.	299	160	149	177
Debt service due after rescheduling (in millions of U.S. dollars)	4,140	1,714	2,501	2,937
Debt service, cash (in millions of U.S. dollars)	1,715	1,714	2,128	1,021
Public external debt stock, end of period (in millions of U.S. dollars)	31,895	30,233	29,683	30,393

Sources: Ministry of Finance; Debt Management Office; and staff estimates.
1/ Data for debt service exclude arrears.
2/ Three-year moving average of exports of goods and nonfactor services.

[74] The agreement consolidated arrears of $21.3 billion at end-July 2000 and maturities falling due between August 2000 and July 2001 of $0.3 billion, capitalized moratorium interest of US$1.8 billion, and deferred post-cutoff-date arrears as of end-2000 of $0.6 billion. Rescheduled amounts are payable on Houston terms (an 18-year maturity, including 3 years' grace for commercial credits, and a 20-year maturity including a 10-years' grace for the small amounts of official development assistance (ODA) debt), except for US$3.6 billion payable on an accelerated schedule until 2009 to level up payments to creditors since the 1991 rescheduling, and in respect of a capitalized moratorium interest of US$1.8 billion that is payable over the 2002–06 period.

212. **Through end-2002 Nigeria has been accumulating new arrears on external debt-service payments**. These total approximately US$2.3 billion, principally to the Paris Club on pre- and post-cutoff-date obligations and to non-Paris Club bilateral creditors. In part, debt-servicing difficulties have been attributed to the Supreme Court ruling of April 2002 that external debts should be charged upon and payable out of the revenue and assets of the part of the government that incurred the indebtedness, and not the Federation Account. With this judgment, the traditional practice of servicing external debts as a first-line charge on the Federation Account (before revenues are shared across federal, state, and local governments) was declared unconstitutional. External debt-service payments should now devolve to the individual levels of government that contracted the debts. It is provisionally estimated that the state governments would be responsible for 24 percent of debt service falling due, with the remaining 76 percent the responsibility of the federal government. In August, agreement was reached with state governments to allocate resources from the Federation Account for selected external debt-service payments. However, discussions on the modalities of servicing the debt in compliance with the Supreme Court ruling, particularly in respect of Paris Club obligations, are ongoing.

213. **Nigeria's ratios of debt service paid to exports have been generally lower than comparator groups in recent years in part owing to debt relief under the 2000 rescheduling.** Debt service paid in relation to exports is lower in Nigeria than sub-Saharan Africa (average) and for developing country fuel exporters, reflecting Nigeria's debt rescheduling in 2000-01 and arrears accumulation in 1999 and, most likely, in 2002 (Table VII.2). Debt service due before rescheduling is generally higher for Nigeria than for both these groups. Debt service paid by Nigeria has also been lower than payments made by African HIPCs in 1999-2002, with the exception of 2001.

Table VII. 2. Nigeria and Comparator Groups: Ratio of Debt Service to Exports, 1999-2002
(In percent of exports of goods and nonfactor services)

	1999	2000	2001	2002 Proj.
Nigeria, due after rescheduling	30	8	13	18
Nigeria, paid	12	8	11	6
Sub-Saharan Africa, paid	18	16	17	...
African HIPCs (decision point by July 2002), paid	15	14	9	8
Developing country fuel exporters, paid	14	10	12	...

Sources: IMF, "Heavily Indebted Poor Countries (HIPC) Initiative – Status of Implementation" (available via the Internet: http://www.imf.org); and World Economic Outlook database.

B. Prospects for Future Debt Sustainability

214. **This section assesses Nigeria's external debt situation at the end of 2002 and evaluates its sustainability over the medium to long term.** The scenarios presented are subject to a number of critical assumptions concerning, inter alia, the evolution of oil prices, the willingness of creditors to restructure debts, and the stance of fiscal policy. The scenarios are, therefore, only illustrative in nature and are not intended to suggest or prejudge a particular outcome for any future debt-restructuring agreement that Nigeria may enter into its external creditors.

215. **Nigeria's medium-term balance of payments outlook, in the absence of further debt rescheduling, remains difficult.** The short-term challenge is to reverse the large decline in external reserves experienced in 2002, in a context of gradually declining oil prices and oil export volume growth constraints Organization of Petroleum Exporting Countries (OPEC) quota and sluggish global demand).

216. **A baseline balance of payments projection before rescheduling is shown in Table VII-3.**[75] Strong fiscal adjustment and no real exchange rate appreciation are the key instruments to achieve the needed import restraint over coming years.

217. **The policies underpinning the macroeconomic framework are projected to improve the macroeconomic indicators over the medium term.** Specifically, GDP growth is projected to accelerate to around 5 percent by 2007 as a result of a sustained implementation of appropriate macroeconomic policies, accelerated structural reform, and vigorous actions to improve governance. The current account deficit will be capped in the range of 3 ½ -4 percent of GDP. Gross reserves are projected to rebuild from 4 ½ months of import coverage at end-2002 to about six months' coverage over the medium term. Notwithstanding significant projected increases in non-debt-creating private capital flows and a gradual increase of concessional lending from multilateral agencies, financing gaps will arise on the order of US$1 billion per year over the period 2003-07 and thereafter.

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[75] This scenario uses the assumptions for the "good-policy" scenario described in the accompanying staff report for the period to 2007 extended to 2020. These projections assume the following: (i) the adoption of policies that accelerate the growth of non-oil exports and import-substituting production (including strengthened infrastructure provision, liberalized energy pricing, and improved governance); (ii) the adoption of a policy rule to move the fiscal position close to overall balance by 2007 from a deficit of 6 percent of GDP in 2002, thereby underpinning a broader commitment to maintain a stable macroeconomic environment; and (iii) the further liberalization of trade and exchange policies to improve the efficiency of investment and incentives for foreign direct investment. The market oil price is assumed to decline gradually from US$25 per barrel in 2002 to US$21 per barrel by 2007.

Table VII-3. Nigeria: Summary Balance of Payments, 2001–20

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Averages 2011–15	Averages 2016–20
Current account balance	1,194	-3,667	-2,537	-2,334	-2,441	-1,872	-1,741	-1,877	-2,020	-2,170	-2,675	-3,686
Export of goods and nonfactor services	18,946	16,224	17,023	16,146	16,466	16,667	17,596	18,476	19,400	20,370	23,637	30,168
Import of goods and nonfactor services	-16,925	-18,618	-19,100	-18,397	-19,080	-19,221	-20,319	-21,335	-22,402	-23,522	-27,294	-34,835
Income (net)	-2,600	-3,084	-2,421	-2,243	-2,207	-1,940	-1,905	-1,963	-2,022	-2,082	-2,270	-2,609
Of which: interest due on public debt 1/	-1,534	-1,567	-1,527	-1,530	-1,521	-1,501	-1,473	-1,449	-1,421	-1,391	-1,311	-1,163
Transfers (net)	1,773	1,812	1,961	2,161	2,380	2,622	2,887	2,944	3,003	3,063	3,252	3,591
Capital and financial account balance	-509	198	1,134	2,033	1,914	1,656	1,732	1,492	1,931	2,359	2,434	2,943
Private capital	1,796	1,950	2,615	2,545	2,858	2,962	3,162	3,225	3,290	3,356	3,563	3,933
Official lending (net)	-1,657	-1,228	-1,047	-918	-1,222	-1,119	-926	-1,286	-859	-497	-628	-490
Disbursements	56	142	286	456	300	330	363	500	550	605	813	1,511
Amortization due	-1,713	-1,370	-1,333	-1,374	-1,522	-1,449	-1,289	-1,786	-1,409	-1,102	-1,441	-2,001
Short-term capital	-647	-524	-434	406	278	-188	-504	-448	-500	-500	-500	-500
Errors and omissions	-781	-1,439	0	0	0	0	0	0	0	0	0	0
Overall balance	-96	-4,907	-1,403	-301	-527	-217	-8	-385	-89	189	-241	-742
Financing	96	4,902	1,403	298	522	209	-2	385	89	-189	241	742
Net reserves (increase -)	-1,023	2,991	543	-792	-720	-701	-861	-529	-800	-736	-541	-281
Exceptional financing	1,119	1,911	860	1,091	1,242	909	859	914	888	547	782	1,023
Memorandum items												
Gross official reserves	10,423	7,233	6,690	7,482	8,202	8,903	9,764	10,292	11,092	11,828	13,591	15,507
(in months of imports of goods and services)	7.4	4.7	4.2	4.9	5.2	5.6	5.8	5.8	5.9	6.0	6.0	5.4
Current account/GDP (in percent)	2.8	-8.6	-5.8	-5.3	-5.3	-3.9	-3.4	-3.5	-3.6	-3.7	-3.9	-4.2
Oil export prices (in U.S. dollars per barrel)	24.3	25.2	25.0	22.5	22.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0

Sources: Nigerian authorities; and staff estimates and projections.

1/ Assumes financing gap pays interest at prevailing commercial interest reference rate.

218. **In the before-rescheduling scenario, the NPV of external debt is projected to remain broadly unchanged at close to US$30 billion over the medium term.** The progressive amortization of existing debt will be replaced by gap-filling loans on commercial terms (Figure VII-2). Cash debt service paid is assumed to amount to US$1,900 million per year during 2003-07, some 20 percent higher than actual debt service paid during 1998-2002. Other new borrowing is assumed to be on concessional terms from multilaterals, as has been the case in recent years.[76]

219. **Projected increases in GDP and exports would lead to gradual improvements in debt indicators after 2007-08, but financing gaps would remain large in the before-rescheduling scenario.** Improvements in the rates of growth of the denominators (exports, government revenue, and GDP) have a significant cumulative effect on both debt and debt service indicators. The NPV of debt-to-exports ratio (three-year average) will fall below 150 percent in 2010, and debt-service due to exports will drop to below 15 percent in 2008 (Figure VII.3). However, the unsustainability of the before-rescheduling scenario is indicated by the financing gaps, which will total over US$7 billion by 2007.

Rescheduling scenarios

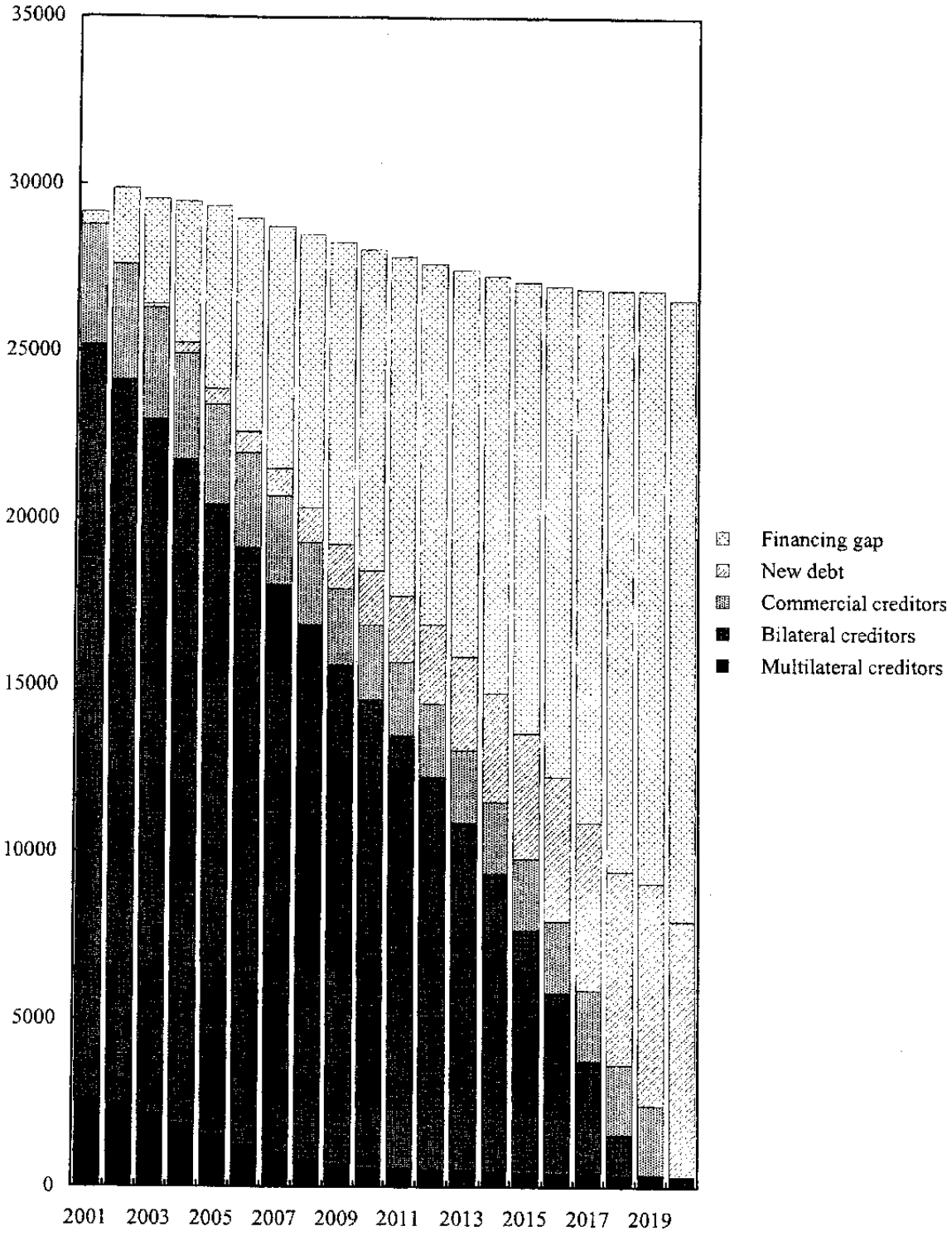
220. **In the immediate period ahead, three-fourths of debt service is payable to Paris Club creditors, and of this amount two-thirds is payable on pre-cut-off-date debt** (Table VII.4). If outstanding arrears were to be paid in 2003, total debt service due would amount to US$5.1 billion.

221. **The 2000 Paris Club agreement included a goodwill clause whereby creditors agreed in principle to consider possible options to further restructure debt falling due after July 2001.** This was contingent on the successful completion of the 1999 Stand-By Arrangement and an appropriate follow-on medium-term arrangement with the Fund. In the event, these terms were not met, and a further rescheduling has not taken place.

222. **Nigeria does not presently qualify for a concessional rescheduling of Paris Club debt on Naples terms, but the Paris Club may nonetheless decide on an exceptional basis to offer such a rescheduling.** A Naples terms rescheduling is conditional on IDA-only Status. IDA-only eligibility is dependent on maintenance of a per capita income below US$885 and a lack of creditworthiness for market-based borrowing. In addition, IDA or IDA-only eligibility is complemented by a requirement that appropriate standards of performance, including macroeconomic stability, be restored for a period, to be decided according to country circumstances. Nigeria has the income and creditworthiness characteristics of an IDA-only country (GNP of $260 in 2000 and no market access), but its ability to maintain a track record of adequate policy performance remains to be

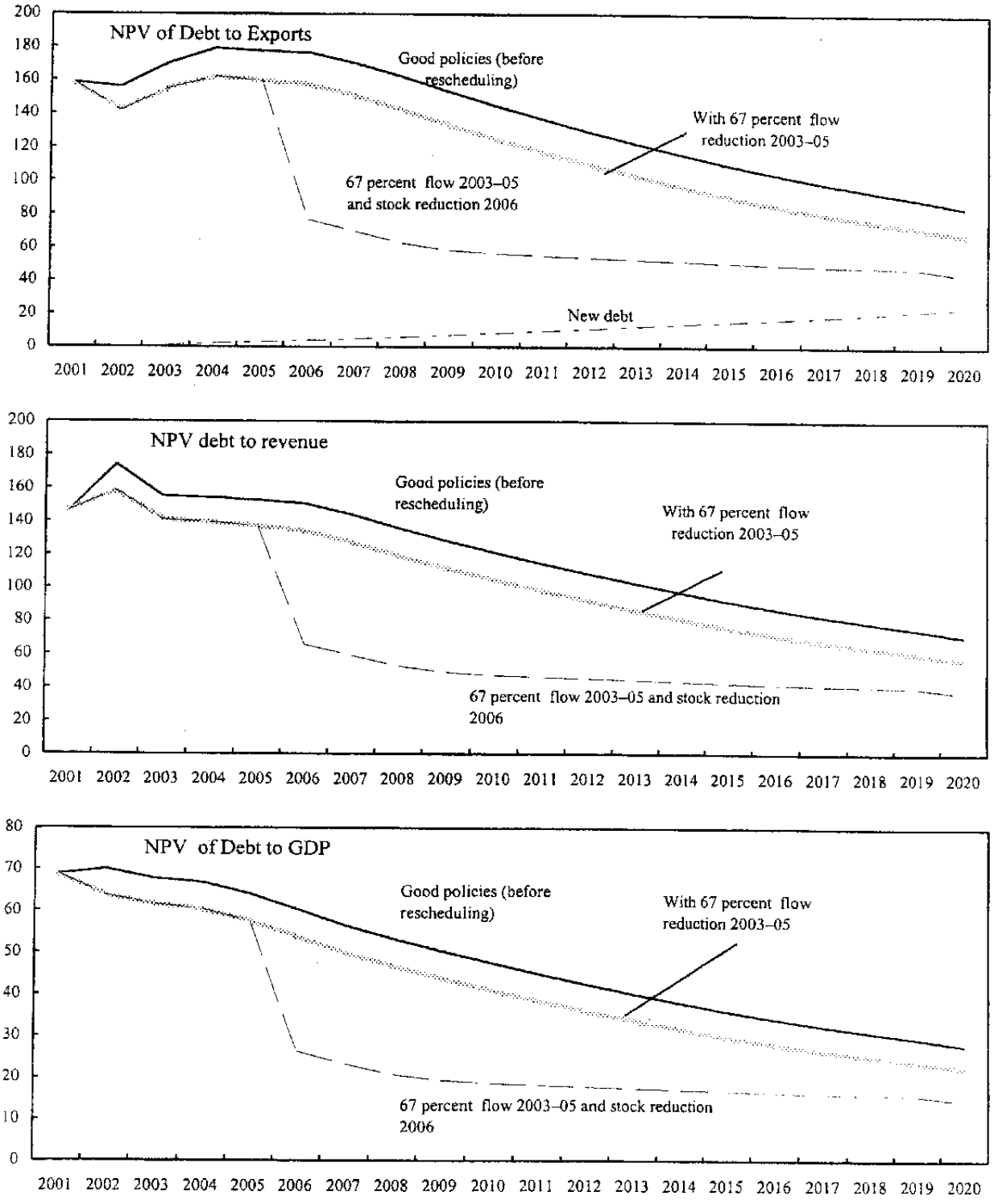
[76] The interest rate on bilateral debt is assumed to be fixed at 5.15 percent in light of signed and initialed bilateral agreements in which fixed rates range between 4.9 percent and 5.3 percent, depending on currency denomination.

