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This paper provides background information to the staff report on the 1998 Article IV consultation discussions with Nigeria, which was circulated as SM/98/112 on May 22, 1998.

Mr. Ames (ext. 34076) or Mr. Hossain (ext. 36861) is available to answer technical or factual questions relating to this paper prior to the Board discussion.

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INTERNATIONAL MONETARY FUND

NIGERIA

Selected Issues and Statistical Appendix

Prepared by a staff team consisting of Mr. P. Dhonte (head), Mr. B. Ames,
Mr. S.M. Hossain, Mr. M.C. Niebling, and Mr. L. Kuijs (all AFR)

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Nigeria: Basic Data, 1992-97

	1992	1993	1994	1995	1996	1997 Est.
(In millions of naira)						
GDP at constant market prices	294,160	300,630	298,772	306,517	326,118	338,914
GDP at constant factor cost	291,617	297,412	297,581	304,887	318,070	329,413
Oil sector	107,552	107,767	104,965	107,590	115,067	120,130
Non-oil sector	184,065	189,644	192,616	197,297	203,004	209,284
Agriculture	89,688	90,850	92,936	96,236	100,129	104,348
Industry	20,975	20,643	20,137	20,172	20,416	20,645
Services	73,401	78,152	79,543	80,890	82,458	84,290
GDP at current market prices	620,077	967,280	1,237,123	1,977,737	2,823,932	3,233,896
External resource balance	10,776	-29,780	12,296	41,598	584,559	211,677
Consumption	474,103	771,810	981,941	1,617,701	1,878,973	2,526,463
Investment	135,198	225,251	242,886	318,439	360,400	495,755
(Average annual percent change)						
Consumer price index (end of period)	48.8	61.3	76.8	51.6	14.3	10.2
(In millions of U.S. dollars)						
Balance of payments						
Current account	-1,298	-2,157	-1,618	-897	5,953	1,856
Exports of goods	11,886	9,924	9,415	11,734	16,117	15,208
Petroleum exports	11,642	9,697	9,171	11,449	15,830	14,850
Other exports	244	228	244	286	287	358
Imports of goods	-8,891	-8,293	-6,470	-8,183	-6,216	-9,256
Oil related	-1,925	-1,819	-1,793	-1,886	-1,775	-1,770
Other	-6,966	-6,474	-4,678	-6,298	-4,441	-7,486
Public	-974	-756	-1,042	-1,597	-2,055	-1,836
Private	-5,992	-5,718	-3,635	-4,701	-2,386	-5,650
Overall balance	-7,676	-3,794	-2,754	-2,255	-803	124
Foreign reserves	2,135	1,410	1,409	1,808	4,161	7,540
(Annual percentage change)						
Exchange rates 1/						
Naira per U.S. dollar	21.8	45.3	52.3	70.4	80.0	82.1
Nominal effective exchange	-46.6	-52.0	-13.4	-25.7	-12.0	-2.6
Real effective exchange	-27.7	-24.0	27.0	11.4	12.7	25.1
(In billions of naira)						
Consolidated government operations 2/						
Total revenues and grants	217,386	246,922	225,985	444,040	558,136	599,816
Petroleum revenues	183,432	206,893	171,786	236,411	307,602	326,640
Non petroleum revenues	33,954	40,029	54,199	207,629	248,534	271,176
Total expenditure and net lending	197,175	273,181	286,001	358,396	415,445	552,973
Current expenditure	114,003	169,282	176,395	219,395	226,810	275,361
Capital expenditure and net lending	83,172	103,899	109,606	139,001	188,634	277,612
Overall balance	20,211	-26,259	-60,016	85,644	142,691	46,842
Financing	-20,211	26,259	60,016	-85,644	-142,691	-46,842
Foreign (net)	-54,961	20,015	14,475	-736	11,124	30,326
Domestic	83,152	90,573	63,732	18,085	-204,340	-59,606
Unspecified financing	-48,402	-84,328	-18,192	-102,994	50,525	-17,562
(In billions of naira; end of period)						
Monetary survey						
Foreign assets (net)	10,130	8,947	-4,009	62,114	113,500	184,050
Domestic credit	155,064	257,315	347,579	435,152	263,012	275,444
Net credit to consolidated government	96,240	187,254	229,365	258,168	43,874	-25,732
Credit to the rest of the economy	58,823	70,060	118,214	176,984	219,138	301,176
Other items (net)	27,654	30,003	41,472	-46,422	103,175	108,467
Broad money	120,682	186,450	258,537	305,324	319,900	380,148
Narrow money	73,452	117,860	174,384	197,383	234,748	270,161
Quasi money	47,230	68,590	84,153	107,941	85,152	109,987

Sources: Nigerian authorities; and staff estimates and projections.

1/ Representative exchange rate; for 1997 refers to the autonomous foreign exchange market rate. Nominal and real effective exchange rate estimates are based on representative exchange rate estimates.

2/ Consists of the federal, state, and local governments, the "first charges," the special funds, and the Petroleum

I. RECENT ECONOMIC DEVELOPMENTS

1. Despite its rich resource endowment, Nigeria remains one of the poorest countries in the world, with a per capita GNP of only US\$240 in 1996 according to World Bank estimates. In recent years, and in particular growth in the non-oil economy, has barely kept pace with population growth (estimated at 2.9 percent per annum). Policy reversals, widespread fuel scarcities, frequent interruptions in power and water supply, and fertilizer shortages have depressed private investment and dampened non-oil output growth. During the period 1995-97, however, Nigeria implemented prudent financial policies that have led to macroeconomic stabilization. Inflation declined sharply, real interest rates turned positive, and foreign exchange has been freely available at market-clearing prices for current international transactions. Economic growth, however, continues to be impeded by structural bottlenecks and by political uncertainties regarding the ongoing transition to civilian rule.

Selected Growth and Inflation Indicators, 1992-97

	1992	1993	1994	1995	1996	1997
	(Annual percentage change)					
National income and prices						
Real GDP (at 1990 factor cost)	2.9	2.0	0.1	2.5	4.3	3.6
Oil Sector	2.7	0.2	-2.6	2.5	6.9	4.4
Non-oil sector	3.0	3.0	1.6	2.4	2.9	3.1
GDP deflator	73.9	54.2	27.3	56.5	34.0	10.3
Non-oil GDP deflator	40.4	49.5	50.6	67.2	28.6	15.1
CPI (end period)	48.8	61.3	76.8	51.6	14.3	10.2
	(In percent of GDP at factor costs)					
Share of GDP at current prices						
Oil sector	52.6	53.5	44.2	40.4	43.6	41.4
Non-oil sector	47.4	46.5	55.8	59.6	56.4	58.6

A. Economic Growth and Price Developments

2. Economic activity in Nigeria picked up modestly from its previously low growth rates in 1996-97, as growth in real GDP averaged 4 percent, compared with an average of under 2 percent over the period 1992-95 (Appendix Table 17).¹ The recovery was underpinned by steady growth in the petroleum sector, which comprises over 40 percent of GDP and which

¹This discussion is based on staff revisions of the national accounts, which are described in Chapter II.

benefited from buoyant world market demand and high international prices (Appendix Tables 16 and 20). Value added in the petroleum sector rose in real terms by 6.9 percent and 4.4 percent in 1996 and 1997, respectively. Growth in non-oil GDP, however, remained sluggish at about 3 percent, as modest growth in the agricultural sector was offset in part by low growth in the industrial and services sectors (Figure 1). Influenced mainly by timely and adequate rainfall and lower incidence of pest and disease outbreaks, agricultural production rose by 3.7 percent in 1996 and 4.1 percent in 1997 (Appendix Table 17). While output increased for both export and food crops, shortages in the supply of fertilizer led farmers to shift production away from fertilizer intensive crops such as maize, to other crops, such as sorghum, yams, and cassava (Appendix Table 21). During 1996-97, the growth performance of the livestock and forestry subsector was much below the average for the agricultural sector, while the fisheries subsector grew at a rate much higher than the average. Growth in manufacturing production, however, declined from 1.0 percent in 1996 to 0.7 percent in 1997 on account of chronic fuel shortages, continual power outages, weak domestic demand, and large buildups in inventories (Appendix Table 22). Service sector growth also remained low, averaging only 2.3 percent during 1996-97, owing in part to a decline in government services.

3. Inflation, as measured by changes in consumer price index, receded for the third consecutive year, falling from a peak of 77 percent in 1994 (end-of-period rate) to 10 percent in 1997 (Figure 1 and Appendix Table 23). The deceleration in the rate of increase in the price level was most pronounced with regard to food, accommodations, and fuel and light, both in urban and in rural areas (Appendix Tables 24 and 25). The decline in overall inflation was largely the result of the authorities' conservative financial policies and the improved supply of foreign exchange for imports. Low domestic demand, along with the good harvest, also contributed to the reduction in inflationary pressure. The reported national unemployment rate which grossly understates the slack in the labor market, rose from an average of 1.9 percent in 1995 to an estimated 4.5 percent at end-1997 (Appendix Table 26).²

B. Developments in Public Finance

4. The consolidated government's fiscal position improved substantially during 1995-97 (Appendix Table 27).³ After recording an overall deficit equivalent to 8.8 percent of non-oil GDP in 1994, the consolidated government recorded overall surpluses for three consecutive years, on account of both higher revenues and relatively lower growth in public expenditure. Improvement in the revenue outturn was reflected in both oil and non-oil receipts. In response to increased production and favourable world oil prices in 1995 and 1996, proceeds from petroleum exports, the petroleum profit tax, and the petroleum royalty increased on average by some 22 percent per annum. Domestic petroleum product revenue, on account of the

² The estimates refer to "open" unemployment captured by the Federal Office of Statistics (FOS) surveys. In the past, the FOS has not made any attempt to measure "disguised" unemployment.

³The derivation of the consolidated government accounts is described in Chapter IV.

October 1994 price increase, rose from ₦6 billion in 1994 to ₦59 billion and ₦72 billion in 1995 and 1996, respectively.