Figure VII-2. Nigeria: Projected NPV of External Debt Before Rescheduling, 2001–2020
(In millions of U.S. dollars)



Source: Fund staff estimates.
Note: Discount rate 5.15 percent.

Figure VII-3. Nigeria: Debt Indicators with Concessional Reschedulings, 2001–2020
(Ratios in percent)



Source: Fund staff estimates.

Table VII-4. Nigeria: Debt Stock and Forthcoming Debt Service, 2002–05

	Stock at End-2002		Maturities Falling Due		
			2003	2004	2005
	(US$ billion)	(percent)	(US$ millions)		
Bilateral—Paris Club	24.3	79.8	2,119	2,156	2,308
Of which: pre cut-off date 1/	19.4	63.8	1,378	1,413	1,520
arrears 2/	2.3	7.5	136	184	243
non-ODA	24.2	79.6	2,109	2,148	2,300
Bilateral—non Paris Club	0.1	0.3	27	25	24
Multilateral	2.8	9.3	418	424	407
Commercial	3.2	10.5	322	322	322
Total	30.4	100.0	2,860	2,902	3,038

1/ Subject to further rescheduling under 2000 agreement, excluding arrears.
2/ Maturities show interest only.

demonstrated.[77,78] However, the Paris Club has granted concessional treatment to non IDA-only countries: in December 2001, the Former Republic of Yugoslavia agreed to a 66 percent NPV reduction of eligible Paris Club debt, almost equivalent to the 67 percent NPV reduction provided under Naples terms.

223. **For purely illustrative purposes, we consider flow and stock Naples terms reschedulings for eligible Paris Club debt** (with comparable terms, where applicable for other creditors). The three-year flow rescheduling applies to maturities falling due during 2003-05 with NPV reductions of 67 percent; the second scenario adds a 67 percent stock-of-eligible debt reduction in 2006. Summary results of the rescheduling scenarios are shown in Figures VII.3 and VII.4 and Tables VII.5 and VII.6.

224. **A flow rescheduling applied to US$4.3 billion of Paris Club principal and interest falling due 2003-05 would generate significant short-term cash-flow benefits, but significant financing gaps would emerge beginning in 2006**. Payments are rescheduled over 23 years, with a 6 year grace period and graduated amortization payments under Paris Club Naples terms. Official development assistance (ODA) debt is rescheduled over

[77] See World Bank, "IDA Eligibility, Terms and Graduation Policies," World Bank, available on the Internet at http://www.worldbank.org.

[78] Non IDA-only low-income countries also include Azerbaijan, India, Pakistan, and Zimbabwe.

Table VII-5. Nigeria: Naples Terms Flow Rescheduling, 2001–2020

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Average 2011–15	Average 2016–20
Debt service and NPV						(In millions of U.S. dollars)						
Debt service before rescheduling	3,247	2,937	2,860	2,904	3,043	2,950	2,762	2,852	2,830	2,492	2,751	3,164
Debt service due after rescheduling 1/	2,501	2,937	1,839	1,803	1,782	3,149	2,954	3,034	2,642	2,305	2,550	2,962
Multilateral creditors	497	514	418	424	407	373	302	279	178	122	55	47
Bilateral creditors	1,672	2,035	1,099	1,054	1,047	2,446	2,263	2,308	1,956	1,785	2,047	1,741
Commercial creditors	322	321	322	322	322	322	322	322	322	173	128	536
New debt	0	0	0	2	6	8	10	13	17	21	45	141
Financing gap interest 2/	9	67	0	0	0	0	57	111	168	205	276	497
Cashflow saving (per year)	746	0	1,021	1,101	1,261	-199	-192	-182	188	187	201	202
Financing gap (cumulative)	373	2,284	0	0	0	1,102	2,164	3,273	3,990	4,370	5,989	10,627
NPV of public external debt	29,159	29,495	26,883	26,661	26,380	25,833	25,427	25,026	24,627	24,231	23,107	21,728
Multilateral creditors	2,649	2,477	2,186	1,875	1,564	1,271	1,034	808	671	584	503	364
Bilateral creditors	22,532	21,266	21,262	21,302	21,351	20,004	18,772	17,430	16,371	15,430	11,605	3,175
Commercial creditors	3,592	3,456	3,312	3,159	2,999	2,831	2,654	2,468	2,273	2,217	2,173	1,675
New debt	0	0	123	325	466	624	803	1,047	1,322	1,631	2,838	5,888
Financing gap	385	2,296	0	0	0	1,102	2,164	3,273	3,990	4,370	5,989	10,627
Debt and debt-service ratios						(In percent)						
NPV of debt to exports (three-year average)	158	154	155	162	159	157	150	142	133	125	103	76
NPV of debt to revenue	147	172	141	139	137	134	127	119	112	105	87	64
NPV of debt to GDP	69	69	62	60	57	54	50	47	44	41	34	25
Debt service to exports	13	18	11	11	11	19	17	16	14	11	11	10
Debt service to revenue	13	17	10	9	9	16	15	14	12	10	10	9
Debt service to GDP	6	7	4	4	4	7	6	6	5	4	4	3

Source: Staff calculations.

1/ Assumes 67 percent NPV reduction on eligible maturities falling due 2003–05. 2002 arrears rescheduled over six years.
2/ At commercial interest reference rate.

Table VII–6. Nigeria: Naples Terms Flow and Stock Rescheduling, 2001–20 1/

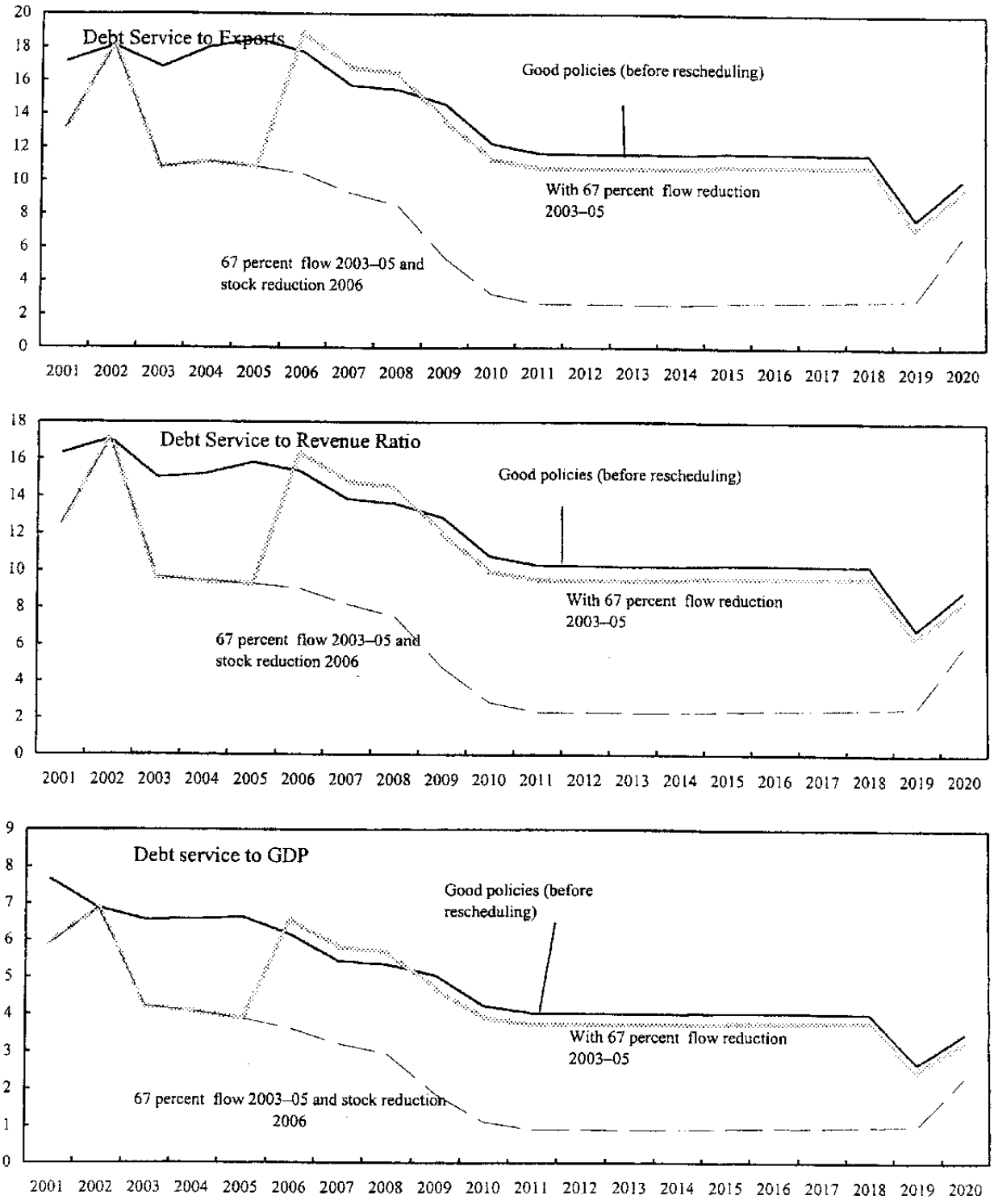
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Averages 2011–15	Averages 2016–20
Debt service and NPV						(In millions of U.S. dollars)						
Debt service due before rescheduling	3,247	2,937	2,860	2,904	3,043	2,950	2,762	2,852	2,830	2,492	2,751	3,164
Debt service due after rescheduling 2/	2,501	2,937	1,839	1,803	1,782	1,735	1,630	1,575	1,044	654	622	1,106
Multilateral creditors	497	514	418	424	407	373	302	279	178	122	55	47
Bilateral creditors	2,418	2,035	1,099	1,054	1,047	1,160	1,124	1,089	655	408	447	595
Commercial creditors	322	321	322	322	322	193	193	193	193	104	77	323
New debt	0	0	0	2	6	8	10	13	17	21	45	141
Financing gap interest 2/	9	67	0	0	0	0	0	0	0	0	0	0
Cashflow saving (per year)	746	0	1,021	1,101	1,261	1,215	1,133	1,277	1,786	1,838	2,129	2,058
Financing gap (cumulative)	373	2,284	0	0	0	0	0	0	0	0	0	0
NPV of total debt	29,159	29,495	26,883	26,661	26,380	12,628	11,795	11,034	10,787	10,945	11,876	13,640
Multilateral creditors	2,649	2,477	2,186	1,875	1,564	1,271	1,034	808	671	584	503	364
Bilateral creditors	22,532	21,266	21,262	21,302	21,351	9,031	8,362	7,694	7,426	7,396	7,227	6,378
Commercial creditors	3,592	3,456	3,312	3,159	2,999	1,702	1,596	1,485	1,368	1,334	1,309	1,010
New debt	0	0	123	325	466	624	803	1,047	1,322	1,631	2,838	5,888
Financing gap	385	2,296	0	0	0	0	0	0	0	0	0	0
Debt and debt-service ratios						(In percent)						
NPV of debt to exports (three-year average)	158	154	155	162	159	77	70	63	58	56	53	48
NPV of debt to revenue	147	172	141	139	137	66	59	53	49	47	44	40
NPV of debt to GDP	69	69	62	60	57	26	23	21	19	19	17	16
Debt service to exports	13	18	11	11	11	10	9	9	5	3	3	4
Debt service to revenue	13	17	10	9	9	9	8	8	5	3	2	3
Debt service to GDP	6	7	4	4	4	4	3	3	2	1	1	1

Source: Fund staff calculations.

1/ Assumes 67 percent NPV reduction on eligible maturities falling due 2003–05 and 67 percent NPV reduction of eligible stock in 2006. 2002 arrears rescheduled over six years.

2/ At commercial interest reference rate.

Figure VII-4. Nigeria: Debt-Service Ratios with Concessional Reschedulings, 2001–2020



Source: Staff estimates.

40 years, with 16 years grace.[79] No capitalization of moratorium interest is assumed. The implied debt reduction would be US$2.9 billion, or 9.7 percent of the end-2002 total debt stock. Cash-flow savings would significantly lower debt service in the period 2003-05, although the debt service would increase above the without rescheduling option during 2006-08 as the remainder of the 2001-02 arrears are cleared. There would be no projected financing gaps through 2005. After the consolidation period, particularly through 2008, financing gaps would reemerge, with debt service-to-exports ratios increasing from 11 percent to the 17-19 percent range.

225. **A stock rescheduling in 2006, following on from the flow rescheduling of 2003-05, and applied to eligible Paris Club debt of U.S.$17.9 billion, would maintain debt-service payments on a downward trend and reduce the total stock of external debt by more than half in 2006.** No financing gaps would arise over the projection period, and debt-service payments would be manageable at 10 percent of exports, 9 percent of consolidated government revenue, and 4 percent of GDP in 2006 and would decline thereafter.

226. **The viability of any projection critically hinges on prospects for oil prices and growth**. Oil price changes have direct impacts on foreign exchange receipts, tax revenues, and GDP and can be very large in magnitude, as illustrated in the earlier discussion of the origins of Nigeria's debt problem in the mid-1980s. Table VII-7 shows the impact of a reduction of average oil prices of 1 standard deviation (US$4 per barrel, calculated on annual oil prices of 1991-2001) on debt-service payments under Naples flow and stock rescheduling. The impact of an oil shock is stronger in the early years of the projection period, owing to the assumption of more diversified production, revenue, and exports over time. As the oil price affects so many parameters in the Nigerian economy, it is difficult to assess whether policies could be adjusted sufficiently in response to a shock of 1 standard deviation to prevent arrears accumulation. However, such shocks could be absorbed for one or two years through a rundown of the reserves cushion. The projections assume an increase in the pace of trend growth. A reduction of trend growth to 2.7 percent (the historical average, "muddle-through" scenario discussed in the staff report) and 1.4 standard deviations below projected growth has a cumulatively large impact on debt indicators.

227. **In both cases, adversity in trend growth and/or oil prices would not substantively call into question the medium-term viability of a concessional rescheduling with a 67 percent stock of debt reduction**. However, it is difficult to assess precisely debt sustainability under various scenarios in the Nigerian context, owing to great uncertainty as to the authorities' policy response in an environment where economic policies,

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[79] The rescheduling is assumed to apply to all pre-cutoff-date debt. The rescheduling would not apply to the leveling up of payments on rescheduled arrears, and to post-cut-off-date maturities. Arrears of US$2.3 billion at end-2002 (accrued since the 2000 rescheduling) are rescheduled nonconcessionally over 6 years, with no grace.

Table VII–7. Nigeria: Sensitivity Analysis 2001–2020 1/

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011–15	2016–20
						(In percent, unless otherwise indicated)						
Baseline (before rescheduling)												
Public external debt-to-GDP ratio	70.0	71.2	69.2	68.8	66.2	57.4	54.3	52.1	50.0	47.8	41.9	35.3
NPV debt-to-GDP ratio	68.8	70.0	67.7	66.8	64.0	60.4	56.4	53.3	50.4	47.6	40.4	30.9
NPV debt-to-exports ratios 1/	158.3	155.7	169.9	179.1	177.5	176.5	170.0	162.2	153.0	144.5	122.5	93.8
NPV debt-to-government revenue ratio 2/	146.6	174.0	155.0	154.3	152.6	150.7	144.0	136.0	128.5	121.4	102.9	78.8
Debt-service-to-exports ratio	17.1	18.1	16.8	18.0	18.5	17.7	15.7	15.4	14.6	12.2	11.6	10.6
Debt service-government revenue ratio 2/	16.3	17.1	15.0	15.2	15.8	15.3	13.8	13.6	12.9	10.8	10.3	9.3
Concessional flow then stock rescheduling 67 percent reduction 3/												
NPV debt-to-GDP ratio	68.8	70.0	61.6	60.4	57.5	26.3	23.2	20.6	19.2	18.6	17.4	15.7
NPV debt-to-exports ratio 2/	158.3	155.7	154.5	161.9	159.4	76.9	69.8	62.8	58.3	56.4	52.8	47.6
NPV debt-to-government revenue ratio 3/	146.6	174.0	141.0	139.5	137.1	65.6	59.1	52.6	49.0	47.4	44.4	40.0
Debt-service-to-exports ratio	17.1	18.1	10.8	11.2	10.8	10.4	9.3	8.5	5.4	3.2	2.6	3.6
Debt service-government revenue ratio 3/	16.3	17.1	9.6	9.4	9.3	9.0	8.2	7.5	4.7	2.8	2.3	3.2
Concessional rescheduling, oil prices lower by 1 standard deviation 3/ 4/												
NPV debt-to-GDP ratio	68.8	70.0	65.0	63.8	60.7	27.7	24.4	21.7	20.2	19.5	18.2	16.3
NPV debt-to-exports ratios 2/	158.3	155.7	161.7	178.8	186.0	90.2	81.8	73.4	67.9	65.3	60.4	53.4
NPV debt-to-government revenue ratio 3/	146.6	174.0	154.3	153.1	150.8	72.4	65.1	57.8	53.7	51.7	48.1	42.8
Debt-service-to exports-ratio	17.1	18.1	12.5	13.1	12.7	12.2	10.8	9.9	6.2	3.7	3.0	4.0
Debt service-government revenue ratio 3/	16.3	17.1	10.6	10.4	10.2	9.9	9.0	8.3	5.2	3.1	2.5	3.4
Concessional rescheduling, GDP growth at long run average 3/ 5/												
NPV debt-to-GDP ratio	68.8	70.0	62.5	62.2	60.6	28.4	25.7	23.4	22.3	22.0	22.1	22.2
NPV debt-to-exports ratio 2/	158.3	155.7	154.5	161.9	159.4	76.9	69.8	63.2	59.7	58.9	59.0	59.3
NPV debt-to-government revenue ratio 3/	146.6	174.0	143.1	143.8	144.6	71.0	65.7	59.8	56.9	56.2	56.3	56.6
Debt-service-to-exports ratio	17.1	18.1	10.8	11.2	10.8	10.4	9.3	8.7	5.6	3.4	3.0	4.6
Debt service-government revenue ratio 3/	16.3	17.1	9.8	9.7	9.8	9.8	9.1	8.5	5.5	3.4	2.9	4.5
Assumptions (unless otherwise indicated)												
Oil export prices (in U.S. dollars per barrel)	24.3	25.2	25.0	22.5	22.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0
GDP growth (in U.S. dollar nominal terms)	4.7	0.8	2.2	1.2	3.9	4.6	6.1	5.0	5.0	5.0	5.0	5.0
Exports/GDP (percent)	44.7	38.0	39.0	36.6	35.9	34.7	34.5	34.5	34.5	34.5	34.5	34.5

Sources: Fund staff estimates and projections.

1/ In percent of a three-year average of exports of goods and nonfactors services.

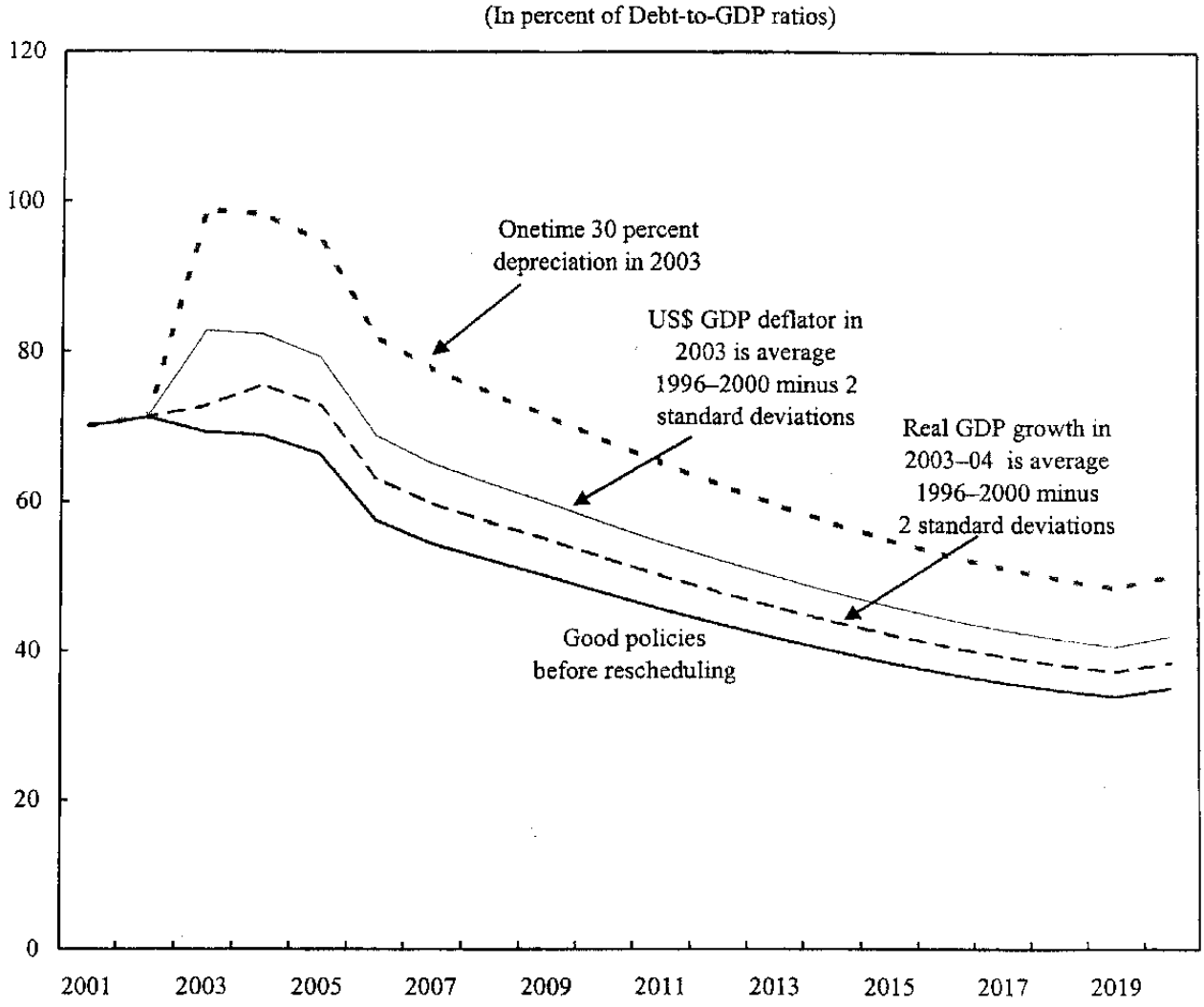
2/ Consolidated government revenues, excluding grants.

3/ Assumes a Paris Club flow rescheduling with 67 percent NPV reduction on eligible maturities falling due in 2003-05, nonconcessional rescheduling of end-2002 arrears, and comparable treatment by other creditors where applicable; stock rescheduling in 2006 with 33 percent NPV reduction and comparable treatment by other creditors.

4/ Reduction of US$4.11 per barrel compared to baseline equivalent to one standard of annual average oil price for 1991–2001.

5/ Assumes GDP growth of 2.7 percent, equivalent to 1.4 standard deviations below projected growth for 2003–2020. Exports assumed to grow at same rate.

Figure VII-5. Nigeria: Standardized Sensitivity Tests, 2001–20



Source: Fund staff estimates.

especially fiscal policy, lack any firm anchor, and where external debt-service payments are highly politicized. This situation has been exacerbated by the April 2002 decision to disallow the deduction of external debt service from federation revenues, as debt-service payments are now decided on an ad hoc basis following discussions between states and the federal government.

228. **Finally, the effect of some standardized adverse shocks on the external debt-to-GDP ratio have been applied to the baseline before rescheduling scenario** (Figure VII-5).[80] Data and circumstances place some limitations on the shocks that can be simulated for Nigeria, and this is an area that would benefit from additional study. A one-time depreciation of 30 percent has a significant impact, with the ratio of external debt to GDP rising above 100 percent in 2003. A 2-standard-deviation shock to the GDP deflator for two years (a proxy for depreciation) also increases the debt ratio significantly, as the historical standard deviation is large. Lowering growth projections to historical average growth for 2003-04 has a more modest effect. While debt service is sensitive to interest rate changes, the proportion of debt that will in the future be at a floating rate is not clear, as up to two-thirds of the debt stock could be converted to fixed rates under the 2000 rescheduling. Thus the sensitivity to interest rate shocks will depend significantly on the outcome of the bilateral negotiations with Paris Club creditors. Similarly, as Nigeria has no market access, shocks to the current account cannot be financed by new borrowing except through arrears accumulation. Therefore, the oil price shock discussed earlier, which incorporates the impact on growth, fiscal revenue, and the balance of payments, is likely a more relevant test of sensitivity than a current account shock, which is assumed to be covered by higher gross external borrowing.

[80] See IMF, *Assessing Sustainability*, May 28, 2002 (available via the Internet at http://www.imf.org).

Table 1. Nigeria: Revised Gross Domestic Product by Sector of Origin at Current Prices, 1997–2001 1/

	1997	1998	1999	2000	2001
	(In millions of naira)				
Primary sector	2,058,381	1,795,613	2,087,428	2,797,128	2,972,318
Agricultural activities	953,549	1,057,584	1,127,693	1,192,910	1,584,312
Agriculture	807,760	892,053	948,183	1,000,069	1,328,733
Livestock	98,034	107,014	111,110	116,393	153,453
Forestry	11,500	14,548	17,684	22,437	27,463
Fishing	36,256	43,970	50,716	54,010	74,664
Mining and quarrying	1,104,831	738,029	959,735	1,604,218	1,388,006
Of which: crude petroleum and gas	1,102,005	734,287	955,594	1,599,624	1,382,001
Secondary sector	164,920	169,125	180,609	199,120	234,769
Manufacturing	144,107	142,226	150,972	166,316	191,576
Utilities	2,038	2,021	2,110	2,200	2,438
Building and construction	18,776	24,878	27,528	30,604	40,755
Tertiary sector	611,698	753,932	976,656	1,144,216	1,368,238
Transport	71,466	91,968	108,301	118,757	132,636
Communication	1,072	1,191	1,333	1,638	2,114
Wholesale and retail trade	392,343	444,485	485,667	527,485	642,860
Hotel and restaurants	4,286	4,865	5,791	6,455	7,252
Finance and insurance	30,923	35,698	39,390	43,775	54,383
Real estate	1,617	1,892	2,384	2,875	3,426
Housing	67,385	98,329	133,032	164,882	171,573
Community and other services	21,244	28,631	41,246	51,963	65,470
Government services	21,361	46,873	159,513	226,386	288,525
Gross domestic product at factor cost	2,834,999	2,718,670	3,244,693	4,140,464	4,575,325
Oil	1,102,005	734,287	955,594	1,599,624	1,382,001
Non-oil	1,732,994	1,984,383	2,289,099	2,540,840	3,193,324
Total indirect taxes (net)	106,000	116,495	128,019	140,663	174,023
Subsidies	-1,348	-858	-1,378	-1,906	-2,683
Gross domestic product at market prices	2,939,651	2,834,306	3,371,335	4,279,221	4,746,666
	(In percent of GDP)				
Memorandum items:					
Oil GDP	38.9	27.0	29.5	38.6	30.2
Non-oil GDP	61.1	73.0	70.5	61.4	69.8
Agricultural activities	33.7	39.0	34.9	28.9	34.8
Secondary	5.8	6.2	5.6	4.8	5.1
Tertiary sectors	21.6	27.7	30.1	27.6	29.9

Sources: Federal Office of Statistics; National Planning Commission; and Fund staff estimates.

1/ Reflects revisions made by the Fund staff through exchange rates used for oil GDP (see Dhonte and others, *Nigeria—Selected Issues and Statistical Appendix*, IMF Staff Country Report No. 98/78 (Washington: IMF, 1998)), as well as through the use of primary data on the oil sector provided by the Nigerian National Petroleum Corporation.

Table 2. Nigeria: Revised Gross Domestic Product by Sector of Origin at Constant 1990 Prices, 1997–2001 1/

	1997	1998	1999	2000	2001
			(In millions of naira)		
Primary sector	221,027	223,273	222,693	233,175	238,337
Agricultural activities	103,993	108,198	113,797	117,110	121,605
Agriculture	88,093	91,263	95,682	98,179	101,988
Livestock	10,691	10,948	11,212	11,427	11,778
Forestry	1,254	1,488	1,785	2,203	2,108
Fishing	3,954	4,498	5,118	5,302	5,731
Mining and quarrying	117,034	115,075	108,897	116,065	116,731
Of which: crude petroleum and gas	116,678	114,624	108,414	115,561	116,138
Secondary sector	20,756	20,377	21,074	21,838	23,197
Manufacturing	18,137	17,136	17,616	18,240	18,929
Utilities	256	243	246	241	241
Building and construction	2,363	2,997	3,212	3,356	4,027
Tertiary sector	84,805	87,973	90,811	93,487	97,056
Transport	9,908	10,738	10,094	9,725	9,428
Communication	149	139	124	134	150
Wholesale and retail trade	54,394	51,843	45,048	42,981	45,495
Hotel and restaurants	594	568	540	529	515
Finance and insurance	4,287	4,168	3,671	3,585	3,866
Real estate	224	221	222	235	244
Housing	9,342	11,480	12,399	13,503	12,196
Community and other services	2,945	3,343	3,844	4,255	4,654
Government services	2,961	5,473	14,868	18,539	20,508
Gross domestic product at factor cost	326,588	331,623	334,579	348,500	358,589
Oil	116,678	114,624	108,414	115,561	116,138
Non-oil	209,910	216,998	226,165	232,939	242,451
Total indirect taxes (net)	9,623	9,948	10,368	10,679	11,115
Subsidies	-122	-94	-136	-175	-204
Gross domestic product at market prices	336,089	341,477	344,811	359,004	369,501
			(Annual percentage change)		
Memorandum items:					
GDP at factor costs	2.7	1.5	0.9	4.2	2.9
Oil sector	1.4	-1.8	-5.4	6.6	0.5
Non-oil sector	3.5	3.4	4.2	3.0	4.1
Agricultural activities	4.2	4.0	5.2	2.9	3.8
Agriculture	4.1	3.6	4.8	2.6	3.9
Livestock	2.3	2.4	2.4	1.9	3.1
Forestry	11.3	18.7	19.9	23.4	-4.3
Fishing	11.0	13.8	13.8	3.6	8.1
Secondary sector	1.7	-1.8	3.4	3.6	6.2
Of which: manufacturing	0.9	-5.5	2.8	3.5	3.8
Tertiary sector	3.0	3.7	3.2	2.9	3.8

Sources: Federal Office of Statistics; National Planning Commission; and Fund staff estimates.

1/ See footnote in Table 1.

Table 3. Nigeria: Revised Gross Domestic Product by Expenditure Category at Current Prices, 1997–2001 1/

(In millions of naira)

	1997	1998	1999	2000	2001
External balance 2/	315,745	-41,393	-96,791	673,369	213,003
Exports of goods and nonfactor services	1,376,473	943,160	1,272,198	2,279,602	2,108,131
Goods	1,300,017	867,038	1,195,322	2,187,477	2,009,730
Nonfactor services	76,456	76,122	76,876	92,125	98,401
Imports of goods and nonfactor services	-1,060,728	-984,552	-1,368,989	-1,606,233	-1,895,128
Goods	-770,290	-634,925	-955,344	-1,131,602	-1,377,523
Nonfactor services	-290,438	-349,628	-413,645	-474,631	-517,604
Domestic demand	2,623,906	2,875,699	3,468,126	3,605,853	4,533,662
Consumption	2,135,556	2,271,802	2,739,819	2,848,624	3,581,593
Government	255,646	628,574	620,754	974,924	1,423,886
Private	1,879,910	1,643,229	2,119,065	1,873,700	2,157,707
Gross investment	488,350	603,897	728,306	757,229	952,069
Stock changes	447	...	...	...	...
Gross fixed investment	487,903	603,897	728,306	757,229	952,069
Government fixed investment	156,215	321,191	260,000	397,471	670,529
Private fixed investment	331,688	282,706	468,306	359,758	281,540
Gross domestic product at market prices	2,939,651	2,834,306	3,371,335	4,279,221	4,746,666
Net factor income from abroad	-235,654	-248,729	-322,562	-407,010	-277,886
Gross national product at market prices	2,703,997	2,585,577	3,048,772	3,872,211	4,468,780
Net transfers from abroad	151,253	128,837	113,423	160,339	198,544
National disposable income	2,855,250	2,714,414	3,162,195	4,032,551	4,667,323
National savings 3/	719,694	442,612	422,376	1,183,927	1,085,730
Gross domestic savings 4/	804,095	562,504	631,515	1,430,598	1,165,072

Sources: Federal Office of Statistics; National Planning Commission; Central Bank of Nigeria; and Fund staff estimates.

1/ See footnote in Table 1.

2/ Reflects adjustments made by the Fund staff to current account transactions, including: increase of non-oil and gas exports and reduction of imports (based on data reported by partner countries and entries for counterpart informal imports); and calculation of natural gas exports. These adjustments strengthen the current account balance by approximately 5 percent of GDP for the period to 2001 (most of the counterpart adjustment is shown in the errors and omissions item of the balance of payments).

3/ National disposable income less aggregate consumption.

4/ Domestic disposable income less aggregate consumption.

Table 4. Nigeria: Revised Gross Domestic Product by Expenditure at Constant 1990 Prices, 1997–2001 1/

(In millions of naira)

	1997	1998	1999	2000	2001
External balance	164,012	159,469	107,388	99,672	75,611
Exports of goods and nonfactor services	290,792	276,911	263,355	270,834	266,045
Goods	274,640	254,562	247,441	259,889	253,627
Nonfactor services	16,152	22,349	15,914	10,945	12,418
Imports of goods and nonfactor services	-126,780	-117,442	-155,967	-171,162	-190,434
Goods	-92,066	-75,737	-108,841	-120,585	-138,422
Nonfactor services	-34,714	-41,705	-47,126	-50,577	-52,012
Domestic demand	172,076	182,008	237,423	259,332	293,889
Consumption	105,517	141,966	185,190	202,279	229,234
Government	38,564	58,514	54,200	79,601	97,809
Private	66,953	83,452	130,990	122,678	131,425
Gross investment	66,560	40,042	52,233	57,053	64,656
Stock changes	431	0	0	2	0
Gross fixed investment	66,128	72,893	52,233	57,053	64,656
Government	21,173	54,692	23,742	25,933	29,389
Private	44,956	18,201	28,491	31,120	35,267
Gross domestic product at market prices	336,089	341,477	344,811	359,004	369,501
Net factor income from abroad	-28,166	-29,670	-36,749	-43,371	-27,924
Gross national product at market prices	307,923	311,808	308,062	315,632	341,577
Net transfers from abroad	18,078	15,368	12,922	17,086	19,951
National disposable income	326,001	327,176	320,984	332,718	361,528
National savings 3/	220,484	185,209	135,794	130,439	132,294
Gross domestic savings 4/	230,572	199,511	159,621	156,725	140,267

Sources: Federal Office of Statistics; National Planning Commission; and Fund staff estimates.

1/ Reflects revisions made by the Fund staff.

2/ Reflects adjustments made by the Fund staff to current account transactions, including: increase of non-oil and gas exports and reduction of imports (based on data reported by partner countries and entries for counterpart informal imports); and calculation of natural gas exports. These adjustments strengthen the current account balance by approximately 5 percent of GDP for the period to 2001 (most of the counterpart adjustment is shown in the errors and omissions item of the balance of payments).

3/ National disposable income less aggregate consumption.

4/ Domestic disposable income less aggeragate consumption.

Table 5. Nigeria: Index of Industrial Production, 1997–2001

	1997	1998	1999	2000	2001
			(1985 = 100)		
Total industrial production	133.4	129.8	129.7	134.6	145.3
Manufacturing	137.9	138.0	126.9	136.9	142.2
Sugar confectionary	54.5	53.9	55.8	56.8	47.5
Soft drinks	167.5	165.8	147.6	164.8	194.0
Beer and stout	119.0	120.1	101.9	120.6	125.7
Cotton textiles	93.6	94.4	87.3	98.5	93.6
Synthetic fabrics	747.3	739.8	736.8	717.3	665.6
Footwear	47.0	46.5	44.6	46.1	44.7
Paints	111.5	110.4	104.7	114.0	114.4
Refined petroleum	132.2	133.4	117.0	114.0	133.0
Cement	93.0	93.8	84.5	88.7	93.5
Roofing sheets	27.1	26.8	27.5	30.9	27.6
Vehicle assembly	13.4	13.3	12.5	13.7	151.0
Soap and detergent	178.4	180.0	161.1	189.1	210.1
Radio and televisions	4.1	4.1	4.9	3.9	3.3
Mineral production	141.5	134.2	130.9	137.5	144.9
Petroleum	142.8	135.7	129.7	138.8	146.3
Gas	192.3	192.1	186.8	191.5	225.0
Cassiterite	12.8	12.9	20.6	26.1	24.9
Columbite	46.5	48.5	48.4	98.2	97.7
Coal	17.4	17.8	11.4	10.8	11.3
Limestone	10.2	10.1	3.3	5.9	6.4
Electricity production	142.9	139.5	139.4	136.1	144.6
			(In thousands of megawatts)		
Electricity consumption	8,843.7	8,521.2	8,576.3	8,688.9	9,034.6
Industrial	2,200.0	2,200.0	2,200.0	2,200.0	1,987.2
Commercial and street lighting	2,083.0	2,083.0	2,083.0	2,083.0	2,439.0
Residential	4,560.7	4,238.2	4,293.3	4,405.9	4,608.4

Source: Central Bank of Nigeria.