5. Nonpetroleum revenues also increased substantially during the period. Sizable gains were generated in the form of profits from sales of foreign exchange in the newly created autonomous foreign exchange market (AFEM), which yielded ₦79 billion in 1995 and ₦103 billion in 1996. The implementation of the value-added tax (VAT), which was introduced in 1994, continued to demonstrate its buoyancy and acceptability as an important and growing source of government revenue, rising from ₦7 billion in 1994 to ₦21 and ₦31 billion in 1995 and 1996, respectively. Customs duties and levies have increased, reflecting the positive impact of customs administration and port reforms introduced in 1996, as well as the resurgence in imports in light of the increased availability of foreign exchange. Federal government independent revenue, however, declined in 1996, owing due largely to the inability of most parastatal and public enterprises to remit dividends and operating surpluses to the federal government. The collection of state government independent revenues, of which the personal income tax is the major component, continued to improve, rising from ₦12 billion in 1994 to ₦19 billion and ₦22 billion in 1995 and 1996, respectively (Appendix Table 38).

6. Since public expenditure was budgeted on the basis of an assumed oil price that was below that prevailing in the world market, increases in recurrent and capital outlays in 1995 and 1996 were held well below those of revenue. As share of non-oil GDP, total expenditure declined in 1996 relative to 1995, with real reductions in both recurrent and capital expenditure. Declines in recurrent expenditure occurred on account of the continued freeze on civil service wage scales, the containment of interest payments on domestic debt at below-market rates, and the capping of external debt service payments at the equivalent of US\$2 billion per year. Nominal capital expenditure was held largely in check.

7. In 1997, the consolidated fiscal balance remained in surplus, although it declined as a share of non-oil GDP to 2.6 percent from 9.2 percent in 1996. Crude oil receipts rose by 11 percent, largely because the increase in production more than offset the decline in world oil prices, which began to tumble only during the fourth quarter of the year.⁴ Revenues from domestic petroleum products declined by 10 percent to ₦65 billion, however, owing to the problems with the domestic refineries and the inability to supply the domestic market. Nonpetroleum revenues increased by 9 percent, with increases in income taxes, customs duties, and the VAT more than offsetting a ₦13 billion fall in AFEM profits.⁵ Total expenditure, however, rose by one-third, led by a doubling in budgetary capital expenditure,

⁴In addition, there is a two month lag in the receipt of oil revenues.

⁵AFEM profits declined because a larger portion of foreign exchange demand was being met from central bank sources, which were purchased from private parties at the AFEM rate and which, hence, did not generate profits. Only foreign exchange purchased at the official rate from the government and subsequently sold in the AFEM generate profits.

the full-scale rolling out of capital expenditure by the Petroleum Special Trust Fund (PSTF), and increased recurrent expenditure on goods and services, as well as on domestic interest payments. Payments on external debt continued to be capped at the equivalent of US\$2 billion, and foreign-financed capital expenditure declined.

C. Monetary Developments

8. Consistent with the fiscal stance, monetary conditions remained tight during 1995-97, as growth in the monetary aggregates showed a remarkable deceleration compared to the previous period (Appendix Table 39). After having increased on average by 47 percent and 54 percent in 1993-94, annual growth in broad money and narrow money averaged only 14 percent and 16 percent, respectively, in 1995-97. Monetary growth during this period was influenced primarily by the large increases in net foreign assets, the sizable buildup of deposits by the PSTF, the impact of the AFEM on the demand for credit, and the repurchase of stabilization securities held by merchant and commercial banks, as well as overall improvements in the government's fiscal operations. Net foreign assets of the banking system shifted from a negative position in 1994 to a positive balance of ₦62 billion in 1995 and grew on average by 73 percent in 1996 and 1997, largely on account of increased oil receipts. A counterpart to the increases in net foreign assets was the large buildup of government deposits held at the central bank in the form of sterilized oil receipts. The combination of these deposit balances and the improvements in the consolidated government's overall fiscal operations triggered a fall of 83 percent from ₦258 billion in 1995 to ₦44 billion in 1996 and, subsequently, a negative balance (i.e., deposits exceeded claims) of ₦26 billion in 1997. With credit to the private sector increasing on average by 37 percent per annum in 1995-97, domestic credit declined from ₦435 billion in 1995 to ₦263 billion in 1996 before rising marginally to ₦275 billion in 1997. Credit to the private sector rose during this period largely because economic agents had to secure additional funds in order to meet the naira cover requirement for acquiring foreign exchange in the AFEM.⁶

9. Throughout the period, the banking system was awash in excess liquidity, forcing the monetary authorities to take corrective action. The PSTF initially held its sizable and growing deposit base at the central bank, where it was effectively sterilized.⁷ In order to earn market rates of interest, the PSTF shifted substantial portions of its deposit base to the commercial and merchant banking system. This shift, combined with the repurchase of stabilization securities held by the merchant and commercial banks in 1996 and the low level of aggregate demand prevailing in the economy, resulted in banks holding excess reserves in the amount of

⁶The high levels of inflation and the relatively low interest rates on borrowing also contributed to private sector demand for credit early in the period.

⁷The PSTF held deposits of ₦7 billion, ₦51 billion, and ₦49 billion in 1995, 1996 and 1997, respectively. These deposits accumulated because the PSTF did not begin full-scale operations until 1997—long after its creation in 1995, when it began receiving transfers from the Petroleum Trust Fund.

₦15 billion in 1995, ₦21 billion in 1996, and ₦31 billion in 1997 (Appendix Tables 43-44). The authorities responded by conducting open market operations, intervening in the AFEM, suspending the release of the remaining balance in outstanding stabilization securities, encouraging the PSTF to lodge its deposits at the central bank, and delaying the proposed transfer of government accounts from the central bank to the commercial and merchant banks. While these measures assisted in reducing excess liquidity during the period, the ability of the central bank to mop up the remaining excess liquidity was constrained by the capping of interest rates in open market operations, which, until the last quarter of 1997, yielded negative real rates of interest.

D. External Developments

10. During 1995-97, Nigeria's balance of payments position improved substantially, largely on the strength of its oil exports. The current account balance improved from a deficit of 12.4 percent of non-oil GDP in 1994 to 5.4 percent of non-oil GDP in 1995 (Appendix Table 48). It improved further in 1996 and 1997, as the current account balance turned from a deficit into a surplus. Gross official reserves increased from about US\$1.4 billion in 1994 to US\$1.8 billion in 1995 and reached about US\$7.5 billion by the end of 1997.

11. During the period, Nigeria continued to be heavily dependent on crude petroleum, which accounted for more than 95 percent of the country's total exports. With steady increase in both price and volume of production, crude oil export proceeds grew by a nearly 25 percent in 1995 and a record 37 percent in 1996, as the value reached US\$15.8 billion in that year, the highest in recent years. However, in 1997, the value of oil exports declined by about 6 percent, to US\$14.9 billion, on account of a decline in average oil prices from US\$20.8 per barrel in 1996 to US\$19.7 per barrel. Despite this decline, the terms of trade improved by about 5 percent in 1997 owing to an offsetting decline in average import prices. With the improvement in price competitiveness resulting from the introduction of market based exchange rate (see Chapter V), non-oil exports recovered during 1995-97 from their generally low level in the early 1990s. After years of stagnation and low growth, non-oil exports (mainly agricultural products) recorded a robust growth of about 23 percent in volume terms in 1997, albeit from a very low base, largely as a result of improved competitiveness and buoyant prices of primary commodities (Appendix Table 49).

12. With the implementation of liberal policies, as well as some policy-induced expansion in public sector imports, total imports increased unevenly during 1995-97. The growth in the value of imports (resulting mainly from non-oil imports) was particularly high in 1995 (26 percent) and in 1997 (49 percent) with a decline (29 percent) intervening in 1996. While public sector imports grew substantially in 1995 and 1996 (by some US\$800 million each year), the high growth in 1997 was largely driven by non-oil private sector imports, reflecting a recovery from an unusually low level recorded in 1996. Non-oil imports were unusually low