Table 6. Nigeria: Selected Indicators of Agricultural Production and Prices, 1997–2001

	1997	1998	1999	2000	2001
			(In thousands of metric tons)		
Food crops					
Millet	5,997	6,328	6,423	9,743	8,088
Sorghum	7,954	8,401	8,504	8,824	9,508
Maize	6,285	6,435	6,515	6,491	6,592
Rice (paddy)	3,230	3,486	3,522	3,841	3,989
Yams	24,713	25,102	26,007	26,421	27,589
Cassava	33,495	34,092	35,980	36,750	37,949
Export crops					
Cocoa	340	345	165	170	171
Groundnuts	2,101	2,227	2,307	2,390	2,401
Palm kernels	550	572	600	629	620
Cotton	309	349	351	353	358
Sheanuts	373	396	421	448	457
Rubber	250	255	265	275	278
			(In naira per metric ton)		
Average prices for food crops					
Millet	22,737	28,406	20,347	21,264	33,528
Sorghum	20,038	27,665	18,867	19,284	34,945
Maize	22,729	29,983	19,304	20,719	37,351
Rice	43,963	45,454	49,226	46,997	51,003
Yams	24,310	29,506	15,544	20,975	56,333
Cassava	11,014	8,187	9,681	10,969	20,613
Average prices for export crops					
Cocoa	89,687	79,600	85,766	90,000	100,744
Groundnuts	17,797	21,509	28,589	44,110	44,843
Palm kernels	16,554	21,000	19,129	21,260	23,379
Cotton	35,883	32,953	40,208	35,000	33,204
Sheanuts	...	...	...	...	...
Rubber	56,722	61,833	57,892	59,400	69,800

Sources: Central Bank of Nigeria; Federal Ministry of Agriculture; and Federal Office of Statistics.

Table 7. Nigeria: Selected Petroleum Statistics, 1997–2002

	1997	1998	1999	2000	2001	Jun. 2002
Production and exports			(Millions of barrels per day)			
Production 1/	2.271	2.231	2.110	2.261	2.238	1.837
Domestic consumption	0.268	0.268	...	...	0.389	0.441
Stock changes	0.000	0.000	...	...	...	...
Exports 2/	2.003	1.955	1.844	1.952	1.849	1.396
World price			(U.S. dollars per barrel)			
Unit value of exports	19.80	12.90	17.62	28.00	...	...
U.K. Brent, average price 3/	19.12	12.72	17.70	28.31	24.43	22.19
			(In millions of U.S. dollars)			
Export values 2/	14,850	9,218	11,943	20,151	16,574	...
Domestic petroleum product prices			(In naira per liter, unless otherwise indicated)			
Crude oil (naira per barrel)	374.00	374.00	807.50	950.00	950.00	1980.00
Premium motor spirits	11.00	11.00	20.00	22.00	22.00	26.00
Kerosene	6.00	6.00	17.00	17.00	17.00	24.00
Gas oil/diesel	9.00	9.00	19.00	21.00	21.00	26.00
Fuel oil 4/	7.00	7.00	12.40	...	...	...
Liquefied petroleum gas (naira per kilogram)	4.00	35.10	26.05	...	...	...
Aviation spirits	8.00	8.00	19.00	...	...	...
Domestic consumption of petroleum products			(In thousands of metric tons)			
Premium motor spirits	3,961.8	3,530.2	3,153.6	4,799.6	5,397.6	3,159.7
Kerosene	1,640.5	1,266.4	1,217.4	1,217.0	1,744.4	758.9
Gas oil/diesel	2,650.9	1,809.9	2,059.9	2,195.3	2,179.2	944.3
Fuel oil (high and low "pour")	2,476.9	1,580.5	2,863.9	...	174.4	77.4
Liquefied petroleum gas	93.4	66.1	37.6	...	13.8	...
Aviation spirits	460.5	26.2	32.4	...	...	...

Sources: Central Bank of Nigeria; Nigerian National Petroleum Corporation; and Fund staff estimates.

1/ Includes condensates.
2/ Balance of payments basis, including exports of condensate.
3/ U.K. Brent, light-blend 38 API, f.o.b. United Kingdom.
4/ Average price of high-"pour" and low-"pour" fuel oil.

Table 8. Nigeria: National Consumer Price Indices, 1997–2002

(September 1985 = 100)

	All Items	Food	Beverages, Tobacco, and Kola	Clothing and Footwear	Housing, Fuel, and Light	Household Goods	Medical Care and Health	Transport	Recreation and Education Services	Other Services
Weights	1,000.0	690.9	47.4	46.9	118.7	35.8	11.0	23.5	13.7	12.1
1997 average	2,916.0	2,890.5	2,636.8	2,914.9	2,520.1	3,557.3	3,115.3	3,373.2	3,552.2	2,727.3
March	2,830.7	2,842.1	2,545.4	2,813.1	2,528.5	3,502.3	2,969.8	3,200.2	3,475.4	2,780.8
June	2,929.0	2,963.7	2,648.3	2,964.6	2,462.6	3,525.6	3,167.9	3,459.3	3,631.4	2,685.1
September	2,860.8	2,840.7	2,657.0	2,988.9	2,569.7	3,608.9	3,124.6	3,469.3	3,599.0	2,753.6
December	2,854.6	2,814.3	2,705.7	3,003.4	2,571.2	3,638.3	3,355.1	3,589.0	3,699.6	2,821.7
1998 average	3,149.2	3,044.4	2,762.6	3,001.7	3,636.4	3,490.4	3,281.0	3,886.2	3,856.3	3,080.7
March	2,990.6	2,952.9	2,682.1	3,041.5	2,813.5	3,442.7	3,378.9	3,839.3	3,701.5	2,844.9
June	3,204.7	3,134.7	2,715.8	3,002.8	3,651.3	3,475.4	3,274.8	3,770.0	3,827.0	2,929.2
September	3,211.3	3,066.3	2,888.6	2,918.5	3,984.1	3,499.3	3,168.9	4,022.6	3,871.1	3,264.7
December	3,291.8	3,009.9	2,793.1	3,037.0	4,885.2	3,507.0	3,329.0	4,229.3	3,988.7	3,538.0
1999 average	3,357.6	3,074.6	2,846.2	2,978.9	4,945.5	3,627.1	3,413.7	4,449.3	4,183.7	3,704.0
March	3,395.3	3,100.1	2,780.9	2,966.4	5,208.0	3,537.7	3,362.5	4,495.1	3,993.9	3,553.6
June	3,469.9	3,218.1	2,800.6	3,032.2	5,037.1	3,602.0	3,476.0	4,598.8	4,145.9	3,633.7
September	3,283.1	3,038.0	2,810.0	2,928.8	4,575.3	3,623.6	3,336.0	4,287.7	4,291.9	3,841.5
December	3,299.2	3,000.4	2,976.6	3,011.6	4,747.6	3,695.7	3,563.3	4,405.4	4,299.6	3,999.0
2000 average	3,590.5	3,148.9	3,148.3	3,074.6	6,067.7	3,821.3	3,625.9	4,726.8	4,650.3	4,322.3
March	3,347.2	3,034.3	3,054.6	3,007.0	4,834.0	3,777.7	3,542.9	4,508.0	4,612.3	4,150.6
June	3,673.6	3,217.6	3,125.6	3,041.3	6,369.5	3,921.6	3,630.5	4,722.7	4,627.7	4,302.1
September	3,792.4	3,200.2	3,205.1	3,113.2	7,373.2	3,834.2	3,647.8	4,884.4	4,700.7	4,470.5
December	3,778.4	3,238.4	3,570.6	3,164.3	6,802.4	3,884.5	3,701.8	5,010.3	4,850.4	4,567.7
2001 average	4,267.8	4,031.3	4,359.3	2,985.0	6,006.4	3,947.3	3,198.1	5,063.3	5,283.3	4,937.5
March	3,956.4	3,527.9	3,797.2	3,122.7	6,424.8	3,988.8	3,572.6	5,240.9	5,014.5	4,488.9
June	4,263.5	4,197.5	4,645.3	2,913.7	4,969.3	4,067.6	3,430.9	4,567.4	5,316.8	5,559.9
September	4,517.6	4,465.4	4,548.3	2,936.6	5,770.8	3,875.6	3,310.9	4,801.2	5,769.6	5,422.0
December	4,401.1	4,173.9	4,883.5	3,379.5	5,817.8	4,065.2	3,060.9	5,673.3	5,569.8	5,304.5
2002 average 1/	4,787.0	4,581.9	5,392.8	3,960.7	6,887.6	3,960.7	3,454.4	5,277.3	5,524.1	5,506.4
March	4,644.1	4,411.2	5,394.9	3,118.5	6,646.0	3,801.0	3,552.5	4,897.1	5,369.9	5,466.2
June	4,784.7	4,630.3	5,599.8	2,821.6	7,192.9	3,867.0	3,230.5	5,039.3	4,952.8	5,520.9
September	4,967.9	4,720.8	5,650.3	3,275.8	6,933.6	4,102.6	3,875.4	5,353.0	6,791.0	6,302.0

Sources: Central Bank of Nigeria; and Federal Office of Statistics.

1/ 2002 average from January to September.

Table 9. Nigeria: Urban Consumer Price Indices, 1997–2002

(September 1985 = 100)

	All Items	Food	Beverages, Tobacco, and Kola	Clothing and Footwear	Housing Fuel, and Light	Household Goods	Medical Care and Health	Transport	Recreation and Education Services	Other Services
Weights	1000	654.2	36.2	42.8	139.6	33.9	12.3	49.5	19.0	12.5
1997 average	3,053.8	2,947.3	3,040.5	3,037.6	2,583.5	3,065.6	3,865.4	4,572.5	5,703.2	3,123.1
March	2,993.0	2,899.5	3,063.6	2,886.6	2,545.2	3,041.6	3,611.9	4,328.2	5,482.7	3,315.7
June	3,116.1	3,073.6	3,035.9	3,114.3	2,263.6	3,054.0	4,028.0	4,812.8	6,112.4	3,096.8
September	3,131.1	3,007.2	3,081.1	3,089.7	2,724.6	3,085.4	4,033.9	4,709.9	5,990.0	3,059.7
December	3,092.8	2,899.3	3,039.9	3,174.8	2,900.7	3,124.0	4,056.6	4,744.2	6,053.9	3,140.9
1998 average	3,229.7	2,944.2	2,971.4	2,985.9	3,475.9	2,888.0	4,095.7	5,425.5	5,839.1	4,288.7
March	3,047.0	2,826.7	2,796.0	2,912.4	2,802.9	2,951.3	4,270.4	5,574.8	5,699.2	3,456.9
June	3,262.9	3,049.1	2,944.8	2,906.9	3,374.7	2,916.4	4,133.3	5,244.5	5,793.9	3,602.2
September	3,293.0	2,975.6	3,095.5	2,967.3	3,649.1	2,818.0	3,987.2	5,622.1	5,739.1	5,118.3
December	3,426.5	2,963.6	3,115.3	3,076.6	4,394.9	2,805.0	4,015.6	5,925.6	5,869.7	6,292.3
1999 average	3,489.2	2,922.3	3,144.3	2,984.7	4,743.2	3,077.5	3,668.4	6,373.1	6,553.6	6,647.8
March	3,525.6	2,888.9	3,096.6	2,919.2	5,298.3	2,920.0	3,750.7	6,550.4	5,861.5	6,212.1
June	3,560.7	3,018.3	3,099.7	2,875.7	4,841.6	2,856.3	3,607.4	6,689.7	6,416.6	6,345.8
September	3,358.6	2,850.3	3,167.1	2,943.2	4,125.2	3,279.5	3,618.1	5,973.3	7,076.9	7,228.5
December	3,403.1	2,885.5	3,163.2	3,118.5	4,167.8	3,260.8	3,856.5	6,214.5	6,682.5	7,329.5
2000 average	3,727.8	3,060.8	3,702.2	3,249.1	5,204.3	3,305.0	4,139.3	6,807.7	6,983.3	7,499.4
March	3,477.3	2,930.4	3,602.1	3,256.2	4,175.3	3,252.1	3,963.6	6,522.6	6,995.6	7,395.8
June	3,767.4	3,095.8	3,593.3	3,186.2	5,399.2	3,239.5	4,228.8	6,817.6	6,906.8	7,509.8
September	3,875.1	3,080.8	3,774.3	3,215.4	6,074.6	3,316.8	4,184.8	7,035.8	6,965.9	7,584.1
December	4,011.0	3,215.9	4,108.7	3,272.1	6,191.6	3,424.9	4,295.0	7,166.8	7,270.9	7,557.1
2001 average	4,490.7	4,021.4	4,962.6	3,474.4	5,161.5	3,681.2	3,995.8	7,585.4	7,732.8	8,487.5
March	4,281.5	3,721.2	3,663.3	3,426.1	5,353.5	3,581.1	4,288.3	7,458.9	7,250.9	8,544.9
June	4,489.6	4,206.9	4,915.1	3,434.6	4,198.0	3,999.9	3,730.9	7,394.7	8,123.0	8,220.8
September	4,874.7	4,582.8	5,541.5	3,217.5	5,268.3	3,444.3	3,673.9	7,482.2	8,371.2	8,489.1
December	4,683.5	4,195.0	5,795.8	3,662.0	4,671.1	4,135.7	3,621.9	8,965.1	8,283.7	9,213.4
2002 average 1/	5,013.7	4,598.7	6,163.9	3,594.9	5,488.0	3,773.5	3,935.0	8,510.1	8,244.2	8,899.7
March	4,916.8	4,461.8	6,049.2	3,685.6	5,525.4	3,532.6	3,879.7	8,175.8	8,858.0	8,428.6
June	5,075.8	4,851.0	6,646.9	3,343.5	5,778.1	3,786.9	3,715.0	8,442.0	6,996.0	9,060.8
September	5,248.7	4,744.3	6,618.9	3,801.2	5,685.4	4,161.6	4,553.9	8,935.8	8,909.5	9,167.7

Sources: Central Bank of Nigeria; and Federal Office of Statistics.

1/ 2002 average from January to September.

Table 10. Nigeria: Rural Consumer Price Indices, 1997–2002

(September 1985 = 100)

	All Items	Food	Beverages, Tobacco, and Kola	Clothing and Footwear	Housing Fuel, and Light	Household Goods	Medical Care and Health	Transport	Recreation and Education Services	Other Services
Weights	1000	698.5	49.6	47.7	114.5	36.1	10.8	18.3	12.5	12.0
1997 average	2,810.4	2,830.0	2,580.8	2,908.2	2,484.6	3,643.1	2,943.8	2,712.0	2,871.4	2,697.2
March	2,799.2	2,831.3	2,469.1	2,799.8	2,524.4	3,589.3	2,822.8	2,586.1	2,861.4	2,668.2
June	2,892.6	2,943.0	2,591.3	2,937.6	2,511.5	3,614.7	2,971.1	2,722.5	2,872.5	2,598.4
September	2,808.3	2,809.3	2,594.5	2,970.6	2,531.5	3,707.8	2,916.5	2,794.0	2,867.6	2,689.1
December	3,808.3	2,798.3	2,656.4	2,972.4	2,490.2	3,735.4	3,194.6	2,960.1	2,979.4	2,754.5
1998 average	3,133.5	3,063.4	2,731.9	3,004.5	3,686.3	3,604.4	3,094.6	3,025.6	3,249.8	2,826.4
March	2,979.6	2,976.7	2,665.3	3,064.9	2,940.7	3,535.5	3,174.9	2,894.6	3,090.4	2,716.1
June	3,193.4	3,150.9	2,682.1	3,020.1	3,719.3	3,581.0	3,078.3	2,967.3	3,225.4	2,787.6
September	3,195.4	3,083.4	2,858.1	2,909.6	4,066.5	3,628.0	2,981.6	3,151.8	3,299.7	2,874.6
December	3,265.6	3,018.6	2,745.6	3,029.8	5,005.9	3,639.6	3,171.9	3,305.8	3,413.3	2,958.2
1999 average	3,332.0	3,103.4	2,802.3	2,977.8	4,995.3	3,730.9	3,355.4	3,402.0	3,458.7	3,084.3
March	3,370.0	3,140.0	2,734.4	2,975.0	5,185.7	3,654.4	3,273.7	3,376.2	3,422.7	2,994.0
June	3,452.3	3,255.8	2,756.5	3,060.5	5,085.3	3,742.8	3,445.9	3,460.6	3,451.3	3,062.8
September	3,268.4	3,073.4	2,757.4	2,926.2	4,686.1	3,688.5	3,271.4	3,370.0	3,440.0	3,128.6
December	3,279.0	3,022.0	2,949.2	2,992.2	4,890.2	3,777.9	3,496.2	3,420.6	3,570.7	3,298.0
2000 average	3,564.1	3,165.6	3,066.7	3,043.1	6,282.0	3,918.8	3,508.4	3,594.0	3,936.7	3,653.5
March	3,321.9	3,053.9	2,974.0	2,961.9	4,996.1	3,877.0	3,446.7	3,411.3	3,883.4	3,467.5
June	3,655.4	3,240.6	3,041.9	3,015.0	6,610.6	4,050.4	3,493.6	3,582.2	3,930.6	3,627.0
September	3,776.3	3,222.8	3,121.3	3,094.7	7,692.7	3,931.9	3,525.1	3,713.2	4,007.8	3,815.2
December	3,733.2	3,242.7	3,402.1	3,144.8	6,952.6	3,971.3	3,566.0	3,836.4	4,110.0	3,938.5
2001 average	4,224.7	4,033.0	4,270.5	2,986.7	6,242.3	3,997.5	3,329.1	3,691.0	4,534.2	4,203.3
March	3,893.2	3,491.4	3,816.9	3,067.8	6,688.3	4,065.8	3,408.7	4,033.4	4,330.4	3,635.3
June	4,219.6	4,195.7	4,605.6	2,819.5	5,159.1	4,080.4	3,362.3	3,028.2	4,458.4	4,999.9
September	4,447.7	4,443.2	4,402.5	2,885.8	5,894.1	3,957.1	3,227.9	3,344.8	4,974.8	4,560.4
December	4,346.8	4,169.9	4,749.6	3,328.5	6,099.1	4,051.9	2,932.8	3,885.2	4,740.7	4,481.1
2002 average 1/	4,748.1	4,583.0	5,279.6	2,911.2	7,231.0	3,972.0	3,334.5	3,348.5	4,693.1	4,813.8
March	4,591.0	4,401.6	5,298.8	3,016.1	6,920.9	3,854.7	3,477.8	3,108.8	4,304.4	4,842.1
June	4,728.0	4,626.4	5,446.1	2,727.3	7,540.0	3,662.2	3,119.8	3,190.9	4,328.6	4,775.2
September	4,913.2	4,716.4	5,508.2	3,180.9	7,239.9	4,091.4	3,720.4	3,406.9	6,143.8	5,698.3

Sources: Central Bank of Nigeria; and Federal Office of Statistics.

1/ 2002 average from January to September.