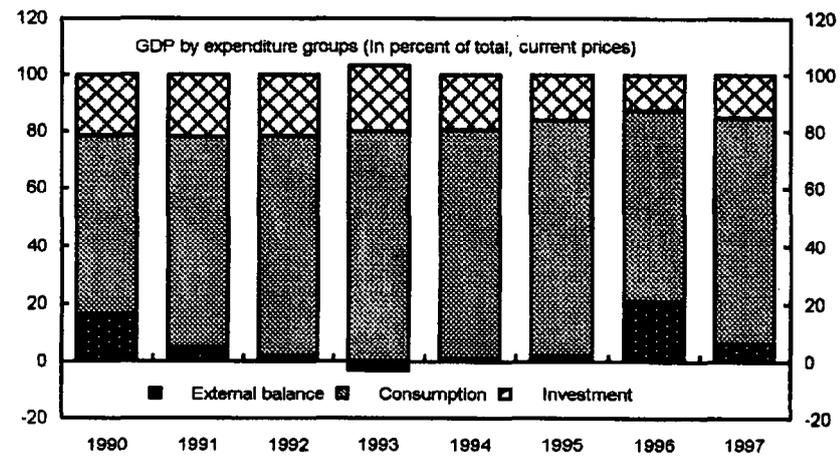
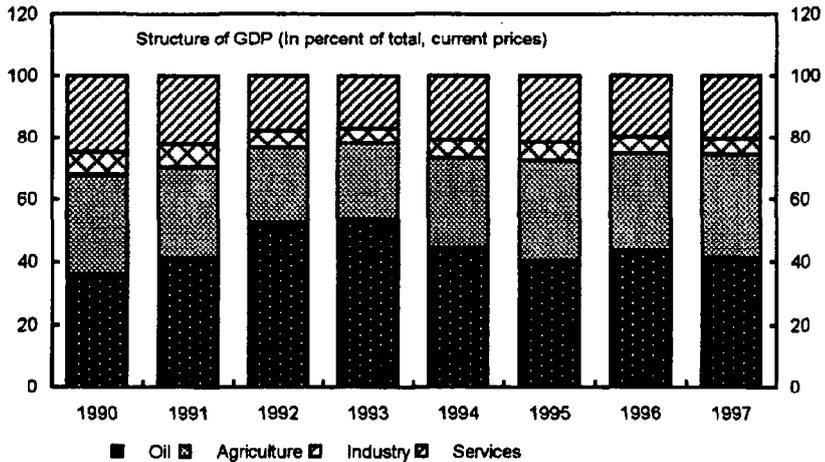
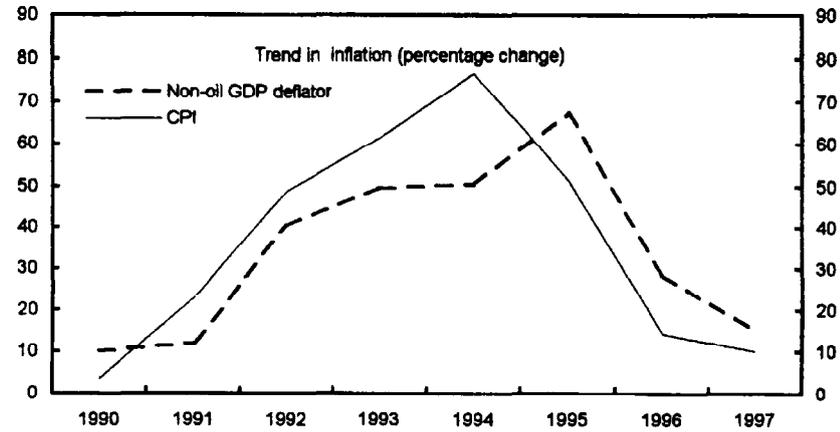
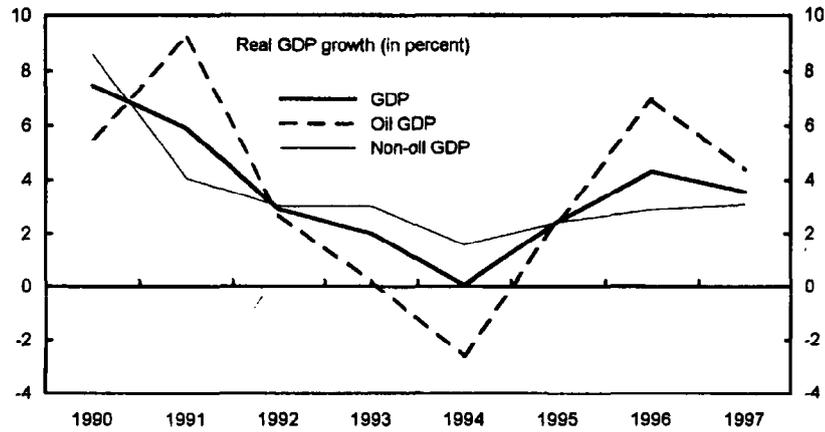
in 1996 largely due to bottlenecks in clearing goods at ports and possibly some under-recording of imports.⁸

13. During 1995-97, the country also received progressively larger amounts of private transfers from Nigerians living abroad; this total reached US\$1.5 billion in 1997, in response to improved incentives and the implementation of liberal policies. Given the upturn in imports and some decline in exports, the current account surplus declined to the equivalent of 8.3 percent of non-oil GDP in 1997, compared with about 31 percent of non-oil GDP in 1996. The latter surplus was made possible by a combination of the high value of oil exports resulting from high oil price and unusually low level of non-oil imports noted above. Net inflow of private capital (direct investment) increased in 1997, responding partly to the improved macroeconomic environment. The overall capital account balance, however, remained in deficit because amortization due on external debt exceeded the level of new official borrowings, which were deliberately limited (see Chapter VI).

14. The overall balance of payments, for the first time in recent years, recorded a small overall surplus of about US\$124 million in 1997 compared with deficits of US\$803 million in 1996 and US\$2.2 billion in 1995 (Appendix Table 48). Gross international reserves rose from about US\$4.2 billion (5.6 months of imports cover) in 1996 to over US\$7.5 billion (7.1 months of imports cover) in 1997. With cash payments for external debt service totaling only US\$1.9 billion in 1997, compared with US\$5.2 billion in debt service due, the stock of arrears on external debt continued to increase reaching US\$3.2 billion to US\$15 billion in that year, while the total stock of external debt (including arrears) stood at US\$28.7 billion, equivalent to about 75 percent of GDP (see Chapter VI).

⁸The large negative short-term capital (net) in 1996 possibly reflects an offsetting entry to the unusually low imports officially recorded in that year.

Figure 1. Nigeria: Developments in the Real Sector, 1990-97



Sources: Federal Office of Statistics; and staff estimates.

II. REVISED NATIONAL INCOME ACCOUNTS FOR NIGERIA ⁹

15. This chapter provides a brief overview of the sources and methodology of national accounts data for Nigeria. It then identifies the main limitations of the data and describes the revision of national accounts data made by the Fund staff. It also provides a comparison between the two sets of estimates and analyzes the evolution of the structure of GDP.

A. National Accounts: Data Sources and Methodology

16. The primary source of all historical national accounts for Nigeria is the data produced by the Federal Office of Statistics (FOS), generally with a lag of one year. The FOS produces national accounts data both by sector of origin and by expenditure groups at current and constant prices. The FOS values the gross output and intermediate inputs on the basis of periodic surveys of different activities. In many sectors, gross output is converted to value added by applying fixed coefficients observed from the past (base) years, rather than using independent estimates of intermediate consumption. In some cases, like the financial services, the annual accounts of companies are used to estimate the value added of the sector. GDP at market prices is then calculated by adding indirect taxes paid and subtracting government subsidies.

17. On the expenditure side of GDP, government consumption and investment data are obtained from the government budget estimates, and exports and imports data from the Customs Department; gross investment is estimated based on survey data on value added and imports of capital goods, namely, machinery, transport equipment and construction goods. Private consumption is derived as a residual.

18. The FOS also estimates of a price deflator for each sector of activity that is used to arrive at sectoral value added at constant prices. In many cases, sectoral price deflators are not based on producer prices but on consumer price subindices for a particular activity. The cost data for the oil GDP deflator are based on observed data for the early 1990s, extrapolated for subsequent years. The import deflator has been used as the deflator for indirect taxes and subsidies. The implicit price deflator for gross fixed capital formation is estimated as the weighted average of the deflator for the building and construction sector and the deflator for imports. The deflator for consumption is proxied by the consumer price index (CPI). For exports and imports, unit price and exchange rate data are used to derive the deflators. The FOS data for GDP measured at current and constant prices, as well as for the implicit sectoral GDP deflators, are presented in Table 1.

⁹ Prepared by Shahabuddin M. Hossain.

B. Limitations of the FOS Data

19. Overall, the estimation of the components of the non-oil sector do not suffer from major methodological shortcomings. However, some of the surveys conducted are outdated and there is the usual problem of the quality and timeliness of data. For the oil sector, it has become apparent that FOS estimates of value added suffer from serious methodological limitations. Although there is no clear documentation, a review of existing oil sector data and discussion with FOS officials indicate that for data through 1994, the official exchange rate has been used to convert U.S. dollar estimates of oil sector production and cost into value-added estimates expressed in local currency. This official exchange rate has been used because there is no representative exchange rate for the period 1985-94 that can be used in national accounts estimates.¹⁰ The adoption of this methodology has resulted in serious underestimation of oil and total GDP in naira terms, and, a corresponding overvaluation of the U.S. dollar estimates.¹¹

20. The expenditure accounts have several important shortcomings, partly owing to unreliable external trade and government budgetary data. First, the customs cleared import data used by the FOS grossly under-records the actual imports.¹² The customs data on exports, particularly non-oil exports, are also lower than the central bank estimates of exports recorded in the balance of payments table. More critically, the FOS uses official exchange rates to convert U.S. dollar estimates into naira, which generates a further downward bias in the estimation of both exports and imports. Second, the government consumption and investment data used by the FOS do not capture the expenditure incurred by all tiers of government, particularly the off-budget accounts and special funds. Third, the private investment estimates of FOS also do not fully capture oil sector investment as well as other components of domestic investment.

¹⁰ For 1995 and 1996 data, the FOS uses weighted-average exchange rates to derive the naira estimates; beginning 1997, it uses "autonomous foreign exchange market" (AFEM) rate for the purpose.

¹¹ In addition, as noted earlier, the FOS has, in the absence of actual data, used fixed ratios of value added to gross output to derive value added for the oil sector. Gross output is estimated from the oil production and export price data.

¹² The FOS data do not capture many non-oil exports or non-dutiable imports, particularly for the oil sector. In general, estimates of imports of goods based on central bank exchange transactions data and expressed in U.S. dollars are substantially higher than the customs estimates.

C. Revision of the National Accounts Data

21. The revision of the national accounts data undertaken recently by the Fund staff had two objectives: (a) to correct the downward bias in oil sector value added, as well as total GDP data provided the FOS, and (b) to derive a set of national accounts data consistent with other macroeconomic aggregates that could form the basis of staff projections of macroeconomic variables.