Table 11. Nigeria: Consolidated Government Finance, 1997–2001 1/

	1997	1998	1999	2000	2001
	(In millions of naira)				
Total revenue	589,339	458,341	986,954	1,927,088	2,227,236
Petroleum revenue	326,640	203,731	721,018	1,584,446	1,712,499
Nonpetroleum revenue	262,699	254,610	265,936	342,642	514,737
Tax revenue	161,158	168,341	248,936	304,585	470,402
Taxes on net income, profits and capital gains	58,918	65,616	84,985	104,960	153,870
Domestic taxes on goods and services	34,000	38,415	71,902	83,937	121,789
Taxes on international trade and transactions	68,240	64,310	92,049	115,688	194,744
Nontax revenue	101,541	86,269	17,000	38,057	44,335
Grants	0	0	0	0	0
Total expenditure	561,036	722,480	1,227,960	1,651,585	2,383,914
Recurrent expenditure	180,140	229,738	484,494	651,835	732,620
Personnel costs	46,000	56,319	136,909	278,701	285,166
Overhead costs	55,000	75,833	69,023	71,377	117,548
Interest payments due	71,654	88,724	266,740	279,273	289,498
Domestic interest	32,000	40,520	84,034	104,168	117,770
Foreign interest	36,654	45,954	182,706	175,106	171,728
Other (local contractors)	3,000	2,250	0	0	0
Other 2/	7,486	8,863	11,823	22,484	40,408
Capital expenditure	225,526	292,285	359,347	501,015	798,486
Domestically financed 3/	217,296	284,142	346,746	485,776	792,271
Of which: Petroleum Special Trust Fund	42,984	66,827	21,000	14,559	0
Foreign financed	8,231	8,143	12,600	15,240	6,215
Extra-budgetary/NDDC/Other	0	0	100,119	5,046	10,000
State and local government (incl. special funds)	155,369	200,457	284,000	493,689	842,808
Overall balance (commitment basis)	28,303	-264,139	-241,006	275,502	-156,678
Balancing item/drawdown on balances	1,344	161,312	0	0	0
Overall balance (cash basis)	29,647	-102,827	-241,006	275,502	-156,678
Financing	-29,647	102,827	241,006	-275,502	156,678
Privatization proceeds	0	0	0	18,104	85,800
External	30,351	24,503	30,690	15,649	-60,304
Borrowing	8,226	8,139	12,600	15,240	6,215
Amortization due	-49,111	-46,720	-200,865	-175,494	-191,754
Change in arrears/rescheduling	71,237	63,084	218,955	175,904	125,235
Domestic	-59,999	78,324	210,315	-309,255	131,182
Banking system (net) 4/	-71,737	66,086	238,000	-227,003	136,613
Change in arrears		0	-32,000	-42,459	0
Nonbank	11,738	12,238	4,315	-39,793	-5,432
	(In percent of GDP, unless otherwise indicated)				
Total revenue	20.0	16.2	29.3	45.0	46.9
Of which: petroleum revenue	11.1	7.2	21.4	37.0	36.1
Total expenditure and net lending	19.1	25.5	36.4	38.6	50.2
Recurrent expenditure	6.1	8.1	14.4	15.2	15.4
Of which: foreign interest due	1.2	1.6	5.4	4.1	3.6
domestic interest due	1.1	1.4	2.5	2.4	2.5
Capital expenditure	7.7	10.3	10.7	11.7	16.8
State and local government (incl. Special Funds)	5.3	7.1	8.4	11.5	17.8
Overall balance (commitment basis)	1.0	-9.3	-7.1	6.4	-3.3
Balancing item/Drawdown on balances	0.0	5.7	0.0	0.0	0.0
Overall balance (cash basis)	1.0	-3.6	-7.1	6.4	-3.3
Foreign financing	1.0	0.9	0.9	0.4	-1.3
Domestic financing	-2.0	2.8	6.2	-7.2	2.8
Of which: bank financing 4/	-2.4	2.3	7.1	-5.3	2.9
Memorandum items:					
Primary balance 5/	3.3	-6.3	0.8	13.0	2.8
Nominal GDP (in millions of naira)	2,939,651	2,834,306	3,371,335	4,279,221	4,746,666
Price of Nigerian oil (in U.S. dollars per barrel)	19.27	13.07	17.98	28.24	24.28

Sources: Federal Ministry of Finance; and Fund staff estimates.

1/ Consists of the federal, state and local governments, "First charges," Special funds, and the Petroleum Special Trust Fund (PSTF).

2/ Includes PSTF recurrent expenditure, fertilizer subsidy, customs levies, Education Fund, and presecondary foreign exchange market (SFEM) payments.

3/ Consists of federal government budgetary capital expenditure, national priority projects, cash calls, Nigerian National Petroleum Corporation (NNPC) priority projects, and PSTF capital expenditure. Starting in 1999, expenditure on national priority projects and local contractors have been classified as domestic arrears.

4/ Includes adjustment for PSTF deposits held in the commercial banking system.

5/ Primary balance is defined as total revenue less total expenditure, excluding interest payments due.

Table 12. Nigeria: Consolidated Government Revenue, 1997–2001 1/

(In millions of naira)

	1997	1998	1999	2000	2001
Total revenue	589,339	458,341	986,954	1,927,088	2,208,296
Tax revenue	292,998	247,169	317,523	637,126	876,478
Taxes on net income, profits, and capital gains	152,758	109,666	153,572	437,502	559,745
Petroleum profits tax	93,840	44,050	68,587	332,542	405,941
Company income tax 2/	26,000	33,500	44,985	51,028	68,660
Education tax	1,733	2,233	3,000	8,302	16,214
Personal income tax 3/	31,185	29,883	37,000	45,630	68,930
Domestic taxes on goods and services	72,000	73,193	71,902	83,937	121,998
Value-added tax	34,000	38,415	48,514	58,470	91,758
Taxes on petroleum products	38,000	34,778	23,388	25,467	30,240
Taxes on international trade and transactions	68,240	64,310	92,049	115,688	194,735
Import duties, excises, and fees 4/	63,000	58,475	83,226	101,506	170,557
Customs levies 5/	5,240	5,835	8,823	14,182	24,178
Nontax revenue	296,341	211,173	669,431	1,289,961	1,331,819
Oil export proceeds	167,800	102,399	498,217	947,163	934,284
Royalty	...	...	102,824	192,531	206,593
Autonomous foreign exchange market profits	90,247	82,158	0	0	0
Domestic crude 6/	27,000	21,806	45,427	89,200	134,037
Federal government independent revenue 7/	7,760	3,112	17,000	38,057	44,405
Petroleum Special Trust Fund independent revenue 8/	3,533	1,000	...	...	...
Upstream gas proceeds/other oil	0	699	5,963	23,010	12,500
Memorandum item:					
Privatization proceeds	...	...	...	18,104	77,958

Sources: Federal Ministry of Finance; and Fund staff estimates.

1/ Includes the federal, state and local governments, "First charges," special funds, and the Petroleum Special Trust Fund (PSTF).

2/ Mainly company income tax collected by the Federal Inland Revenue Service Revenue.

3/ Consists of personal income tax, other taxes and fees collected by state governments. The Federal Inland Revenue Service also collects a small amount of personal income tax from armed forces personnel and inhabitants of the Federal Capital Territory.

4/ Consists of import duties, excise duties, and fees that go directly to the Federation Account.

5/ Consists mainly of earmarked import levies of a 5 percent port development surcharge, a 1 percent Nigerian Shippers' Council surcharge, and a 1 percent Raw Materials Research and Development Council surcharge.

6/ Proceeds from the sale of crude oil to domestic refineries.

7/ Consists of dividends from public enterprises, directors' fees and loan recoveries.

8/ Consists of interest earned on PSTF balances held as deposits and treasury bills.

Table 13. Nigeria: Consolidated Government Expenditure, 1997–2001 1/

(In millions of naira)

	1997	1998	1999	2000	2001
Total expenditure	561,036	722,480	1,227,960	1,681,615	2,350,079
Recurrent expenditure	180,140	229,738	484,494	684,850	595,454
Goods and services	101,513	132,946	205,931	350,078	403,107
Federal government personnel costs	46,000	56,319	136,909	278,701	285,118
Federal government overhead	55,000	75,833	69,023	71,377	117,989
Petroleum Special Trust Fund	513	794	0	0	0
Fertilizer subsidy	0	0	0	0	0
Customs levies	5,240	5,835	8,823	14,182	24,195
Education Fund	1,733	2,233	3,000	8,302	16,214
Presecondary foreign exchange market payments	0	0	0	0	0
Interest payments due	71,654	88,724	266,740	312,288	151,939
Domestic interest	32,000	40,520	84,034	104,168	117,770
Foreign interest	36,654	45,954	182,706	208,121	34,168
Other (local contractors)	3,000	2,250	0	...	...
Capital expenditure	172,286	220,424	152,540	203,639	431,816
Domestically financed budgetary	164,056	212,281	139,940	191,384	425,601
Core capital	104,792	132,254	118,940	176,825	403,567
National priority projects	16,280	13,200	0	0	18,124
Petroleum Special Trust Fund	42,984	66,827	21,000	14,559	3,910
Foreign financed	8,231	8,143	12,600	12,254	6,215
NNPC operations	53,240	71,861	206,806	284,750	480,001
JVC cash calls	45,100	54,991	183,339	260,000	441,927
NNPC priority projects	8,140	16,870	23,468	24,750	38,074
Extrabudgetary outlays/other/NDDC	0	0	100,119	5,046	0
Judiciary	0	0	0	9,641	0
State and local governments 2/	155,369	200,457	284,000	493,689	842,808
Memorandum items:					
Domestic arrears	...	...	32,000	42,459	...
Arrears on local contractors	...	...	1,000	...	...
Arrears on federal government priority projects	...	...	14,000	42,459	...
Other domestic arrears	...	...	17,000	...	...

Sources: Federal Ministry of Finance; and Fund staff estimates.

1/ Consists of the federal, state and local governments, "First charges," special funds and the Petroleum Special Trust Fund (PSTF).

2/ Includes the special funds.

Table 14. Nigeria: Federation Account Operations, 1997–2001

(In millions of naira)

	1997	1998	1999	2000	2001
Total revenue	200,540	137,768	454,239	1,007,585	1,096,418
Petroleum revenue	111,540	45,793	326,027	855,051	857,201
Foreign-generated oil revenue (net)	84,540	23,988	257,212	740,384	735,656
Gross government export proceeds	167,800	102,399	498,217	947,163	934,284
Royalty and petroleum profit tax	93,840	44,050	171,411	525,073	639,234
First charges/dedicated accounts	-177,100	-122,461	-412,416	-731,852	-837,862
Domestically generated oil revenue (net)	27,000	21,806	68,816	114,667	121,545
Petroleum naira revenue	65,000	56,584	68,816	114,667	121,545
Transfer to Petroleum Special Trust Fund	38,000	34,778	0	0	0
Nonpetroleum revenue	89,000	91,975	128,212	152,534	239,217
Company income tax	26,000	33,500	44,985	51,028	68,660
Customs and excise	63,000	58,475	83,226	101,506	170,557
Total expenditure	194,380	132,525	436,599	1,020,954	1,212,101
Deduction for fertilizer subsidy	0	0	0	0	0
Transfers to stabilization account	0	0	0	0	0
Federation Account distribution 1/	194,380	132,525	436,599	1,020,954	1,212,101
Federal government	97,262	67,157	211,751	514,969	530,658
State government	48,130	33,232	104,784	256,501	391,327
Local government	40,108	27,693	87,320	213,751	245,487
Special funds	8,881	4,443	32,745	35,733	44,629
Federal Capital Territory (1 percent)	2,005	1,385	4,366	10,210	12,780
Ecology (2 percent)	4,011	2,769	8,732	20,419	25,491
Statutory stabilization (0.5 percent)	1,003	692	2,183	5,105	6,358
Derivation (2 percent)	465	-101	8,732	...	...
Mineral-producing areas (2 percent)	1,396	-303	8,732	...	...
Overall balance	6,160	5,243	17,640	-13,369	-115,683
Financing	-6,160	-5,243	-17,640	13,369	115,683
Memorandum items:					
First charges/dedicated accounts	177,100	122,461	412,416	731,852	837,862
First charges	177,100	122,461	412,416	686,786	759,481
JVC cash calls	45,100	54,991	183,339	260,000	391,990
NNPC priority projects	8,140	16,870	23,468	24,750	38,074
External debt service	44,000	37,400	177,610	175,034	232,192
National priority projects	16,280	13,200	0	0	0
Special reserve/excess proceeds	63,580	0	28,000	227,003	97,225
Dedicated accounts	...	...	...	...	...
13 percent natural resource derivation	...	...	...	45,066	78,381

Sources: Federal Ministry of Finance; and Fund staff estimates.

1/ Since 1992, the allocation formula of Federation Account revenue has been 48.5 percent for the federal government, 24.0 percent for state governments, 20.0 percent for local governments, and 7.5 percent for special funds. Subsequent to the creation of the Niger Delta Development Commission in 2000, the share of the former OMPADEC and derivation totaling 4 percent has been distributed mainly to the three tiers of governments, thereby reducing the share of special funds to 3.5 percent.

Table 15. Nigeria: Summary Federal Government Fiscal Operations, 1997–2001 1/

(In millions of naira, unless otherwise indicated)

	1997	1998	1999	2000	2001
Total revenue	369,296	285,884	711,449	1,368,233	1,412,949
Distribution from Federation Account	97,262	67,157	211,751	514,969	530,658
Drawdown of Federation Stabilization Account	0	0	13,580	0	64
Federal government share of value-added tax	12,000	9,462	7,277	8,770	13,359
Independent revenue 2/	7,760	3,112	17,000	38,057	44,405
Autonomous foreign exchange market profit	90,247	39,846	0	0	0
Education Trust Fund	1,733	2,233	3,000	8,302	16,214
Customs levies	5,240	5,835	8,823	14,182	24,195
First charges deductions	113,520	122,461	426,416	783,953	730,317
External debt service	44,000	37,400	177,610	175,034	232,192
National priority projects	16,280	13,200	14,000	42,459	18,124
JVC cash calls and NNPC priority projects	53,240	71,861	206,806	284,750	480,001
Excess proceeds	...	...	28,000	227,003	0
Judiciary	...	...	...	9,641	0
13 percent derivation grant	...	...	...	45,066	0
Transfer from Federation Account for fertilizer subsidy	0	0	0	0	0
Transfer for Petroleum Special Trust Fund (PSTF)	38,000	34,778	21,000	0	0
PSTF independent revenue 3/	3,533	1,000	0	0	0
Other	0	0	2,603	0	53,737
Total expenditure	398,688	513,950	957,960	1,220,744	1,466,862
Recurrent expenditure	173,167	221,669	484,494	684,850	555,046
Goods and services	101,513	132,946	205,931	350,078	403,107
Personnel costs	46,000	56,319	136,909	278,701	285,118
Overhead	55,000	75,833	69,023	71,377	117,989
PSTF	513	794	0	0	0
Fertilizer subsidy	0	0	0	0	0
Interest payments due	71,654	88,724	266,740	312,288	151,939
Domestic interest	32,000	40,520	84,034	104,168	117,770
Foreign interest	36,654	45,954	182,706	208,121	34,168
Local contractors	3,000	2,250	0	0	0
Other			11,823	22,484	0
Capital expenditure	172,281	220,419	166,540	246,098	431,816
Domestically financed	164,056	212,281	153,940	233,843	425,601
Budgetary	104,792	132,254	118,940	176,825	403,567
National priority projects	16,280	13,200	14,000	42,459	18,124
PSTF	42,984	66,827	21,000	14,559	3,910
Foreign financed	8,226	8,139	12,600	12,254	6,215
Net lending 4/	0	0	0	0	0
JVC cash calls and NNPC priority projects	53,240	71,861	206,806	284,750	480,001
Other/extrabudgetary expenditure	0	0	100,119	5,046	0
Overall balance (commitment basis)	-29,392	-228,066	-246,511	147,490	-53,914
Balancing item	-52,914	-42,100	0	13,300	0
Overall balance (cash basis)	23,522	-185,966	-246,511	134,190	-53,914
Financing	-23,522	185,966	246,511	-134,190	53,914
Privatization	0	0	0	18,104	0
External loans (net)	30,352	24,503	-188,265	45,341	0
Borrowings	8,226	8,139	12,600	12,254	0
Amortization due	-49,111	-46,720	-200,865	-135,513	0
Change in arrears (acc. +, red. -)	71,237	63,084	0	0	0
Rescheduling	0	0	0	168,600	0
Domestic	-53,873	161,463	434,776	-179,531	53,914
Banking system (net) 5/	-63,873	151,464	238,000	-99,615	118,724
Nonbank	10,000	10,000	196,776	-79,916	-30,216
Memorandum items:					
Primary balance 6/	42,262	-139,342	20,229	459,778	98,025
Primary balance (in percent of GDP)	1.4	-4.9	0.6	10.7	2.1
GDP at market prices	2,939,651	2,834,306	3,371,335	4,279,221	4,746,666

Source: Federal Ministry of Finance; and Fund staff estimates.

1/ Consists of the federal government and the Petroleum Special Trust Fund (PSTF).

2/ Consists of dividends from public enterprises, directors' fees and loan recoveries from public enterprises.

3/ Consists of interest earned on PSTF balances held as deposits and treasury bills.

4/ To state governments.

5/ Includes adjustment for PSTF deposits held in the commercial banking system, which are classified as private deposits.

6/ Primary balance is defined as total revenue less total expenditure, excluding interest payments due.

Table 16. Nigeria: Total Expenditure of the Federal Government by Functional Classification, 1997–2001 1/

	1997	1998	1999	2000	2001
			(In millions of naria)		
Administration	101,861	89,944	139,871	165,929	210,253
General administration	71,564	47,025	82,447	93,892	103,112
Defense	17,121	25,162	24,477	37,486	63,472
Internal security	13,176	17,757	32,948	34,551	43,669
Economic services	94,089	61,334	73,628	118,790	233,503
Agriculture and natural services	7,398	9,043	12,151	13,609	64,944
Road and construction	0	2,244	3,895	18,486	19,642
Manufacturing, mining, and quarrying	4,146	14,691	9,924	10,514	7,284
Transport and communications	3,348	9,965	5,948	9,604	53,176
Special projects	44,000	14,665	18,920	40,377	18,124
Others	35,198	10,725	22,789	26,200	70,333
Social and community services	27,119	50,865	55,002	86,768	132,971
Education	16,286	24,614	31,564	49,563	59,745
Health	6,718	13,641	16,180	20,446	44,652
Housing	0	4,722	0	0	0
Other	4,115	7,888	7,258	16,759	28,574
Transfers	145,573	206,591	316,742	359,554	217,313
Outstanding domestic liabilities	23,169	4,147	0	0	0
Interest due	73,308	86,474	266,740	316,606	187,267
Domestic	36,654	40,520	84,034	108,485	104,000
External	36,654	45,954	182,706	208,121	83,267
Other recurrent tranfers 2/	10,524	52,272	25,190	42,948	30,046
Other capital transfers	38,572	63,698	24,812	0	0
Total	368,641	408,734	585,243	731,041	794,040
			(In percent of total)		
Administration	27.6	22.0	23.9	22.7	26.5
General administration	19.4	11.5	14.1	12.8	13.0
Defense	4.6	6.2	4.2	5.1	8.0
Internal security	3.6	4.3	5.6	4.7	5.5
Economic services	25.5	15.0	12.6	16.2	29.4
Agriculture and water services	2.0	2.2	2.1	1.9	8.2
Construction	0.0	0.5	0.7	2.5	2.5
Manufacturing, mining, and quarrying	1.1	3.6	1.7	1.4	0.9
Transport and communications	0.9	2.4	1.0	1.3	6.7
Special projects	11.9	3.6	3.2	5.5	2.3
Others	9.5	2.6	3.9	3.6	8.9
Social and community services	7.4	12.4	9.4	11.9	16.7
Education	4.4	6.0	5.4	6.8	7.5
Health	1.8	3.3	2.8	2.8	5.6
Housing	0.0	1.2	0.0	0.0	0.0
Other	1.1	1.9	1.2	2.3	3.6
Transfers	39.5	50.5	54.1	49.2	27.4
Outstanding domestic liabilities	6.3	1.0	0.0	0.0	0.0
Interest due	19.9	21.2	45.6	43.3	23.6
Domestic	9.9	9.9	14.4	14.8	13.1
External	9.9	11.2	31.2	28.5	10.5
Other recurrent transfers 2/	2.9	12.8	4.3	5.9	3.8
Other capital transfers	21.6	15.2	15.2	15.2	15.2
Total	100.0	100.0	100.0	100.0	100.0

Source: Central Bank of Nigeria, *Annual Reports,* except for "interest due" which is estimated by Fund staff.