22. The existing IMF database is based almost entirely on the primary data generated by the FOS (Tables 1 and 3). Some adjustments are made when additional sources of data become available and when there are strong reasons for revising the FOS data. With a few exceptions, FOS sectoral and aggregate value-added data are taken as they are reported. In contrast, the accounts by expenditure category are based mainly on the staff's own estimates. Export and import data are based on balance of payments estimates, which for recent years are identical to the central bank estimates; government consumption and investment data, however, are more comprehensive than the estimates used by the FOS and include all identifiable off-budget accounts and special funds, as well as state and local governments.¹³ Aggregate investment and consumption are estimated as ratios to domestic absorption. Private sector consumption and investment are then derived residually. Apart from these adjustments, which are described below, the staff has recently undertaken a major revision of the oil GDP series to correct the strong downward bias associated as indicated earlier, with the use of the official exchange rate. The methodology for revising the national accounts is described below:

Revised national accounts at current prices

23. The first task in the revision exercise was construction of a **representative exchange rate** series. The parallel exchange rate could be a good proxy for a free market rate. However, during the period under consideration (1984-94), a large part of the transactions were actually carried out at the official rate. The staff opted for a representative exchange rate measured as the weighted average of the official and parallel exchange rate for the period 1984-94. For 1995-96, the central bank estimates of weighted average of the AFEM and the official rate (used also by the FOS) have been used as our representative exchange rates. For 1997, the AFEM rate is accepted as the approximate measure of a free market exchange rate. In general, the parallel (or the free market) exchange rate was given a two-thirds weight with only one-third weight given to the official exchange rate. The representative exchange rates are found to be significantly different from the official rates in all years except 1990 (Table 2).

24. The representative exchange rate series is then used to revalue the oil sector value-added data, expressed in current naira. This revaluation is done by converting the oil sector value-added data (reported by the FOS) into U.S. dollars at the official exchange rate, and then converting back the resulting figures into naira, using the representative rate series. This

¹³ For a description of the consolidation of the fiscal accounts undertaken by the Fund staff, see Chapter IV.

reevaluation raises the naira value of GDP and also changes its composition, with the oil sector accounting for a much higher share of GDP in all years. For the period 1995-97, the FOS estimates of oil sector value-added, which are already based on weighted-average exchange rates (AFEM rate in 1997), have been kept unchanged.

25. Once the revised naira GDP series is constructed the U.S. dollar GDP series is derived simply by converting the data into U.S. dollars, using the representative exchange rate series. The revised GDP estimates measured in current prices, constant (1990) prices and in current U.S. dollars are presented in Table 2.

Revised national accounts at constant prices and implicit GDP deflators

26. The revision to the FOS naira GDP series expressed at constant (1990) prices was carried out by correcting the FOS constant price oil GDP series in naira terms by a factor representing the ratio of the representative to official exchange rate in the base year. Taking the FOS estimates of oil GDP at constant prices as the point of departure (Table 1), the exchange rate factor is used to convert the original naira figures into revised naira estimates. No revision was done for non-oil GDP. As a consequence, although there was no change in underlying oil and non-oil sector growth rates, the relative share of oil sector in GDP went up, causing the growth rate of aggregate GDP to differ from the official estimates (Tables 1 and 2).

27. The revised implicit naira GDP deflator series are then derived directly as the ratio of the revised GDP estimates measured at current prices to the revised GDP estimates measured at constant prices. The overall GDP deflator estimates differ significantly from the official deflator estimates, owing to large changes in the oil GDP deflator (Tables 1 and 2).

Revised GDP by expenditure

28. In recognition of the problem with the FOS GDP data on the expenditure side (Table 3), the staff has made its own estimates of expenditure components, namely, exports, imports, consumption and investment. The staff has used the balance of payments estimates of exports and imports of goods and services and converted them into naira, using the representative exchange rate (Table 4). Domestic absorption (sum of aggregate consumption and aggregate investment) is then calculated by subtracting the external balance (exports less imports) from the revised GDP series. The public (government) consumption and investment data are obtained from the consolidated government accounts calculated by the staff. The aggregate consumption and aggregate investment data are derived as the ratios of domestic absorption, using the trends in FOS data as a guide. The actual ratios, however, have been adjusted to correct for the downward bias in investment observed in the historical data provided by the FOS.¹⁴

¹⁴ On average, as a share of domestic absorption, staff estimates of aggregate investment are
(continued...)

29. The GDP expenditure aggregates at constant prices are then estimated by using the data at current prices and implicit expenditure deflators. For imports and exports, the trade-weighted unit price deflators reported by the World Economic Outlook database for Nigeria have been used. However, for consumption and investment, the original FOS deflators, rebased to 1990, have been employed to derive the constant price estimates. For convenience, the residual balancing items (small, in most years) were included in the estimates of private consumption. The revised GDP by expenditure groups at current and constant prices are presented in Table 4.¹⁵

D. GDP Comparisons

30. Table 5 provides a comparison between the levels of revised GDP and those of the FOS GDP estimates. It indicates that, in current naira prices, the revised GDP is about 6-38 percent higher than the FOS GDP estimates, owing to the revaluation of the oil sector GDP discussed earlier. The four years in which revised GDP estimates are about one-third higher than the original data are 1984, 1985, 1993 and 1994. These are also the years when revised oil sector GDP estimates are about 106-219 percent higher than the original data, resulting directly from the exchange rate distortion measured by the differential between the representative rate and the official rate.

E. Evolution of the Structure of GDP

31. An important question relating to national income accounts in Nigeria is whether the economy has undergone a structural shift during the last decade or so. The revised current price estimates indicate that from a high level of nearly half the size of GDP, the oil sector share has stabilized to about 40-44 percent level in recent years. Looking at the period 1984-97, it appears that the share of non-oil output peaked in 1986-88, declined during 1989-93, and recovered during the last three years largely as result of a shift in intrasectoral shares within the non-oil sector. Agriculture, whose share declined during 1989-93, recovered most of the lost ground while the share of the services sector declined; industry's share remained unchanged in recent years but has declined somewhat over the long run (Tables 5 and Figure 1).

¹⁴(...continued)

about 10 percent higher than the FOS estimates; staff estimates of aggregate consumption are, as a consequence, about 10 percent lower than the FOS estimates of aggregate consumption.

¹⁵ Once the structure of GDP at current (and constant) prices has been derived, the estimation is a straightforward exercise. The representative exchange rate series can be used to convert naira values into U.S. dollar estimates.

32. In constant 1990 prices, the sectoral shares have undergone only small changes over the period under review. The share of the oil sector has fallen somewhat from a high level in 1984-85. Unlike the trend, identified in the case of current prices, the share of agriculture remained nearly unchanged while the share of the service sector has risen. Industry, however, appeared to have suffered a mild decline.

Table 1. Nigeria: Source Data—GDP and GDP Deflator estimates, 1984-97
(Value in millions of naira)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997 Est.
GDP at current prices														
Total GDP at factor cost	63,006	71,368	72,128	106,883	142,678	222,458	257,873	320,247	544,331	695,986	908,476	1,960,683	2,740,457	3,129,243
Oil sector GDP	9,569	12,110	9,828	25,423	29,919	78,788	86,188	120,103	254,854	249,959	226,173	792,373	1,194,561	1,294,160
Non-oil sector GDP	53,437	59,258	62,300	81,460	112,759	143,670	171,685	200,144	289,477	446,027	682,304	1,168,311	1,545,896	1,835,083
Agriculture	23,799	26,625	27,887	39,204	57,924	69,713	84,345	97,464	145,225	231,833	349,245	619,805	841,456	1,023,833
Industry 1/	7,933	8,718	8,927	10,182	14,065	17,287	20,491	25,836	34,787	49,260	73,970	122,930	153,020	171,988
Services	21,705	23,915	25,486	32,074	40,769	56,669	66,849	76,845	109,465	164,934	259,089	425,576	551,420	639,263
Indirect taxes	1,052	1,332	1,383	2,329	3,147	2,770	3,220	11,457	16,055	15,486	25,555	22,355	86,791	106,000
Subsidies	-450	-344	-449	-1,198	-1,599	-431	-456	-3,589	-6,100	-7,800	-11,001	-5,301	-3,316	-1,348
Total GDP at market prices	63,608	72,355	73,062	108,014	144,226	224,796	260,637	328,115	554,285	703,672	923,031	1,977,737	2,823,932	3,233,896
GDP at constant naira (1990) prices 2/														
Total GDP at constant prices	187,400	204,519	206,390	200,633	219,683	239,744	257,873	272,786	280,723	286,496	286,949	293,989	306,415	317,245
Oil GDP at constant prices	70,821	76,814	72,785	65,659	70,981	81,662	86,188	94,117	96,658	96,851	94,333	96,692	103,411	107,961
Non-oil GDP at constant prices	116,579	127,705	133,605	134,974	148,702	158,082	171,685	178,669	184,065	189,644	192,616	197,297	203,004	209,284
Agriculture	56,902	66,453	72,580	70,266	77,162	80,921	84,345	87,322	89,116	90,330	92,504	95,889	99,802	104,018
Industry 1/	16,495	16,746	15,692	16,637	18,634	19,110	20,491	22,098	21,547	21,162	20,569	20,518	20,744	20,975
Services	43,181	44,506	45,333	48,070	52,906	58,051	66,849	69,248	73,401	78,152	79,543	80,890	82,458	84,290
Indirect taxes	14,233	15,776	9,209	4,614	5,200	3,077	3,220	3,640	2,669	3,300	2,200	2,138	8,368	9,623
Subsidies	-6,090	-4,080	-2,993	-648	-961	-478	-456	-433	-126	-81	-1,009	-507	-320	-122
Total GDP at market prices	195,542	216,215	212,606	204,599	223,921	242,342	260,637	275,993	283,266	289,715	288,140	295,619	314,463	326,746
Growth rate of GDP at factor cost (in percent)														
GDP at factor cost		9.1	0.9	-2.8	9.5	9.1	7.6	5.8	2.9	2.1	0.2	2.5	4.2	3.5
Oil sector		8.5	-5.2	-9.8	8.1	15.0	5.5	9.2	2.7	0.2	-2.6	2.5	6.9	4.4
Non-oil sector		9.5	4.6	1.0	10.2	6.3	8.6	4.1	3.0	3.0	1.6	2.4	2.9	3.1
GDP at market prices		10.6	-1.7	-3.8	9.4	8.2	7.5	5.9	2.6	2.3	-0.5	2.6	6.4	3.9
Implicit naira GDP deflators (index, 1990=100)														
GDP at factor cost	35.0	36.3	35.6	52.9	64.3	93.3	100.0	118.6	195.7	243.8	315.0	663.7	897.1	991.9
Oil sector	13.5	15.8	13.5	38.7	42.2	96.5	100.0	127.6	263.7	258.1	239.8	819.5	1,155.2	1,198.7
Non-oil sector	45.8	46.4	46.6	60.4	75.8	90.9	100.0	112.0	157.3	235.2	354.2	592.2	761.5	876.8
GDP at market prices	34.7	36.0	35.5	52.8	64.2	93.3	100.0	120.2	197.3	243.8	317.1	663.1	911.6	1,010.1
Memorandum item:														
Exchange rate (naira/U.S. dollar) 3/	0.76	0.89	1.75	4.02	4.54	7.36	8.04	9.91	17.30	22.05	21.89	70.36	80.00	82.14

Sources: Federal Office of Statistics; and staff estimates.

1/ Includes mining and quarrying other than the petroleum and gas sectors.

2/ Base year of the FOS data is 1984. FOS data at constant (1984) naira prices have been rebased to 1990.

3/ Average exchange rate reportedly used by the FOS. For the period, 1984-94, this represents the official exchange rate; for the period 1995-96, this represents a weighted average of the official and the autonomous foreign exchange market (AFEM) rate. For 1997, the rate is the actual AFEM rate.

Table 2. Nigeria: Revised IMF GDP and GDP Deflator Estimates, 1984-97
(Value in millions of naira, unless otherwise indicated)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997 Est
Revised GDP in current prices														
Revised GDP at factor cost	83,949	97,632	82,706	113,793	152,891	247,726	267,587	340,899	610,122	959,594	1,222,568	1,960,683	2,740,457	3,129,243
Oil sector (revised) 1/	30,512	38,374	20,406	32,333	40,132	104,056	95,902	140,754	320,645	513,567	540,264	792,373	1,194,561	1,294,160
Non-oil sector	53,437	59,258	62,300	81,460	112,759	143,670	171,685	200,144	289,477	446,027	682,304	1,168,311	1,545,896	1,835,083
Agriculture	23,799	26,625	27,887	39,204	57,924	69,713	84,345	97,464	145,225	231,833	349,245	619,805	841,456	1,023,833
Industry	7,933	8,718	8,927	10,182	14,065	17,287	20,491	25,836	34,787	49,260	73,970	122,930	153,020	171,988
Services	21,705	23,915	25,486	32,074	40,769	56,669	66,849	76,845	109,465	164,934	259,089	425,576	551,420	639,263
Indirect taxes	1,052	1,332	1,383	2,329	3,147	2,770	3,220	11,457	16,055	15,486	25,555	22,355	86,791	106,000
Subsidies	-450	-344	-449	-1,198	-1,599	-431	-456	-3,589	-6,100	-7,800	-11,001	-5,301	-3,316	-1,348
Revised GDP at market prices	84,551	98,619	83,640	114,923	154,439	250,064	270,351	348,766	620,077	967,280	1,237,123	1,977,737	2,823,932	3,233,896
Revised GDP in constant (1990) prices														
GDP at factor cost (revised)	195,382	213,177	214,593	208,033	227,683	248,948	267,587	283,394	291,617	297,412	297,581	304,887	318,070	329,413
Oil sector (revised) 1/	78,803	85,471	80,988	73,059	78,981	90,866	95,902	104,725	107,552	107,767	104,965	107,590	115,067	120,130
Non-oil sector	116,579	127,705	133,605	134,974	148,702	158,082	171,685	178,669	184,065	189,644	192,616	197,297	203,004	209,284
Agriculture	56,902	66,453	72,580	70,266	77,162	80,921	84,345	87,322	89,116	90,330	92,504	95,889	99,802	104,018
Industry	16,495	16,746	15,692	16,637	18,634	19,110	20,491	22,098	21,547	21,162	20,569	20,518	20,744	20,975
Services	43,181	44,506	45,333	48,070	52,906	58,051	66,849	69,248	73,401	78,152	79,543	80,890	82,458	84,290
Indirect taxes	14,233	15,776	9,209	4,614	5,200	3,077	3,220	3,640	2,669	3,300	2,200	2,138	8,368	9,623
Subsidies	-6,090	-4,080	-2,993	-648	-961	-478	-456	-433	-126	-81	-1,009	-507	-320	-122
Revised GDP at market prices	203,525	224,872	220,809	212,000	231,921	251,546	270,351	286,601	294,160	300,630	298,772	306,517	326,118	338,914
Revised naira GDP deflators (1990=100)														
Revised GDP at factor cost	43.0	45.8	38.5	54.7	67.2	99.5	100.0	120.3	209.2	322.6	410.8	643.1	861.6	949.9
Oil sector (revised) 1/	38.7	44.9	25.2	44.3	50.8	114.5	100.0	134.4	298.1	476.6	514.7	736.5	1038.1	1077.3
Non-oil sector	45.8	46.4	46.6	60.4	75.8	90.9	100.0	112.0	157.3	235.2	354.2	592.2	761.5	876.8
Revised GDP at market prices	41.5	43.9	37.9	54.2	66.6	99.4	100.0	121.7	210.8	321.8	414.1	645.2	865.9	954.2
Estimation of representative exchange rate														
Official exchange rate: average (naira/U.S. dollar)	0.762	0.894	1.755	4.016	4.537	7.365	8.04	9.91	17.30	22.05	21.89	21.89	21.89	21.89
Parallel exchange rate: average (naira/U.S. dollar)	3.251	3.787	4.573	5.645	6.848	10.890	9.39	12.45	23.96	56.75	67.25			
Representative exchange rate: (naira/U.S. dollar) 2/	2.430	2.832	3.643	5.107	6.085	9.727	8.94	11.61	21.76	45.30	52.28	70.36	80.00	82.14
Current GDP (in millions of U.S. dollars)														
GDP in at factor cost	34,552	34,472	22,703	22,280	25,125	25,469	29,919	29,355	28,034	21,184	23,385	27,865	34,256	38,096
Oil GDP at factor cost	12,558	13,549	5,602	6,331	6,595	10,698	10,723	12,121	14,733	11,338	10,334	11,261	14,932	15,756
Non-oil GDP at factor cost	21,994	20,923	17,102	15,949	18,530	14,771	19,196	17,235	13,301	9,846	13,051	16,604	19,324	22,341
GDP at market prices	34,800	34,820	22,960	22,501	25,379	25,709	30,228	30,033	28,492	21,354	23,663	28,108	35,299	39,371
Memorandum item:														
Gross national income (in millions of U.S. dollars) 3/	32,361	32,183	20,595	20,190	23,083	23,777	27,548	28,134	26,698	19,854	21,811	26,620	33,945	38,650

Sources: Federal Office of Statistics, and staff estimates.

1/ Adjusted for exchange rate; official exchange rate is used to derive the U.S. dollar estimate and then representative exchange rate is used to get back the naira estimates.

2/ Weighted average of the official and the parallel exchange rate estimated by the staff for the period 1984-94. For 1995-96, the rate represents the weighted average of the official and the autonomous foreign exchange market (AFEM) rate used by the FOS. For 1997, it represents the actual AFEM rate used by the FOS.

3/ Gross national income is derived by adding net factor income from abroad and net transfers to the GDP measured at market prices.

Table 3. Nigeria: Source Data, GDP by Expenditure Groups at Current and Constant Prices, 1984-97
(Value in millions of naira)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
GDP at current market prices	63,608	72,355	73,062	108,885	145,243	224,797	260,637	324,010	549,809	701,473	914,939	1,977,739	2,823,934	3,233,898
External balance	4,464	5,821	1,636	13,556	13,525	57,469	62,767	53,427	66,255	55,019	47,058	196,669	139,721	194,535
Exports of goods and services	9,548	12,083	9,427	30,013	31,955	94,959	112,562	129,691	196,904	228,679	217,245	678,852	719,763	863,830
Imports of goods and services	-5,084	-6,262	-7,791	-16,457	-18,430	-37,490	-49,795	-76,264	-130,650	-173,661	-170,187	-482,183	-580,042	-669,294
Domestic demand	59,144	66,534	71,426	95,329	131,718	167,328	197,869	270,583	483,554	646,454	867,881	1,781,070	2,684,212	3,039,362
Consumption	54,887	61,408	63,692	85,724	122,327	148,904	166,743	234,959	424,614	565,056	782,566	1,666,243	2,520,642	2,844,731
Government final consumption	6,925	7,342	7,488	7,395	9,253	10,076	11,469	12,689	20,432	27,583	88,513	123,152	146,599	174,453
Private consumption	47,962	54,066	56,204	78,329	113,074	138,827	155,274	222,270	404,182	537,473	694,053	1,543,090	2,374,043	2,670,278
Gross investment	4,257	5,126	7,734	9,605	9,391	18,424	31,127	35,624	58,940	81,398	85,314	114,827	163,570	194,631
Increase in stocks	-1,160	-447	411	-1,056	-2,993	10	500	200	300	450	293	351	386	447
Gross fixed capital formation	5,417	5,573	7,323	10,661	12,384	18,414	30,627	35,424	58,640	80,948	85,022	114,476	163,184	194,184
GDP at constant 1990 market prices	183,095	200,863	205,914	204,470	224,711	240,893	260,637	273,028	280,948	288,342	291,945	298,291	309,795	321,743
External balance	-9,403	-8,668	3,958	32,526	35,356	56,775	62,767	36,625	21,312	13,702	16,838	21,114	15,936	20,429
Exports of goods and services	59,379	65,516	55,835	65,135	65,812	98,425	112,562	101,630	76,584	80,491	69,200	67,259	71,844	81,190
Imports of goods and services	-68,782	-74,183	-51,878	-32,609	-30,456	-41,650	-49,795	-65,005	-55,272	-66,789	-52,363	-46,145	-55,908	-60,762
Domestic demand	192,498	209,531	201,956	171,944	189,355	184,117	197,869	236,403	259,637	274,640	275,107	277,177	293,859	301,314
Consumption	171,403	186,307	175,393	153,150	174,049	160,896	166,743	206,380	229,352	241,185	243,407	249,369	264,071	270,386
Government final consumption	10,935	11,126	10,336	9,393	10,368	10,343	11,469	12,413	13,964	15,878	32,454	26,131	24,059	24,746
Private consumption	160,468	175,181	165,056	143,756	163,681	150,553	155,274	193,967	215,387	225,306	210,953	223,238	240,012	245,641
Gross investment	21,095	23,223	26,564	18,795	15,306	23,221	31,127	30,023	30,285	33,456	31,700	27,808	29,788	30,928
Increase in stocks	-8,209	-2,576	3,107	-2,222	-7,000	11	500	395	617	608	239	162	140	144
Gross fixed capital formation	29,305	25,799	23,457	21,017	22,306	23,210	30,627	29,627	29,668	32,847	31,461	27,645	29,648	30,784
Implicit GDP deflators, 1990=100														
External balance														
Exports of goods and services	16.1	18.4	16.9	46.1	48.6	96.5	100.0	127.6	257.1	284.1	313.9	1009.3	1001.8	1064.0
Imports of goods and services	7.4	8.4	15.0	50.5	60.5	90.0	100.0	117.3	236.4	260.0	325.0	1044.9	1037.5	1101.5
Domestic demand	38.5	39.5	41.4	58.2	72.7	90.7	100.0	125.0	208.2	269.9	354.6	712.1	1030.6	1133.0
Consumption														
Government final consumption	63.3	66.0	72.4	78.7	89.2	97.4	100.0	102.2	146.3	173.7	272.7	471.3	609.3	705.0
Private consumption	40.7	41.3	41.5	59.6	76.6	93.9	100.0	129.2	219.2	287.7	416.4	841.7	1214.7	1326.8
Gross investment														
Increase in stocks	14.1	17.4	13.2	47.5	42.8	90.0	100.0	50.6	48.6	74.0	122.3	216.1	276.1	310.1
Gross fixed capital formation	18.5	21.6	31.2	50.7	55.5	79.3	100.0	119.6	197.7	246.4	270.2	414.1	550.4	630.8