1/ The figures are based on budgetary data and exclude extrabudgetary expenditures.
2/ Includes pensions, gratuities, and contingencies.

Table 17. Nigeria: Recurrent Expenditure of the Federal Government by Functional Classification, 1997–2001 1/

	1997	1998	1999	2000	2001
			(In millions of naira)		
Administration	61,332	54,674	97,134	114,532	161,007
General administration	37,908	26,932	48,364	57,332	75,080
Defense	13,343	15,460	20,679	31,046	47,072
Internal security	10,082	12,281	28,091	26,154	38,855
Economic services	7,794	11,862	20,451	29,815	53,011
Agriculture	2,421	2,979	5,239	4,806	7,065
Road and construction	0	2,244	3,895	11,480	7,202
Transport and communications	2,185	1,439	2,632	2,427	33,935
Others	3,188	5,200	8,686	11,102	4,809
Social and community services	21,331	22,778	37,748	58,803	79,635
Education	12,983	14,035	23,047	39,034	39,885
Health	4,702	5,334	8,793	11,580	24,524
Others	3,645	3,409	5,908	8,189	15,226
Transfers	83,832	138,746	291,930	359,554	217,313
Interest due	73,308	86,474	266,740	316,606	187,267
Domestic	36,654	40,520	84,034	108,485	104,000
External	36,654	45,954	182,706	208,121	83,267
Others 2/	10,524	52,272	25,190	42,948	30,046
Total	174,289	228,059	447,264	562,704	510,966
			(In percent of total)		
Administration	35.2	24.0	21.7	20.4	31.5
General administration	21.8	11.8	10.8	10.2	14.7
Defense	7.7	6.8	4.6	5.5	9.2
Internal security	5.8	5.4	6.3	4.6	7.6
Economic services	4.5	5.2	4.6	5.3	10.4
Agriculture and water	1.4	1.3	1.2	0.9	1.4
Construction	0.0	1.0	0.9	2.0	1.4
Transport and communications	1.3	0.6	0.6	0.4	6.6
Others	1.8	2.3	1.9	2.0	0.9
Social and community services	12.2	10.0	8.4	10.5	15.6
Education	7.4	6.2	5.2	6.9	7.8
Health	2.7	2.3	2.0	2.1	4.8
Others	2.1	1.5	1.3	1.5	3.0
Transfers	48.1	60.8	65.3	63.9	42.5
Interest due	42.1	37.9	59.6	56.3	36.6
Domestic	21.0	17.8	18.8	19.3	20.4
External	21.0	20.2	40.8	37.0	16.3
Others 2/	6.0	22.9	5.6	7.6	5.9
Total	100.0	100.0	100.0	100.0	100.0

Source: Central Bank of Nigeria, Annual Reports, except for "interest due" which is estimated by Fund staff.

1/ The figures are based on budgetary data and exclude extrabudgetary expenditures.

2/ Includes pensions, gratuities, and contingencies.

Table 18. Nigeria: Capital Expenditure of the Federal Government by Functional Classification, 1997–2001 1/

	1997	1998	1999	2000	2001
			(In millions of naira)		
Administration	40,529	35,270	42,737	51,397	49,246
General administration	33,656	20,093	34,083	36,560	28,032
Defense	3,778	9,702	3,798	6,440	16,400
Internal security	3,095	5,476	4,856	8,397	4,814
Economic services	86,295	76,070	58,176	88,975	180,492
Agriculture and natural resources	4,976	6,065	6,913	8,803	57,879
Road and construction	0	26,599	5,000	7,006	12,440
Manufacturing, mining, and quarrying	4,146	14,691	9,924	10,514	7,284
Transport and communications	1,163	8,526	3,317	7,177	19,241
Special projects	44,000	14,665	18,920	40,377	18,124
Others	32,010	5,525	14,103	15,098	65,524
Social and community services	5,789	28,088	17,254	27,965	53,336
Education	3,303	10,579	8,517	10,529	19,860
Health	2,016	8,307	7,387	8,866	20,128
Housing	0	4,722	0	0	0
Others	470	4,479	1,350	8,570	13,348
Transfers	61,741	67,846	24,812	0	0
Outstanding domestic liabilities	23,169	4,147	0	0	0
PSTF/other	38,572	63,698	24,812	0	0
Total	194,353	207,274	142,979	168,337	283,074
			(In percent of total)		
Administration	20.9	17.0	29.9	30.5	17.4
General administration	17.3	9.7	23.8	21.7	9.9
Defense	1.9	4.7	2.7	3.8	5.8
Internal security	1.6	2.6	3.4	5.0	1.7
Economic services	44.4	36.7	40.7	52.9	63.8
Agriculture and water resources	2.6	2.9	4.8	5.2	20.4
Road and construction	0.0	12.8	3.5	4.2	4.4
Manufacturing, mining, and quarrying	2.1	7.1	6.9	6.2	2.6
Transport and communications	0.6	4.1	2.3	4.3	6.8
Special projects	22.6	7.1	13.2	24.0	6.4
Others	16.5	2.7	9.9	9.0	23.1
Social and community services	3.0	13.6	12.1	16.6	18.8
Education	1.7	5.1	6.0	6.3	7.0
Health	1.0	4.0	5.2	5.3	7.1
Housing	0.0	2.3	0.0	0.0	0.0
Others	0.2	2.2	0.9	5.1	4.7
Transfers	31.8	32.7	17.4	0.0	0.0
Outstanding domestic liabilities	11.9	2.0	0.0	0.0	0.0
Other	19.8	30.7	17.4	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0

Source: Central Bank of Nigeria, *Annual Reports*.

1/ The figures are based on budgetary data and exclude extrabudgetary expenditure.

Table 19. Nigeria: Federal Government Outstanding Domestic Debt, 1997–2001

	1997	1998	1999	2000	2001
	(In millions of naira)				
By instruments	359,028	404,102	794,806	898,253	1,016,974
Treasury bills	221,801	221,802	361,758	465,535	584,536
Treasury bonds	134,388	179,620	430,608	430,608	430,608
Treasury certificates	0	0	0	0	0
Development stock	2,840	2,680	2,440	2,110	1,830
Other	0	0	0	0	0
By holders	359,029	404,101	794,807	898,253	1,016,974
Banking sector	305,679	355,857	765,123	808,217	879,374
Central bank	264,229	301,742	522,820	520,000	680,108
Commercial banks	35,066	49,540	226,092	275,778	199,266
Merchant banks	6,384	4,574	16,211	12,439	0
Nonbank sector	53,350	48,245	29,684	167,817	137,600
	(In percent of total, unless otherwise indicated)				
Holders	100.0	100.0	100.0	108.7	100.0
Banking sector	85.1	88.1	96.3	90.0	86.5
Central bank	73.6	74.7	65.8	57.9	66.9
Commercial banks	9.8	12.3	28.4	30.7	19.6
Merchant banks	1.8	1.1	2.0	1.4	0.0
Nonbank sector	14.9	11.9	3.7	18.7	13.5

Sources: Central Bank of Nigeria, *Annual Reports;* and Fund staff estimates.

Table 20. Nigeria: Summary of Budgetary Operations of State and Local Governments and Special Funds, 1997–2001 1/

(In millions of naira)

	1997	1998	1999	2000	2001
Revenue	163,799	224,242	316,820	321,284	514,136
Statutory share of Federation Account revenue 2/	107,000	132,758	232,221	251,570	404,094
Statutory share of Federation Stabilization Account revenue	449	237	922	5,781	7,061
Share of value-added tax	21,420	26,378	37,655	30,644	44,912
State allocation	579	750	719	0	0
Independent revenue 3/	29,875	32,546	38,157	0	0
Other	4,476	31,573	7,146	33,289	58,069
Expenditure 4/	136,402	210,122	252,745	355,680	529,930
Recurrent	80,813	104,260	139,956	196,784	294,710
Capital	41,441	78,514	78,962	158,896	235,220
Net lending	0	0	0	0	0
Expenditure of special funds	14,148	27,348	33,827	0	0
Balance (deficit -)	27,397	14,120	64,075	-34,396	-15,794
Financing	-27,397	-14,120	-64,075	34,396	15,794
Foreign loans	192	246	295	156	0
Domestic loans	259	4,189	4,554	3,835	0
Other (residual) 5/	-27,848	-18,555	-68,924	30,405	15,794

Source: Central Bank of Nigeria, *Annual Reports* .

1/ These data, obtained through annual surveys undertaken by the Central Bank of Nigeria, are only illustrative.

2/ This revenue is on gross basis (ie. before deductions for payments of various commitments made by the sub national governments).

3/ Mainly personal income tax collected by state governments.

4/ Total spending is underestimated because only a sample of local governments are covered and deductions at source may not have been included.

5/ Reflects an underestimation of expenditure.

Table 21. Nigeria: Monetary Survey, 1997–2002 1/

	1997	Official 1998	AFEM 1998	1999	2000	2001	2002 Q1	2002 Q2
				(In millions of naira; end of period)				
Net foreign assets	195,134	215,314	517,751	649,967	1,164,876	1,322,385	1,326,157	1,248,880
Central Bank of Nigeria (net)	128,554	125,671	428,108	493,688	956,988	1,034,542	1,053,078	949,883
Foreign assets	179,186	161,356	485,914	510,559	1,091,053	1,156,483	1,215,153	1,345,775
Foreign liabilities	-50,632	-35,685	-57,806	-16,871	-134,065	-121,940	-162,075	-395,892
Commercial and merchant banks (net)	66,580	89,643	89,643	156,280	207,889	287,843	273,079	298,997
Foreign assets	69,590	96,184	96,184	161,754	222,988	305,029	300,054	340,467
Foreign liabilities	-3,009	-6,540	-6,540	-5,474	-15,099	-17,185	-26,974	-41,470
Net domestic assets	247,085	317,319	-25,533	66,227	-111,323	19,721	130,663	278,570
Domestic credit	365,871	512,490	311,373	632,010	472,012	829,791	1,004,846	1,065,957
Consolidated government (net)	47,840	140,858	-44,531	178,907	-116,425	1,588	101,664	108,733
Claims	453,723	516,807	498,499	736,646	813,542	925,682	931,993	859,434
Deposits	-405,882	-375,950	-543,031	-557,740	-929,968	-924,094	-830,329	-750,701
Of which: federal government (net)	46,358	139,916	-45,481	176,805	-123,990	-25,209	111,973	126,573
Non-financial public enterprises	1,453	926	19,287	692	951	1,080	692	951
Other financial institutions	5,916	4,580	4,313	4,568	4,881	6,330	4,568	4,881
Claims on private sector	310,661	366,127	332,304	447,843	582,606	820,793	447,843	582,606
Other items (net)	-118,786	-195,171	-336,906	-565,783	-583,335	-810,070	-874,182	-787,387
Broad money	427,601	521,420	533,953	698,020	1,034,770	1,315,869	1,423,346	1,502,055
Narrow money	275,098	327,300	339,834	400,826	649,684	816,708	835,923	872,094
Quasi money	152,503	194,120	194,120	297,194	385,086	499,162	587,423	629,961
Bonds and money market instruments	14,618	11,213	11,213	18,174	18,784	26,237	33,475	25,395
Capital accounts	204,811	249,485	277,055	460,555	571,775	666,981	811,927	803,573
Net domestic assets 2/	32.8	28.4	-110.3	-359.4	-268.1	-117.7	562.6	1,312.6
Domestic credit 2/	-1.4	40.1	-14.9	103.0	-25.3	75.8	21.1	28.5
Claims on private sector 2/	23.1	17.9	-9.2	34.8	30.1	40.9	-45.4	-29.0
Broad money 2/	15.6	21.9	24.9	30.7	48.2	27.2	8.2	14.1
Quasi money 2/	13.6	27.3	27.3	53.1	29.6	29.6	2.4	6.8
Narrow money 2/	16.8	19.0	23.5	17.9	62.1	25.7	17.7	26.2
				(Contribution to growth of M2; in percentage points)				
Net foreign assets 3/	0.2	4.7	75.4	24.8	73.8	15.2	0.3	-5.6
Net domestic assets 3/	-1.5	16.4	-63.8	17.2	-25.4	12.7	8.4	19.7
Domestic credit 3/	1.7	34.3	-12.7	60.0	-22.9	34.6	13.3	17.9
Net credit to the consolidated govt. 3/	16.5	21.8	-21.6	41.8	-42.3	11.4	7.6	8.1
Of which: net credit to the federal govt. 3/	-1.4	21.9	-21.5	41.6	-43.1	9.5	10.4	11.5
Other items (net)	17.9	-17.9	-51.0	-42.9	-2.5	-21.9	-4.9	1.7
Velocity (non-oil GDP/broad money)	4.1	3.8	3.7	3.3	2.5	2.4	...	...

Sources: Central Bank of Nigeria (CBN); and Fund staff estimates.

1/ Consolidated accounts of the CBN, commercial banks, and merchant banks.
2/ Quarterly data for 2002 reflect growth since the end of 2001.
3/ Quarterly data for 2002 reflect contribution to M2 growth since the end of 2001.

Table 22. Nigeria: Consolidated Accounts of the Central Bank, 1997–2002

(In millions of naira; end of period)

	1997	Official 1998	AFEM 1998	1999	2000	2001	2002 Q1	2002 Q2
Net foreign assets	128,554	125,671	428,108	493,688	956,988	1,034,542	1,053,078	949,883
Foreign assets	179,186	161,356	485,914	510,559	1,091,053	1,156,483	1,215,153	1,345,775
Foreign liabilities	-50,632	-35,685	-57,806	-16,871	-134,065	-121,940	-162,075	-395,892
Domestic credit	40,244	121,717	-47,040	43,523	-298,843	-147,881	-66,479	-61,012
Consolidated government (net)	10,815	93,875	-91,861	15,308	-343,014	-178,998	-117,889	-93,526
Claims	406,060	456,991	438,683	532,299	513,010	716,769	653,666	568,739
Deposits	-395,245	-363,116	-530,544	-516,990	-856,024	-895,767	-771,554	-662,265
Nonfinancial public enterprises (gross)	1,453	926	19,287	692	951	1,080	4,662	1,796
Private sector (gross)	778	517	516	884	2,163	3,103	3,026	1,934
Claims on banks (gross)	21,282	21,818	20,705	22,070	36,176	20,604	37,377	22,933
Other financial institutions (gross)	5,916	4,580	4,313	4,568	4,881	6,330	6,330	5,488
Liabilities to commercial banks 1/	59,224	59,763	57,641	95,478	130,035	194,830	178,546	296,908
Currency in vault	14,071	15,521	15,521	21,892	34,976	64,835	54,960	64,282
Demand deposits	10,086	16,230	14,108	9,582	21,350	15,294	16,337	119,276
Special deposits	4	4	4	4	4	4	4	4
Required reserves	35,063	28,009	28,009	64,001	73,704	114,698	107,246	113,346
Liabilities to merchant banks	232	383	390	1,488	3,846	8,412	8,384	9,144
Currency in vault	86	141	141	213	1,510	0	0	0
Demand deposits	137	232	240	746	967	1,554	1,271	1,131
Special deposits	9	9	9	9	9	9	9	9
Required reserves	0	0	0	0	1,350	6,847	7,104	8,002
Other deposits of DMBs	1	1	0	520	11	1	1	1
Currency and deposit liabilities	142,705	175,637	187,823	190,904	292,713	368,671	344,668	462,753
Currency outside banks	130,668	156,716	148,557	186,457	274,011	338,671	316,170	290,092
Public sector demand deposits 2/	2,080	1,120	24,088	715	3,702	15,844	9,937	85,431
Private sector demand deposits	9,957	17,801	15,179	3,732	15,000	14,156	18,562	87,230
Other items (net)	101,806	68,765	-46,403	-10,931	91,012	-12,027	-50,043	177,881
Capital accounts	68,442	80,369	141,759	238,409	322,564	302,722	413,538	370,880

Source: Central Bank of Nigeria (CBN).

1/ Data for 2002 Q1 and Q2 are preliminary. Several problems emerged when the CBN shifted commercial bank accounts from its Lagos branch to its Abuja branch.

2/ Nonfinancial public sector demand deposits.

Table 23. Nigeria: Consolidated Accounts of the Commercial Banks, 1997–2002 1/

(In millions of naira; end of period)

	1997	Official 1998	AFEM 1998	1999	2000	2001	2002 Q1	2002 Q2
Net foreign assets	52,482	63,234	65,200	130,002	179,719	287,843	273,079	298,997
Foreign assets	52,927	63,260	68,787	135,223	194,585	305,029	300,054	340,467
Foreign liabilities	-446	-26	-3,587	-5,221	-14,867	-17,185	-26,974	-41,470
Reserves	63,822	66,194	68,656	118,522	167,630	318,986	306,456	282,209
Currency	14,071	14,584	16,713	21,892	34,976	64,835	54,960	64,282
Deposits at central bank	49,751	51,611	51,943	96,630	132,654	254,151	251,496	217,927
Reserve requirements	22,137	22,470	24,471	62,001	77,782	125,258	120,380	130,149
Current accounts	15,207	18,818	17,105	34,624	54,872	94,359	116,402	87,778
Stabilization securities	12,406	10,323	10,366	5	0	0	0	0
Domestic credit	284,650	301,534	310,579	540,758	732,251	998,260	1,108,702	1,149,902
Federal government (net)	29,347	21,923	24,570	148,155	204,302	153,774	229,847	219,736
Claims	39,525	37,093	38,433	188,576	278,130	182,116	261,856	278,451
Deposits	-10,178	-15,171	-13,863	-40,422	-73,828	-28,342	-32,009	-58,715
State and local governments (gross)	1,420	1,171	1,213	2,095	7,501	26,796	16,472	12,245
Claims on private sector	253,883	278,440	284,796	390,508	520,448	817,690	862,383	917,921
Deposit liabilities 2/	261,203	291,735	299,298	476,351	702,105	947,183	1,087,258	1,112,235
Demand deposit	125,412	127,152	133,437	202,152	345,001	448,021	499,836	482,274
Quasi-monetary deposits	135,791	164,583	165,861	274,199	357,103	499,162	587,423	629,961
Other items (net)	-25,939	-18,779	-16,872	-119,692	-147,407	-267,411	-169,115	-160,786
Bonds and money market instruments	10,066	15,352	16,607	11,337	12,995	26,237	33,475	25,395
Capital accounts	103,745	105,095	111,658	181,903	217,094	364,259	398,389	432,692

Source: Central Bank of Nigeria.

1/ Starting in April 2001, due to regulatory changes merchant banks are being treated as commercial banks.

2/ Includes deposits of state and local governments.

Table 24. Nigeria: Liquidity of Commercial Banks, 1997–2002

	1997	Official 1998	AFEM 1998	1999	2000	2001	2002 Q1	2002 Q2
				(In millions of naira; end of period)				
Total liquid assets	100,733	94,012	94,012	275,063	398,254	477,317	539,862	528,627
Cash in vault	14,071	15,521	15,521	21,892	34,976	64,835	54,960	64,282
Balances with central bank 1/	42,358	39,980	39,980	90,705	127,787	239,605	238,939	193,364
Of which								
Reserve requirements	22,137	27,743	27,743	62,001	77,782	125,258	120,380	130,149
Stabilization securities	12,406	339	339	5	0	0	0	0
Current accounts	15,207	19,062	19,062	34,624	54,872	94,359	116,402	87,778
Net interbank positions	6,350	-8,706	-8,706	-24,176	-39,748	368	-6,060	1,149
Balances held with other banks (net)	22,490	22,255	22,255	36,029	37,086	54,872	34,474	53,382
Interbank placements (net)	5,397	9,542	9,542	2,540	11,786	3,239	2,121	3,085
Money at call (net)	6,805	-1,900	-1,900	1,479	-1,086	-5,305	-5,305	-8,351
Uncleared effects	-28,341	-38,602	-38,602	-64,223	-87,534	-52,438	-37,350	-46,967
Treasury bills	37,791	47,218	47,218	186,143	275,774	173,107	252,725	270,827
Treasury certificates	0	0	0	446	0	0	0	0
Other liquid assets 2/	163	-1	-1	53	-534	-598	-702	-994
Certificate deposits (net)	-2	-8	-8	-63	-572	-627	-729	-1,006
Bills discounted	165	6	6	116	38	30	27	12
Total liquid assets less cash reserve requirements and stabilization securities	66,189	65,930	65,930	213,057	320,472	352,059	419,482	398,479
Total deposit liabilities	261,203	314,304	314,304	476,351	702,105	947,183	1,087,258	1,112,235
Of which								
Demand deposits	125,412	142,252	142,252	202,152	345,001	448,021	499,836	482,274
Time, savings, and foreign currency deposits	135,791	172,051	172,051	274,199	357,103	499,162	587,423	629,961
				(In percent)				
Liquidity reserve ratios 3/								
Actual	25	21	21	45	46	37	39	36
Required	30	30	30	30	30	40	40	40
Cash reserves (deposits at the CBN)								
In percent of demand deposits	34	28	28	45	37	53	48	40
In percent of total deposit liabilities	16	13	13	19	18	25	22	17
Required 4/	6	6	6	10	10	13	13	13

Source: Central Bank of Nigeria (CBN).

1/ As reported by the commercial banks.

2/ Comprising certificates of deposit and bills discounted.

3/ Total liquid assets less penalty and cash reserve requirements as a percent of total deposit liabilities.

4/ The base to calculate the reserve requirement comprises banks' total deposit liabilities (i.e., demand, savings, and time deposits) except foreign currency deposits; certificate of deposits; promissory notes held by the nonbank public; and bankers' acceptances and since January 2002, VAT and customs dutires collected by banks on behalf of the federal government held more than for seven days. Starting in 2002, the CRR's maintenance period was changed from 30 to 15 days. Cash must be held in a separate account with the CBN. Vault cash is not an eligible asset.

Table 25. Nigeria: Sectoral Distribution of Bank Credit, 1997–2001

(In percent of total)

	1997	1998	1999	2000	2001
Commercial banks					
Agriculture	11.6	10.0	8.3	9.1	7.0
Manufacturing	34.4	35.4	27.4	32.8	26.0
Other	54.0	35.3	64.3	58.1	67.0
Merchant banks 1/					
Agriculture	9.3	6.0	8.5	9.7	...
Manufacturing	36.0	32.3	31.4	35.2	...
Other	54.7	12.5	60.1	55.1	...

Source: Central Bank of Nigeria.

1/ As of 2001, merchant banks have been reclassified to commercial banks (that is, deposit-taking institutions).

Table 26. Nigeria: Selected Interest Rates, 1997–2002

(In percent; end of period)

	1997	1998	1999	2000	2001	2002		
						Q1	Q2	Q3
Minimum rediscount rate	13.5	13.5	20.0	14.0	20.5	20.5	20.5	18.5
Treasury bill rate (stop rate)	12.0	12.5	14.0	13.0	20.5	22.5	19.8	16.5
Seven-day Nibor	...	16.8	17.2	15.9	25.3	24.5	24.4	19.4
Savings deposit rate 1/	5.4	5.2	5.2	4.9	5.0	8.5	3.7	3.8
Prime lending rate 1/	28.0	18.5	19.0	19.5	26.0	24.5	25.3	26.3

Source: Central Bank of Nigeria.

1/ At commercial banks.

Table 27. Nigeria: Number of Financial Institutions, 1997–2001

	1997	1998	1999	2000	2001
Total deposit banks	1,131	1,106	1,105	1,105	1,105
Commercial deposit banks	64	51	51	51	51
Merchant banks	51	39	38	38	38
Community banks	1,015	1,015	1,015	1,015	1,015
People's Bank of Nigeria	1	1	1	1	1
Total other financial institutions	802	905	905	1,805	1,805
Foreign exchange bureaus	250	244	244	905	905
Finance companies	279	279	279	244	244
Deposit insurance corporation	1	1	1	279	279
Unit trusts	11	11	11	1	1
Stockbrokers	140	170	170	11	11
Federal mortgage bank	1	1	1	1	1
Primary mortgage institutions	115	194	194	170	170
Discount houses	5	5	5	5	5
Memorandum items:					
Total number of branches 1/	2,477	2,220	2,220	2,220	2,220
Commercial bank branches	2,330	2,107	2,107	2,188	2,188
Rural branches	615	557	557	722	722
Urban branches	1,715	1,550	1,550	1,466	1,466
Merchant bank branches 2/	147	113	113	113	113
People's Bank of Nigeria	275	275	275	275	275
Insurance companies	188	187	187	187	187

Source: Central Bank of Nigeria.

1/ Excluding community banks.

2/ All urban branches.

Table 28. Nigeria: Balance of Payments, 1997–2001

(In millions of U.S. dollars, unless otherwise indicated)

	1996	1997	1998	1999	2000	Est. 2001
Trade balance		6,449	2,699	2,604	10,327	5,646
Exports		15,827	10,082	12,971	21,395	17,949
Oil		14,850	9,218	11,943	20,151	16,574
Gas		0	0	299	576	708
Other		977	864	729	668	666
Imports		-9,378	-7,383	-10,367	-11,068	-12,303
Oil related		-1,920	-1,699	-1,885	-1,926	-1,828
Gas related		-260	-338	-664	-772	-889
Other		-7,457	-5,684	-7,817	-8,370	-9,586
Services (net)		-5,474	-6,277	-7,155	-7,722	-6,226
Factor services		-2,869	-2,892	-3,500	-3,981	-2,482
Of which: interest due on public debt		-1,636	-2,087	-1,972	-1,715	-1,534
Nonfactor services		-2,605	-3,384	-3,654	-3,741	-3,744
Oil related		-1,280	-1,133	-1,257	-1,284	-1,219
Gas related		-60	-68	-95	-103	-119
Non-oil related		-1,325	-2,252	-2,303	-2,354	-2,407
Private transfers (net)		1,867	1,552	1,288	1,703	1,798
Official transfers (net)		-26	-54	-57	-135	-25
Current account balance		2,816	-2,080	-3,320	4,173	1,194
Official capital (net)		-3,181	-1,803	-2,031	-1,569	-1,657
Disbursements		376	372	136	149	56
Amortization due		-3,556	-2,175	-2,168	-1,719	-1,713
Other capital flows (net)		1,539	1,220	1,473	1,502	1,796
Direct and portfolio investment		1,539	1,220	1,473	1,502	1,796
Private borrowing (net)		0	0	0	0	0
Short-term capital (net)		-153	-248	-184	-295	-647
Capital account balance		-1,795	-830	-743	-362	-509
Errors and omissions		-1,216	-315	-28	-1,571	-781
Overall balance		-194	-3,025	-4,091	2,240	-96
Financing		194	3,025	4,091	-2,240	96
Gross reserves (increase -)		-3,061	115	1,666	-3,959	-1,023
Exceptional financing 1/		3,255	2,909	2,425	1,719	1,119
Net accumulation of arrears (decrease -)		3,255	2,909	2,425	-20,383	373
Reschedulings 1/		0	0	0	22,102	746
Memorandum items:						
Current account (in percent of GDP)		7.9	-6.3	-9.1	10.0	2.8
Gross official reserves (in millions of U.S. dollars)		7,222	7,107	5,441	9,400	10,423
(in months of imports of goods & nonfactor services)		6.7	7.4	4.4	7.1	7.3
Debt service after rescheduling/exports goods & nonfactor services		31.0	38.9	29.8	7.7	13.2
Debt/GDP (in percent)		86.3	95.7	87.2	72.2	70.0
Oil export price (in U.S. dollars per barrel)		19.8	13.6	17.0	28.2	24.3

Sources: Nigerian authorities; and Fund staff estimates.

1/ In 2000–01, reflects the Paris Club rescheduling agreement of December 13, 2000.

Table 29. Nigeria: Imports, 1997–2001 1/

	1997	1998	1999	2000	2001
			(In millions of U.S. dollars)		
Imports from the world	7,017	7,574	7,609	8,842	11,484
Industrial countries	4,584	4,739	4,653	5,167	6,784
Of which					
United States	896	902	709	789	1,053
Japan	235	252	271	318	487
France	500	624	631	746	832
Germany	801	714	740	635	971
Italy	399	360	366	458	546
Netherlands	298	362	383	448	610
United Kingdom	771	854	821	881	1,082
Africa	248	330	341	475	551
Of which					
Côte d'Ivoire	40	69	41	75	56
Ghana	65	71	69	86	86
Niger	40	47	56	86	63
South Africa	49	58	91	112	218
Asia (excluding Japan)	1,520	1,719	1,994	2,361	3,100
Of which					
China, P.R.: Hong Kong	348	393	436	604	1,009
China, P.R.: Hong Kong	216	180	195	184	198
India	202	217	211	264	263
Indonesia	75	136	226	260	252
Korea	116	170	185	273	456
Singapore	140	203	213	257	269
Thailand	230	208	259	247	384
Other	664	787	621	839	1,048
Of which					
Russia	16	36	28	90	70
Turkey	17	26	41	50	76
Ukraine	132	143	108	84	91
Brazil	274	361	249	271	459
			(In percent of total)		
Industrial Countries	65.3	62.6	61.2	58.4	59.1
Africa	3.5	4.4	4.5	5.4	4.8
Asia	21.7	22.7	26.2	26.7	27.0
Other	9.5	10.4	8.2	9.5	9.1

Source: IMF, *Direction of Trade Statistics*.

1/ c.i.f. basis, based on partner-country data.

Table 30. Exports, 1997–2001 1/

	1997	1998	1999	2000	2001
	(In millions of U.S. dollars)				
World	16,540	11,320	11,999	21,684	20,603
Industrial countries	11,637	7,599	7,636	15,660	14,278
Of which					
United States	6,107	4,135	4,220	9,409	8,345
Canada	377	209	261	311	138
Japan	181	78	189	195	251
Austria	205	94	83	189	240
France	653	673	684	1,055	1,073
Germany	786	289	189	463	627
Netherlands	329	115	130	217	378
Portugal	466	250	292	727	657
Spain	1,416	876	876	2,189	1,747
Switzerland	282	225	211	325	270
United Kingdom	183	211	190	130	90
Africa	1,527	1,244	1,467	2,125	1,973
Of which					
Cameroon	88	115	141	260	235
Côte d'Ivoire	390	290	359	601	435
Ghana	430	443	439	545	588
Senegal	80	84	103	267	266
South Africa	182	82	202	182	234
Asia	2,480	1,550	1,864	2,352	2,327
Of which					
China,P.R.: Mainland	10	25	166	279	207
India	1,086	1,014	1,005	1,246	1,345
Indonesia	129	50	171	401	389
Korea	724	240	216	79	69
Other	896	927	1,031	1,547	2,025
Of which					
Turkey	15	3	22	120	207
Brazil	560	630	738	738	1,372
Chile	128	117	119	285	111
	(In percent of total)				
Industrial Countries	70.4	67.1	63.6	72.2	69.3
Africa	9.2	11.0	12.2	9.8	9.6
Asia	15.0	13.7	15.5	10.8	11.3
Other	5.4	8.2	8.6	7.1	9.8

Source: IMF, *Direction of Trade statistics* .

1/ f.o.b. basis, based on partner country data.

Table 31. Nigeria: External Public Debt Stock, 1997–2002 1/

	1997	1998	1999	2000	2001	Proj. 2002
			(In millions of U.S. dollars)			
Multilateral	3,906	3,802	3,665	3,342	3,037	2,840
World Bank	2,621	2,529	2,340	2,149	1,958	1,873
African Development Bank	1,209	1,176	1,119	990	909	799
Other	75	97	206	203	170	168
Bilateral	20,810	20,422	21,243	23,296	23,205	24,250
Paris Club 2/	20,786	20,398	21,219	23,272	23,193	24,242
Medium- and long-term debt	...	...	...	23,272	22,831	21,965
Pre-cutoff	...	...	...	21,731	21,058	20,945
Post cutoff				1,541	1,774	1,020
Arrears	...	...	...	0	362	2,277
Other bilateral	24	24	24	24	11	8
Commercial	4,224	3,998	3,809	3,596	3,443	3,284
Par bonds (London Club debt)	2,043	2,043	2,043	2,043	2,043	2,043
Promissory notes	2,043	1,836	1,667	1,446	1,292	1,153
Other (including arrears)	138	119	99	107	108	88
Total	28,939	28,221	28,717	30,234	29,685	30,375
			(In percent of total)			
Multilateral	13.5	13.5	12.8	11.1	10.2	9.3
World Bank	9.1	9.0	8.1	7.1	6.6	6.2
African Development Bank	4.2	4.2	3.9	3.3	3.1	2.6
Other	0.3	0.3	0.7	0.7	0.6	0.6
Bilateral	71.9	72.4	74.0	77.1	78.2	79.8
Paris Club 2/	71.8	72.3	73.9	77.0	76.9	72.3
Other bilateral	0.1	0.1	0.1	0.1	1.3	7.5
Commercial	14.6	14.2	13.3	11.9	11.6	10.8
Par bonds	7.1	7.2	7.1	6.8	6.9	6.7
Promissory notes	7.1	6.5	5.8	4.8	4.4	3.8

Sources: Nigerian authorities; Paris Club; and Fund staff estimates.

1/ As reported by creditors. These figures are tentative pending the reconciliation of Nigeria's obligations with Paris Club creditors.
2/ Excluding late interest in 1996–99. In 2000, including late interest as reported by the Paris Club and capitalized moratorium interest as estimated by Fund staff.

Table 32. Nigeria: External Debt Service 1997–2002

	1998	1999	2000	2001	Proj. 2002
Total debt service due	4261.4	4140.1	3434.4	3246.8	2937.3
Interest payments due before rescheduling	2086.6	1972.4	1718.9	1534.0	1566.8
Multilateral	301.3	243.3	186.7	132.3	161.3
Bilateral	1560.0	1513.5	1344.8	1203.1	1213.9
Commercial	225.4	215.6	187.4	198.6	191.7
Amortization payments before rescheduling	2174.8	2167.8	1715.5	1712.9	1370.5
Multilateral	460.62	425.4	423.3	364.3	352.8
Bilateral	1595.6	1622.6	1166	1225	889
Commercial	118.6	119.8	126.0	123.8	129.0
Rescheduling (principal, interest)	0.0	0.0	22670.0	746.0	0.0
current maturities	0.0	0.0	247.4	149.0	0.0
arrears	0.0	0.0	21362.0	0.0	0.0
capitalized moratorium interest	0.0	0.0	492.6	597.0	0.0
Flow accumulation of arrears	2909.4	2424.9	-20633.0	372.8	1910.8
Cash Debt Service Payments:	1352.0	1715.3	1714.3	2128.0	1021.0
Multilaterals	698.0	751.0	610.0	491.2	514.1
Bilaterals	310.0	576.2	1207.0	1307.7	186.2
Paris Club	304.0	463.0	1141.3	1273.5	165.8
Other bilaterals	6.0	113.2	65.7	34.2	20.4
Commercial banks	344.0	388.1	277.9	328.8	320.7
Brady bonds	128.0	129.4	128.8	134.1	127.7
Promisory notes	216.0	258.7	149.1	194.7	193.0
Debt conversion program	88.4	49.0	95.0	30.0	10.0
Cash interest paid	...	...	815.4	305.2	539.2
Cash principal paid	...	...	895.3	1822.9	481.8

Source: Central Bank of Nigeria; Debt Management Office; Creditors; and Fund staff estimates.