Sources: Federal Office of Statistics; and staff estimates.

Table 4 Nigeria Revised IMF GDP Estimates by Expenditure Groups, 1984-97
(Value in millions of naira)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997 Est.
Total revised GDP at market prices	84,551	98,619	83,640	114,923	154,439	250,064	270,351	348,766	620,077	967,280	1,237,123	1,977,737	2,823,932	3,233,896
External balance (revised)	3,569	6,874	-5,162	5,453	1,069	25,738	44,047	17,396	10,776	-29,780	12,296	41,598	584,559	211,677
Exports of goods and services	29,935	36,411	25,933	39,617	41,422	96,745	126,014	142,727	261,913	455,794	516,569	875,895	1,359,582	1,321,418
Imports of goods and services	-26,366	-29,537	-31,096	-34,164	-40,353	-71,007	-81,968	-125,331	-251,137	-485,574	-504,273	-834,297	-775,023	-1,109,741
Domestic demand (revised)	80,982	91,746	88,802	109,470	153,370	224,326	226,304	331,370	609,301	997,060	1,224,826	1,936,139	2,239,373	3,022,219
Consumption	67,055	75,503	70,307	87,493	127,098	177,193	168,074	254,606	474,103	771,810	981,941	1,617,701	1,878,973	2,526,463
Public	6,925	9,078	12,215	22,679	28,115	40,541	66,667	74,950	114,003	169,282	176,395	219,395	226,810	275,361
Private	60,130	66,425	58,092	64,815	98,983	136,652	101,406	179,656	360,100	602,527	805,546	1,398,305	1,652,163	2,251,102
Gross investment	13,927	16,243	18,496	21,977	26,272	47,133	58,230	76,764	135,198	225,251	242,886	318,439	360,400	495,755
Stock changes	-1,160	-447	411	-1,056	-2,993	10	500	200	300	450	293	351	386	447
Gross fixed investment	15,087	16,690	18,085	23,033	29,264	47,123	57,730	76,564	134,898	224,801	242,593	318,088	360,014	495,308
public investment	4,596	5,597	7,628	8,647	14,772	16,134	35,558	46,130	83,172	103,899	109,606	139,001	188,634	277,612
private investment	10,491	11,093	10,456	14,386	14,492	30,988	22,172	30,434	51,726	120,901	132,987	179,086	171,380	217,696
Revised GDP at 1990 constant market prices	203,525	224,872	220,809	212,000	231,921	251,546	270,351	286,601	294,160	300,630	298,772	306,517	326,118	338,914
External balance (revised)	-54,441	-37,469	3,084	26,347	29,328	40,652	44,047	34,775	29,488	25,991	42,014	54,007	88,279	44,232
Exports of goods and nonfactor services	89,565	100,370	102,924	96,124	94,059	112,343	126,014	131,688	129,604	124,616	133,598	156,075	174,430	176,550
Imports of goods and nonfactor services	-144,006	-137,839	-99,840	-69,777	-64,731	-71,691	-81,968	-96,913	-100,116	-98,625	-91,584	-102,067	-86,151	-132,317
Domestic demand (revised)	257,965	262,341	217,726	185,652	202,593	210,894	226,304	251,827	264,672	274,639	256,758	252,509	237,839	294,682
Consumption	184,557	187,654	156,690	142,468	156,882	151,488	168,074	187,396	195,805	182,811	166,752	175,531	172,291	216,017
Public	10,935	13,757	16,862	28,807	31,502	41,614	66,667	73,323	77,917	97,447	64,676	46,552	37,223	39,059
Private	173,623	173,897	139,828	113,661	125,380	109,874	101,406	114,073	117,889	85,364	102,076	128,979	135,068	176,958
Gross investment	73,408	74,687	61,036	43,184	45,711	59,406	58,230	64,431	68,867	91,828	90,006	76,978	65,548	78,665
Stock changes	-8,209	-2,576	3,107	-2,222	-7,000	11	500	395	617	608	239	162	140	144
Gross fixed investment	81,617	77,263	57,929	45,407	52,711	59,395	57,730	64,035	68,250	91,220	89,767	76,816	65,408	78,521
public investment	24,863	25,910	24,435	17,047	26,608	20,336	35,558	38,582	42,080	42,160	40,558	33,568	34,271	44,009
private investment	56,754	51,354	33,494	28,360	26,103	39,059	22,172	25,454	26,170	49,059	49,209	43,248	31,137	34,511
Implicit GDP deflators: 1990=100														
External balance (revised)														
Exports of goods and nonfactor services	33.4	36.3	25.2	41.2	44.0	86.1	100.0	108.4	202.1	365.8	386.7	561.2	779.4	748.5
Imports of goods and nonfactor services	18.3	21.4	31.1	49.0	62.3	99.0	100.0	129.3	250.8	492.3	550.6	817.4	899.6	838.7
Domestic demand (revised)														
Consumption	36.3	40.2	44.9	61.4	81.0	117.0	100.0	135.9	242.1	422.2	588.9	921.6	1090.6	1169.6
Public	63.3	66.0	72.4	78.7	89.2	97.4	100.0	102.2	146.3	173.7	272.7	471.3	609.3	705.0
Private	34.6	38.2	41.5	57.0	78.9	124.4	100.0	157.5	305.5	705.8	789.2	1084.1	1223.2	1272.1
Gross investment	19.0	21.7	30.3	50.9	57.5	79.3	100.0	119.1	196.3	245.3	269.9	413.7	549.8	630.2
Stock changes	14.1	17.4	13.2	47.5	42.8	90.0	100.0	50.6	48.6	74.0	122.3	216.1	276.1	310.1
Gross fixed investment	18.5	21.6	31.2	50.7	55.5	79.3	100.0	119.6	197.7	246.4	270.2	414.1	550.4	630.8

Sources: Federal Office of Statistics; and staff estimates.

Table 5. Nigeria: GDP Comparisons and Evolution of the Structure of GDP, 1984-97

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997 Est.
Revised GDP at current prices														
Difference over FOS estimates (in percent)														
Total GDP at factor cost	33.2	36.8	14.7	6.5	7.2	11.4	3.8	6.4	12.1	37.9	34.6	0.0	0.0	0.0
Oil sector GDP	218.8	216.9	107.6	27.2	34.1	32.1	11.3	17.2	25.8	105.5	138.9	0.0	0.0	0.0
Non-oil sector GDP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sectoral share of revised GDP at current prices														
Total GDP at factor cost	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Oil sector GDP	36.3	39.3	24.7	28.4	26.2	42.0	35.8	41.3	52.6	53.5	44.2	40.4	43.6	41.4
Non-oil sector GDP	63.7	60.7	75.3	71.6	73.8	58.0	64.2	58.7	47.4	46.5	55.8	59.6	56.4	58.6
Agriculture	28.3	27.3	33.7	34.5	37.9	28.1	31.5	28.6	23.8	24.2	28.6	31.6	30.7	32.7
Industry 1/	9.4	8.9	10.8	8.9	9.2	7.0	7.7	7.6	5.7	5.1	6.1	6.3	5.6	5.5
Services	25.9	24.5	30.8	28.2	26.7	22.9	25.0	22.5	17.9	17.2	21.2	21.7	20.1	20.4
Sectoral share of GDP at constant prices														
Total GDP at factor cost	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Oil sector GDP	40.3	40.1	37.7	35.1	34.7	36.5	35.8	37.0	36.9	36.2	35.3	35.3	36.2	36.5
Non-oil sector GDP	59.7	59.9	62.3	64.9	65.3	63.5	64.2	63.0	63.1	63.8	64.7	64.7	63.8	63.5
Agriculture	29.1	31.2	33.8	33.8	33.9	32.5	31.5	30.8	30.6	30.4	31.1	31.5	31.4	31.6
Industry 1/	8.4	7.9	7.3	8.0	8.2	7.7	7.7	7.8	7.4	7.1	6.9	6.7	6.5	6.4
Services	22.1	20.9	21.1	23.1	23.2	23.3	25.0	24.4	25.2	26.3	26.7	26.5	25.9	25.6
Memorandum item:														
Exchange rate (naira/U.S. dollar) 2/	2.43	2.83	3.64	5.11	6.09	9.73	8.94	11.61	21.76	45.30	52.28	...	...	...
Percentage difference: representative rate over official rate	218.8	216.9	107.6	27.2	34.1	32.1	11.3	17.2	25.8	105.5	138.9	...	...	...

Source: Data provided by the Federal Office of Statistics; and staff estimates.

1/ Includes mining and quarrying other than the petroleum and gas sectors.

2/ Representative exchange rate.

III. DETERMINANTS OF INFLATION, THE EXCHANGE RATE AND OUTPUT: A QUANTITATIVE ANALYSIS¹⁶

A. Introduction

33. This chapter presents a simplified macro economic model of the Nigerian economy. The core of the model consists of behavioral equations pertaining to the markets for money, foreign exchange, and output. Long-run equilibrium in the model is characterized by three equilibrium conditions. First, in the long run, the price level is modeled to be determined by monetary policy and, in principle, import prices.¹⁷ Second, the equilibrium real exchange rate is modeled to be determined by the balance of payments. The supply of foreign exchange to the private sector arises from export revenues, net of public sector imports, debt servicing, and new external borrowing. This supply of foreign exchange, together with the private sector's demand for foreign exchange in order to buy import goods, determines the equilibrium real exchange rate and/or the parallel exchange rate premium. The latter plays a role when the supply of foreign exchange is rationed. Import prices in foreign currency are exogenous. The nominal exchange rate is then determined once the price level and the real exchange rate have been determined. Third, for non-oil GDP, a Cobb-Douglas production function is estimated, using capital stock, labor supply, a measure of human capital, and (residual) technological progress as explanatory variables. The potential output derived from the production function is taken to be the long-run equilibrium level of output. The three long-run equilibrium conditions, or equilibrium correction mechanisms (ECMs), are estimated using the Vector Auto Regression (VAR) technique. Shocks, external or policy induced, are the cause of temporary disequilibria in any or several of the markets. The manner in which equilibrium in the economy is restored is evaluated by estimating dynamic equations for the price level, the real exchange rate, and output. These dynamic equations quantify how each of the three variables responds to shocks affecting each of the three markets, using the information contained in the three ECMs derived from the co-integration analysis, as well as dynamic explanatory variables.

34. Two features of the equilibrium real exchange rate model used here for Nigeria should be noted. First, exports are assumed to be exogenous, on the grounds that the overwhelming share of total export revenues (over 95 percent) is accounted for by the oil sector. The public sector receives foreign exchange from these oil revenues; the amount of foreign exchange retained by the public sector (for public sector imports) is a policy instrument. The (exogenous) net supply of foreign exchange to the private sector, combined with its (endogenous) demand for foreign exchange, then determines the long-run equilibrium exchange rate. Second, the extensive use of import controls and foreign exchange rationing during much of the period under investigation made it necessary to model the excess demand for foreign

¹⁶Prepared by Louis Kuijs.

¹⁷ The model allows for a long-run effect of import prices on domestic prices. However, this effect is shown empirically not to be significant.

exchange. The premium of the parallel exchange rate over the formal exchange rate has been used to proxy the excess demand for foreign exchange.

B. Theoretical Framework

The economy

35. The theoretical framework is based on models of small, open economies such as Edwards (1994). For a formal exposition of such models, the reader is referred to, for instance, Williamson (1994). In this paper, the framework is outlined briefly, with an emphasis on the adaption to the particular structure of Nigeria's economy and the respects in which the framework diverges from the standard approach. The economy produces two goods: exportables and nontradables. Exportables (oil) are produced via a highly capital-intensive production process without domestic labor. All labor is employed in the nontradables (non-oil) sector, which competes against imported foreign goods (importables). The supply of nontradables is assumed to be a function of labor, capital (physical and human), the degree of distortions, and (residual) technological progress (according to a Cobb-Douglas production function). In long-term equilibrium, actual output (non-oil GDP) is assumed to grow in line with potential output. However, at any particular time, actual output can diverge from potential output, owing to external shocks or changes in the fiscal and monetary policy stance. Identifying the oil sector as the export sector strongly simplifies the analysis. Both the volume and price of exports can then be treated as exogenous. The only impact of the export sector on the economy at large is in the form of foreign exchange revenues flowing to the government, and, in part, to the private non-oil sector. In line with established practice in Nigeria, the government is assumed to allocate the net proceeds of oil revenues (after reservations for debt service and reserve accumulation) to imports. A substantial part of net proceeds is used for public sector imports. The residual amount of foreign exchange is made available for private sector imports. Non-oil private sector expenditure (in real terms), D , is spent on domestically produced goods, Y , and imports.

$$\text{Eq. 1} \quad Y = f (D (M - M^d), Pim/P),$$

$$\text{Eq. 2} \quad MPR = f (D (M - M^d), Pim/P),$$

where Y denotes non-oil GDP, M is broad money supply ($M2$), M^d denotes money demand, P is the domestic price level (non-oil GDP deflator), and MPR is private sector imports. Pim , the price of import goods in domestic currency, $= E * P\$ * (1 + T/100)$, where E is the formal exchange rate (naira per U.S. dollar), $P\$$ is the price of imports in U.S. dollars, and T is the trade-weighted average import tariff). An increase in Pim/P , i.e. a real exchange rate depreciation, would lead to a rise in the share of D spent on domestically produced goods. By definition, $D = Y + MPR$ ¹⁸.

¹⁸ In the absence of non-oil exports, the national accounts identity for the non-oil sector is
(continued...)

Money and prices

36. There is only one asset: money. Prices are principally determined by monetary policy, as an excess of money supply over money demand leads to excess demand for goods and inflation. Money supply is assumed to be an exogenous policy instrument, while money demand can be expressed as a function of domestic demand, prices and opportunity costs. Import prices are also assumed to have an impact on domestic prices. The money-price block then takes the following form:

$$\text{Eq. 3} \quad M^d = f (P , D , INF , RDIFF) , \text{ and}$$

$$\text{Eq. 4} \quad P = f (M - M^d , Pim) ,$$

where *INF* denotes the rate of inflation (year-on-year change in the non-oil GDP deflator) and *RDIFF* is the differential between the Nigerian three-month deposit rate and the U.S. federal funds rate.

Balance of payments and the real exchange rate

37. The balance of payments identity can be written, in simplified form, as

$$\text{Eq. 5} \quad X\$ - (MGPR\$ + MGPU\$) + NFB = dR ,$$

where *X\$* represents exogenous export revenues, *MGPR\$* denotes private sector imports of goods, *MGPU\$* is public sector imports of goods, *dR* represents the net accumulation of reserves, and *NFB* represents net foreign borrowing as defined by the equation (all in U.S. dollars). Net foreign borrowing thus includes items that are either exogenous to the model or policy instruments: oil sector imports, imports of services (predominantly factor services in

¹⁸(...continued)

$Y = C + I - MPU - MPR$, where *C* is non-oil consumption, *I* represents investment, and *MPU* denotes public sector imports. By definition, total domestic demand, *DT*, can be written as $DT = C + I = Y + MPU + MPR$. Total domestic demand exceeds production because of the net proceeds of oil revenues. Non-oil goods are produced either by the public sector or the private sector. But value added of the public sector equals, by definition, the public sector wage bill. Hence, non-oil private sector income stems from both private and public sector production, plus the amount of net oil revenues allocated to the private sector. Net oil revenues allocated to the private sector are a net transfer to the private non-oil sector. Non-oil private sector income can then be defined as $D = Y + MPR$. Assuming that savings equal investment for the non-oil private sector, expenditure equals income.

Nigeria)¹⁹, debt service payments, official borrowing, and private capital flows. The latter are small enough, in relation to other balance of payments transactions, to be taken as exogenous. The net accumulation of reserves is also assumed to be a policy instrument. Using equation (5), the exogenous real supply of foreign exchange to the private sector (FX^s) can be written as follows:

$$\text{Eq. 6} \quad FX^s = (X\$ - MGPU\$ + NFB - dR) / P\$,$$

where $P\$$ is the price of imports in U.S. dollars. Real private sector demand for foreign exchange (FX^d) arises from the demand for imports:

$$\text{Eq. 7} \quad FX^d = f (D, RER, (M - M^d)) ,$$

where RER is the real exchange rate (the relative price of imports to domestically produced goods²⁰) and $(M - M^d)$ denotes excess money supply. During the period of analysis (1983-96), the Nigerian authorities have, in varying degree, made extensive use of foreign exchange rationing and import controls. As a consequence, the demand for foreign exchange at the prevailing formal exchange rate has usually exceeded supply. For the period during which the formal exchange rate was set above the market-clearing rate and access to imports was restricted, the premium of the parallel exchange rate (PAR) over the formal exchange rate (E) measures the excess demand for foreign exchange (see Agénor (1990)).²¹ The (dis)equilibrium on the foreign exchange market can then be written as

$$\text{Eq. 8} \quad fx^d = fx^s + c3 * rho , \quad c3 > 0$$

where fx^d and fx^s are real demand for, and supply of, foreign exchange expressed in logarithm, rho is the logarithm of (PAR/E) , with both exchange rates defined in terms of naira per U.S. dollar, and $c3$ expresses the relation between excess import demand and the exchange rate premium. In long-run equilibrium, M^d is equal to M^s . The long-run equilibrium relation for the foreign exchange market can then be written as

¹⁹ It would have been preferable to base the analysis on total imports, including non factor services, of the private sector. Data limitations necessitated the use of imports of goods. There are no source data available for nonfactor services; IMF staff estimates are made using a constant share of imports of goods. According to those estimates, nonfactor services of the private sector are relatively small.

²⁰ The relative exchange rate is defined as $RER = P\$ * E * (1+T/100) / P$, with E the formal exchange rate (naira per U.S. dollar) and T the average import tariff.