Summary of the Tax System as of October 2002

(All amounts in Naira)

Taxes	Tax Base	Exemptions, Allowances, and Deductions	Tax Rates
1. Tax on net income and profits			
1.1 Company income tax (*Companies Income Tax Act* of 1979, as amended to date); (*Industrial Development Income Tax Relief Act)*	**Taxable persons** Annual tax on profits of companies, except those engaged in exploration, drilling, and extraction of petroleum and natural gas. Total profits are defined as assessable profits from all sources after adjusting for balancing charges, losses, investment, and capital allowances. Losses may be carried forward against future profits for four years. Profits of a non-resident corporation are taxable if attributable to operations carried out in Nigeria.	**Exemptions** • nonprofit organizations, including religious and educational institutions; • companies with pioneer status, which have a tax holiday of between three to five years; • statutory corporations established by states or local governments; • state purchasing authorities established to acquire any commodity for exports; • enterprises operating in an export processing zone will have a tax holiday of three years; • profits from export activities that are used for the purchase of raw materials, plant, equipment and spare parts; • profits of a company whose supplies are exclusively inputs to the manufacturing of products for exports; • interest on public loans; and • dividends paid by unit trusts, between related companies and by companies with pioneer status.	**General tax rates** 30 percent of taxable income; 20 percent if engaged in manufacturing, mining, exports or agricultural production, and the turnover is N 1 million or less for the first 3-5 years of operation. Tax must be deducted at source from construction-related activities at the rate of 2.5 percent from payments. The tax is credited against the final tax assessment The profit of an export-oriented undertaking within or outside an Export Free Zone benefits from a 3 year tax holiday, provided that exports are not less than 75 percent of the turnover. **Minimum tax** There is, however, a minimum tax base of • 0.5 percent of gross profits, or • 0.5 percent of net assets, or • 0.25 percent of paid-up capital, or 0.25 percent of turnover, whichever is

Summary of the Tax System as of October 2002

(All amounts in Naira)

Taxes	Tax Base	Exemptions, Allowances, and Deductions	Tax Rates
		Dividends received from investments in export-oriented companies, from small companies in the manufacturing sectors in the first five years of operation, and from unit trusts are exempt. Dividends received by resident companies are recorded as franked income and are excluded from taxable income. **Deductible expenses** Deductions include expenditure incurred in the earning of income. Apart from the usual expenses, those include contributions to pension funds, Industrial Training Fund contributions, donations out of profits to a maximum of 10 percent of total profits, and reserves made out of profits for research and development, up to a maximum of 10 percent of total profits. **Depreciation allowances** Instead of a depreciation provision, there is a system of capital allowances for prescribed assets (effectively amounting to depreciation allowances). These allowances are calculated on a straight-line basis by spreading annual allowances over the specified period of write-off. The annual claim for capital allowances by companies (except manufacturing, agro-allied and agricultural trade or business) may not exceed 66 2/3 percent of profits in any year.	the highest, for turnover of N 500,000 or less. For turnover of more than N 500,000, the minimum tax on turnover up to N 500,000 plus 0.125 percent of the turnover in excess of N 500,000 is applied.

Summary of the Tax System as of October 2002

(All amounts in Naira)

Taxes	Tax Base	Exemptions, Allowances, and Deductions	Tax Rates
		The following rates apply for capital allowances: (i) buildings 10% (ii) plant and machinery in agricultural production nil (iii) other plant and machinery 25% (iv) ranching and plantation expenditure 50% (v) motor vehicles 25% (vi) housing estate 25% (vii) furniture and fittings 20% **Other allowances** *(a) Initial allowance* An additional 5 percent initial allowance is granted for certain expenditure items at the following rates: (i) buildings 15% (ii) plant and machinery in agricultural production 95% (iii) plant and machinery replacing oil manufacturing plant and machinery 95% (iv) other plant and machinery 50% (v) ranching and plantation expenditure 30% (vi) motor vehicle expenditure 50% (vii) motor vehicles for public transportation 95% (viii) housing estate expenditure 50% (ix) furniture and fittings 25%	

Summary of the Tax System as of October 2002

(All amounts in Naira)

Taxes	Tax Base	Exemptions, Allowances, and Deductions	Tax Rates
		(x) research and development 95% (xi) plantation equipment 95% Export-processing companies in an Export Processing Zone will be entitled to 100 percent first-year capital allowance on their qualifying expenditure. Agro-allied, companies receive in addition an investment allowance of 10 percent. *(b) Investment allowance* An investment allowance will be given in addition to the annual and initial allowances where a company incurs expenditure on plant and machinery. In general, the investment allowance will be 10 percent of expenditure but 15 percent if replacing oil manufacturing plant and machinery. *(c) Rural investment allowance* Graduated allowances at a rate of 5-100 percent for infrastructure expenditure in remote areas. *(d) Investment tax credit* There is an investment tax credit for research and development (20 percent), capital expenditure for the acquisition of tools (25 percent), locally manufactured machinery and equipment (15 percent), and for replacement of obsolete plant and machinery (15 percent).	

Summary of the Tax System as of October 2002

(All amounts in Naira)

Taxes	Tax Base	Exemptions, Allowances, and Deductions	Tax Rates
		Incentives to downstream gas Any company engaged in downstream gas utilization will benefit from a 3 year tax holiday (renewable for an additional 2 years) or an additional investment allowance of 35 percent. In addition, there are accelerated capital allowances following the tax holiday period (an annual allowance of 90 percent for plant and machinery).	
I.2 Petroleum profit tax (*Petroleum Profit Tax Act* of 1959, as amended in 1979 and 1990)	Annual tax on profits of companies engaged in exploration, drilling, and extraction of petroleum and natural gas. Income generated by a petroleum company not related to its petroleum operations is subject to the company income tax. Tax payments are spread over 12 monthly installments. In determining profits, exports of crude oil are valued at a posted price, which is determined by the government, while domestic sales are valued at the actual price. Projects operating under a Memorandum of Understanding (MOU) fiscal regime are subject to the fiscal terms specified in these. Projects operating under a Production Sharing Contract (PSC) regimes are subject to the fiscal terms specified in these contracts. The share of projects producing under PSCs is expected to	**Deductible expenses** Deductions include any current expenditure (incl. interest) incurred in the earning of income, and royalties and duties to the federal government or local authorities. Profits in the form of dividends derived from manufacturing companies in petrochemical and liquefied natural gas subsection are tax exempt. **Depreciation allowances** Annual and initial capital allowances are available on a straight-line basis at the following rates: Initial / Annual Plant and machinery 10 / 10 Pipelines, storage tanks 10 / 10 Buildings nil / 5 Drilling expenditure 10 / 5	In general, a tax rate of 85 percent applies. However, for new operations which have not yet commenced sales, a reduced rate of 65.75 percent applies until pre-production costs are fully amortized. Under the **2000 MOU**, producers are guaranteed a profit margin ranging between US$2.5 or US$2.7 per barrel when oil prices are between US$15-19 per barrel. The royalty rate, which is levied only on exports, is graduated as follows: • onshore operations, 20 percent; • offshore operations up to 100-meter water depth, 18 percent; and • offshore operations beyond 100-meter water depth, 16 2/3 percent.

Summary of the Tax System as of October 2002

(All amounts in Naira)

Taxes	Tax Base	Exemptions, Allowances, and Deductions	Tax Rates
	increase over the medium term.	The annual allowances are granted based on cost less 1 percent. The capital allowances are restricted so that tax payable is not less than 15 percent of the tax that would have been payable without any allowances. **Other allowances** An *investment tax credit* in the year of such expenditure is provided in the following cases: • operations onshore, 5 percent; • operations in offshore areas of water depth up to 100 meters, 10 percent; • operations in offshore areas of water depth between 100 and 200 meters, 15 percent; and • operations on offshore areas of water depth beyond 200 meters, 20 percent. The following incentives are provided to the *gas industry*: • All development gas projects, including those engaged in power generation, liquid plants, fertilizer plants, gas transmission, and distribution pipelines, are to be taxed under the company income tax instead of the petroleum profit tax. • Initial tax holiday period of three years may be extended to five years. • Capital investment for associated and non-associated gas may be treated as	Under the **PSC fiscal terms**, the profit oil after deduction of cost oil is split between the NNPC and the Contractor at a progressive split depending on cumulative production in the contract area. Under the 1993 Deep Water model the profit oil is split between the NNPC and the Contractor at progressive rates reaching a maximum of 60:40 percent whereas more recent PSC terms have split profit oil at the progressive rates reaching 70:30 percent. Royalty oil is a first call on production at variable rates between 0-16.67 percent depending on location (deep water blocks face a zero percent royalty rate).

Summary of the Tax System as of October 2002

(All amounts in Naira)

Taxes	Tax Base	Exemptions, Allowances, and Deductions	Tax Rates
		part of the capital investment for oil development (and therefore be deductible at 85 percent). • Gas is to be transferred at 0 percent petroleum profit tax and 0 percent royalty. • Investment capital allowance is increased from 5 percent to 15 percent. • Interest on loans for gas projects is to be deductible, provided that prior approval is obtained from the Federal Ministry of Finance before taking the loan. • All dividends distributed during the tax holiday are to be tax free.	
1.3. Personal Income Tax ***(Decree no. 104*** of 1993)	**Taxable persons** For resident individuals, taxable income include both domestically and foreign sourced income. Individuals pay tax to the state of residence. However, persons employed in the armed forces, the foreign service, residents of the Federal Capital Territory, and residents outside Nigeria who derives income in Nigeria pay taxes to the Federal Board of Inland Revenue (FBIR). Non-residents are liable to tax on income from sources in Nigeria. Only the personal allowance is available to	**Deductible expenses** The following deductions and allowances are provided: • personal allowance of N 5,000, plus 20 percent of earned income; • N 2,500 per annum per unmarried child; • N 2,000 for dependent relatives; • for disabled persons, N 3,000 or 20 percent of his/her earned income, whichever is higher; and • alimony deductions, not exceeding N 1,000.	**General tax rates** Annual income — In percent 0 – 30,000 — 5 30,000 – 60,000 — 10 60,000 – 110,000 — 15 110,000 – 160,000 — 20 Over 160,000 — 25 A minimum tax of 0.5 percent of total income applies.

Summary of the Tax System as of October 2002

(All amounts in Naira)

Taxes	Tax Base	Exemptions, Allowances, and Deductions	Tax Rates
	non-residents. For employment sourced income, tax is deducted at source and is paid under the PAYE system each month. **Concept of income** Progressive tax on income arrived at after deducting personal allowances and exempted categories of income. Taxes on rents, dividends, royalties, and interest are withheld at source at a rate of 10 percent. For nonresidents, the withholding constitutes the final tax. *Income* includes: (i) gains from trade, profession or vocation (ii) salary, wages and other benefits (iii) property gains and profits (iv) dividends and interest (v) pension or annuity (vi) any other personal gain or profit *Benefits in kind* are included in taxable income, with the exception of reimbursement of expenses, medical costs, and cost of passage to or from Nigeria. *Exempted salary income* include: (a) housing allowance paid by the employer not exceeding N 150,000 per year;	**Exemptions** The following exemptions apply to individuals: • official emoluments of the President and Vice President, and State Governors and Deputy Governors; • investment income of any pension fund; • death gratuity and compensation for death, or injuries; • retirement gratuities; • gratuities paid to public officers; • compensation for loss of office; • proceeds of foreign earnings that are repatriated into Nigeria in convertible currencies, to which concessional tax rates apply; • all salaries, dividends, interest, rent, royalties, fees, commissions, etc., earned from abroad and brought into Nigeria by Nigerian residents, provided the income is received in convertible currency that is paid into a domiciliary account in a bank approved by the government; • interest paid by the Nigerian Post Office Savings Bank or in respect of Nigerian Savings Certificates and on specific government bonds; and • income earned by non-residents under a technical assistance agreement. • all life insurance premiums; • interest on loans for owner-occupied	

Summary of the Tax System as of October 2002

(All amounts in Naira)

Taxes	Tax Base	Exemptions, Allowances, and Deductions	Tax Rates
	(b) transport allowance not exceeding N 20,000 per year; (c) meal subsidy not exceeding N 5,000 per year; (d) utility allowance of N 10,000 per year; (e) entertainment allowance of N 6,000 per year; (f) leave grant not exceeding 10 percent of basic salary; and (g) education allowances.	house; • contributions to pension, provident, or other retirement benefit funds; • losses incurred in trade or business, profession, or vocations; • equity shareholding in company floated exclusively for research and development on 25 percent of chargeable income in year of assessment; and • dividends for three years if (a) company is incorporated in Nigeria, (b) equity participation was imported into the country between January 1, 1987 and December 31, 1992, and (c) the recipient's equity in company constitutes at least 10 percent of the company's share capital. Dividend income for resident individuals is grossed up by the withholding tax and the grossed-up amount is subject to tax as other income. The withholding tax is credited against the personal income tax.	

Summary of the Tax System as of October 2002

(All Amounts in Naira)

Taxes	Tax Base	Exemptions, Allowances, and Deductions	Tax Rates
		Capital allowances Personal income taxpayers can also benefit from capital allowances, albeit at different rates than corporate taxpayers: Initial / Annual Buildings 5 / 10 Industrial buildings 15 / 10 Mining expenditure 20 / 10 Plant and machinery 20 / 10 Plant for manuf, agric. 25 / ... Furniture and fittings 15 / 10 Motor vehicles 25 / 20 Public motor vehicles 30 / ... Plantation equipment 20 / 33.33 Housing estate 20 / 10 Ranching and plantat. 30 / 15 Research and develop. 25 / 12.5	
1.4 Taxation of capital gains *(Capital Gains Tax Act of 1967)*	A tax levied on capital gains by individuals or companies accruing and derived from the sale, lease, or transfer of property rights in chargeable assets in or outside of Nigeria. Capital losses cannot be offset against capital gains. However, where two or more assets are disposed on in a single transaction, they are treated as a single disposal. Chargeable assets consist of loans, buildings, movable assets (such as motor vehicles), stocks, and shares in Nigerian companies.	Exempted institutions include charitable, religious, and educational organizations, pension funds, and trade unions, provided that the gain is not derived in connection with trade or business carried out by the institution. Exempted items include the main private residence of an individual, life insurance policies, Nigerian government securities, sale of stocks and shares, and unit trusts.	10 percent

Summary of the Tax System as of October 2002

(All amounts in Naira)

Taxes	Tax Base	Exemptions, Allowances, and Deductions	Tax Rates
2. Other payroll taxes			
2.1 Industrial Training levy	An obligatory contribution to the Industrial Training Fund by employers in industry and commerce.	Employers with fewer than 25 employees are exempt.	1 percent of annual payroll.
2.2 National Provident Fund levy	An obligatory contribution to the National Provident Fund.	Employers with fewer than 10 employees are exempt.	Employers contribute 6 percent of employees' salary to the National Provident Fund. Theoretically, employees make a similar contribution. However, in practice, the maximum monthly contribution per employee is 4.
2.3 Education tax	An obligatory contribution to the Education Fund.	Same exemptions apply as for company income tax.	2 percent of assessable profit.
3. Taxes on goods and services			
3.1 Value added tax (VAT) *Decree no. 102 of 1993*	**Taxable persons** [The legislation does not seem to specify a turnover threshold; perhaps in the regulations?]	**Exemptions**	**Tax rates**
	Taxable transactions		
	VAT is payable on the supply of goods and services provided in Nigeria by a taxable person and on the importation of goods by any person, irrespective of whether they are taxable persons, unless explicitly exempted.	Exempted items include the following goods: • medical and pharmaceutical products; • basic food items—beans, yam tubers, cassava, maize, millet, rice, milk,	There is only one statutory rate of 5 percent; however, exports are zero-rated.

Summary of the Tax System as of October 2002

(All amounts in Naira)

Taxes	Tax Base	Exemptions, Allowances, and Deductions	Tax Rates
	The deduction of input tax against output tax charged on sales is limited to the tax on goods purchased or imported directly for resale or as an input for production. However, input tax on (i) any overhead, service and general administration; and (ii) any capital item and asset is not allowed as a deduction from output tax.	meat, fish, and infant food; • books and educational materials, including exercise books, laboratory equipment, school fees, PTA levies, etc.; • newspapers and magazines; • baby products, including feeding bottles, carriages, clothes, napkins, baby cream and powder, soap, toys, and baby dresses; • plant and machinery imported for use in an EPZ; • plant and machinery for gas utilization in downstream petroleum operations; • locally produced fertilizer; • agricultural equipment and products, fertilizer, and veterinary medicine. The following services are exempt: • medical services; • services by community banks, peoples' banks, and mortgage institutions; and • plays and performances conducted by educational institutions as part of learning. [Educational goods and services incidental to education for an educational institution are also exempt.] **Zero-rated goods** Exports are zero-rated.	

Summary of the Tax System as of October 2002

(All Amounts in Naira)

Taxes	Tax Base	Exemptions, Allowances, and Deductions	Tax Rates
3.2 Excise duties	**Tax base** Excise duties are levied at ad valorem rates on selected goods manufactured or produced in Nigeria.		**Tax rate** Excisable goods — In percent Beer — 20 Other alcoholic beverages — [40] Cigarettes and other tobacco products — 40
4. Taxes on international transactions			
4.1 Customs duties *Customs Tariff Consolidation Decree*, 1995 as amended 1996-2002.	Customs duties are levied on goods imported into Nigeria calculated on the c.i.f. value. Nigeria uses the Harmonized Tariff System. Other levies on imports are: Port surcharge – 7 percent of duty payable; National automotive council – 2 percent tax on vehicles and parts; Sugar levy of 5 percent of sugar imports; ECOWAS community levy of 0.5 percent of c.i.f. value of imports; and Administrative charge of 1 percent on f.o.b. value of imports for pre-shipment inspection.	Exemptions include the following: • aircraft equipment used by foreign airlines; • films of educational, scientific, or cultural character imported by the United Nations or its agencies or an approved educational or scientific organization; • fuel, lubricants, etc., used exclusively for operation of military equipment or aircraft; • government imports by internationally recognized nonprofit organizations or by the Head of State, consular offices, or under diplomatic privilege, or for other technical assistance purposes; and • life-saving appliances.	A new tariff structure, which includes a narrower and lower range of customs duty rates, was effected in March 1995. The trade weighted statutory average tariff us 17.4 percent in 2002 (weighted by 2002 imports). The peak tariff was increased from 100 to 150 percent in 2002. *Rates (percent)* Raw materials — 2.5-25 Components — 5-50 Clothing — 55-75 Luxury consumer goods (except automobiles) — 30-50 Paper products — 5-100 Vehicles — 5-50 Soy meal, soy cake, and groundnut cake — 35 Refined petroleum

Summary of the Tax System as of October 2002

(All Amounts in Naira)

Taxes	Tax Base	Exemptions, Allowances, and Deductions	Tax Rates
		There are various incentive schemes in place including a duty drawback scheme and a so-called Export Expansion Grant. The latter provide tax vouchers for 20 percent of non-traditional exports that can be used to offset other duty or tax payments, and is administered by the Ministry of Commerce.	products 10 Rice 75 Wheat 15 Machin. and elect. equip. 5-20 Food 5-100 Cigarettes and tobacco 150 Alcoholic beverages 100
		Duty concessions operate for specific manufacturing sectors, e.g., pharmaceuticals, telecommunications and specific ports. Special duty concessions are granted to specific companies, e.g., tobacco companies.	There are various restrictions and/or bans including on vehicles older than 5 years, poultry, textile fabrics, used refrigerators and fridges, and ceramic tiles and products.
5. Other taxes			
5.1 Stamp duty *Stamp Duty Act*	Stamp duty is levied on a number of instruments, including agreements, bills of exchange, [bonds], leases and licenses, mortgages, and insurance policies.	No stamp duty is payable on instruments executed by the government and on all forms of securities.	Rates of stamp duty vary depending on the nature of the instrument and the value thereof.

Sources: Ministry of Finance, various tax legislation; Nigerian Tax Companion, 2001; and International Bureau of Fiscal Documentation.