²¹ Since the first quarter of 1995, the formal exchange rate has been allowed to adjust to market forces. Consequently, the premium has been reduced strongly and virtually disappeared during 1997.

$$\text{Eq. 9} \quad fx^s = c1 * d - c2 * rer - c3 * rho, \quad c1, c2, c3 > 0,$$

with d and rer the logarithms of, respectively, real demand and the real exchange rate. Depending on the actual policy setting, either the formal exchange rate or the parallel market premium adjusts. For our purposes, it is convenient to rewrite equation (9) as follows:

$$\text{Eq. 10} \quad rer = a1 * d - a2 * fxs - a3 * rho, \quad a1, a2, a3 > 0,$$

38. Given an exogenous supply of foreign exchange and the level of activity in the domestic economy, and depending on the value of the parallel market premium (i.e., the degree of overvaluation of the nominal formal exchange rate), the real (formal) exchange rate adjusts so as to bring demand for foreign exchange in line with supply. If, however, the (real) exchange rate is perceived to be the policy instrument, or target, as it arguably has been during much of the period until 1995, the relationship could be thought of as expressing the difference between the actual parallel market premium and its equilibrium value.

Production function

39. In the long run, non-oil output is assumed to be determined by a Cobb-Douglas production function, with constant returns to scale. The factors of production are capital, labor and the level of education of the workforce. The latter factor is approximated by the secondary school enrollment rate, for which reasonably reliable data are available.²² It is assumed that output capacity is affected by the foreign exchange restrictions that have been imposed during much of the sample period. As in the balance of payments analysis, the excess demand for foreign exchange is approximated by the parallel market premium. This premium can be seen as a proxy for distortions in the economy that reduce potential output (see, for instance, Barro and Sali-i-Martin (1995)).²³ The production function is written as

$$\text{Eq. 11} \quad y^f = \alpha * ls + \beta * k + \gamma * ss_4 - \delta * rho + TFP * Trend,$$

where y^f denotes non-oil output, ls represents the labor supply, k stands for the capital stock, ss_4 is the fourth lag of the secondary school enrollment rate, rho is the (logarithm of the) ratio between the parallel market exchange rate (PAR) and the formal exchange rate (E), and TFP is (residual) growth of total factor productivity, with all variables written in lower case

²²The enrollment ratio is an imperfect proxy for the stock of human capital. However, no data on the stock of human capital (or education of the work force) was available, and the construction of a stock variable would require information on the starting level, demographic trends, and the 'depreciation rate'.

²³ The parallel market premium is, over a long-enough time period, stationary. Although its inclusion does influence the estimated level for output capacity in specific periods, it does not alter the estimated long-run rate of technological progress.

expressed in logarithms. The imposition of constant returns to scale implies that the three factor shares (α , β , and γ) add to one.

C. Co-integration Analysis

Data and estimation period

40. The long-run relationships for the money-price block and the balance of payments block, as well as all dynamic equations, were estimated using quarterly data for the period 1983-96. For this period, the necessary data are available on a reasonably consistent basis. Most of the data were taken from *International Financial Statistics*. However, for many variables, data for recent periods were overwritten with data from the IMF Nigeria desk. Variables for which no quarterly data exist (non-oil GDP, the non-oil GDP deflator, private sector imports, and import tariffs) were interpolated. Data on production factors were available from the World Bank *World Development Indicators* database and the *Penn World Tables* only on an annual basis. Therefore, the production function for non-oil output was estimated using annual data. In order to obtain a sufficient number of observations, the estimation period for the production function was extended (as far back as possible) to 1976-97. Actual data on the capital stock, the labor force, and the secondary school enrollment rate were available through 1995 and estimates for 1996 and 1997 were made using data on investment and population growth. The annual time series for potential output resulting from the estimation of the production function was interpolated into a quarterly series for the estimation of the dynamic equations.

Unit root tests

41. Co-integration analysis was used to identify the long-run equilibrium relationships in the system of variables. A set of nonstationary variables is said to be co-integrated if there exists at least one linear combination (a co-integrating vector) of these variables that is stationary ($I(0)$). A necessary condition for the result to hold is that the maximum order of integration of the variables is one. The Johansen method can be used to determine the number of co-integrating vectors among a set of $I(1)$ variables. The order of integration of the individual variables was determined using the augmented Dickey-Fuller (ADF) test. Table 6 reports the test statistics for the original level variables (in log form for all variables except *INF*, *RDIFF* and *rho*) and first differences. The larger the test statistic, the less likely it is that the series is stationary. The test results for the level variables suggest that all variables are at least $I(1)$, that is, not stationary, at the 1 percent significance level, although fx^s and *INF* were found to be almost stationary²⁴. The first differences of all variables are $I(0)$, at the 5 percent significance level, implying that none of the variables is integrated of an order higher than

²⁴ fx^s is stationary at the 5% significance level, *INF* at the 8% level.

one²⁵. The fact that fx^r and INF are not unambiguously $I(1)$ (that is, they could be $I(0)$) had to be taken into account in the co-integration analysis²⁶.

Co-integration analysis of the money and price block

42. Table 7 reports the results of co-integration analysis for the set of variables $\{m, p, d, INF, RDIFF, pim\}$. The trace statistic indicates that there are, at most, two co-integrating vectors. Tests on the significance of individual variables indicated that pim is not significant in either of the two vectors. Hence, pim could be removed from the analysis. This results suggests that in Nigeria the price level is in the long run determined purely by money growth, while the contribution of import prices is insignificant. The restrictions used to reduce the remaining system to a set of two economically meaningful relationships were accepted statistically (see table 7). The first relationship is interpretable as an equation for money demand. The second one indicates that INF is stationary by itself, confirming the unit roots results. The commonly used restriction of homogeneity between money and prices was not accepted. The restriction of homogeneity between money and nominal activity was accepted²⁷. The derived demand for money function can be written as follows:

$$\text{Eq. 12} \quad m = 0.89 * p + 1.11 * d + 0.0136 * RDIFF$$

43. According to the augmented Dickey Fuller unit root test, the relationship is stationary at the 5 percent significance level. The non-standard result that the elasticity of money with respect to prices is significantly lower than one suggests that an increase in the price level results in a fall in the demand for real money balances. The elasticity of money demand with respect to non-oil domestic demand was estimated to be 1.1. The semi elasticity of money demand with respect to the interest differential is within the range found for other countries, implying that a permanent 1 percentage point rise in the interest differential would lead to an increase in real money demand of 1.4 percent. A dynamic equation for the price level is discussed below. However, having obtained the demand for money function, we can illustrate its relevance for the determination of prices. Figure 2 shows excess money supply, which can be defined as the actual money stock minus the demand for (nominal) money, and inflation for the period under investigation. Expansionary monetary policy clearly leads to inflationary pressure; however, the impact of the monetary stance is felt with a lag of several quarters.

²⁵ Although P is strictly speaking $I(2)$ rather than $I(1)$ at the 5 percent significance level, the test statistic (-2.5) is close to the critical value (of -2.9). Moreover, P was found to be $I(1)$ when the unit root test was repeated over a longer period.

²⁶ A stationary variable forms a co-integrating relationship on its own. Ignoring the stationarity of variables included in a co-integration analysis leads to an overestimation of the number of 'proper' co-integrating vectors, and could distort the identification process.

²⁷ The imposition of the sum of the coefficients of d and p being 2.

Co-integration analysis of the balance of payments block

44. Co-integration analysis was carried out for the set of variables $\{ rer , d , fx_s , rho \}$.²⁸ Table 8 presents the results. Rank testing suggested the presence of one co-integrating vector. Significance tests on the individual variables indicated that none of the variables could be removed from the co-integrating relationship²⁹. The relationship for equilibrium on the balance of payments can be written as follows:

$$\text{Eq. 13} \quad rer = 2.928 * d - 1.652 * fx_s - 0.33 * rho .$$

The resulting long-run relationship is stationary at the 5 percent significance level. The coefficients all have the expected sign. If the equation is seen as an import demand function, the elasticity of imports (fx_s) with respect to domestic demand is relatively high ($2.93/1.65 = 1.78$). However, the elasticity of imports with respect to the real exchange rate ($1/1.65 = 0.61$) is much in line with results for other countries. The equation suggests that a permanent 1 percent increase in domestic demand, with unchanged foreign exchange supply and a constant parallel market premium, would require a real exchange rate depreciation of 2.9 percent in order to dampen the demand for imports. A permanent 1 percent fall in the supply of foreign currency to the private sector would, with an unchanged parallel market premium, require a 1.65 percent depreciation of the real exchange rate, a ($1.65/2.9 =$) 0.6 percent drop in domestic demand, or a combination of the two. If neither the real exchange rate nor domestic demand is allowed to change, the ensuing shortage of foreign currency would, in the long run, result in a ($1.65/0.33 =$) 5 percent rise in the parallel market premium. Figure 3 shows the actual and equilibrium real exchange rates. Figure 4 (top half) shows the ratio of the supply of foreign exchange to non-oil GDP. The two figures combined illustrate how the sharp fall in supply of foreign exchange since the beginning of the 1980s has led to a depreciation of the real exchange rate.

45. The theoretical framework used in this paper facilitates the analysis of developments on the foreign exchange market during two turbulent periods: 1983-86 and 1992-94. In the period 1983-86, sharply falling oil revenues put pressure on the foreign exchange market. In a free market, this pressure would have required a sharp depreciation of the real exchange rate. Such action, however, was resisted during 1984-85; instead, the authorities put in place tight

²⁸ The analysis was initially carried out for the period 1983-1996. A repetition of the exercise for the period 1981-1996 rendered an almost identical relationship, which was, however, more robust to tests. Therefore, the results for 1981-1996 were used in the dynamic model.

²⁹ As discussed above, the unit root tests suggests that fx_s is not unambiguously $I(1)$; hence, fx_s could be the one stationary relationship suggested by the rank testing. However, because none of the other variables could be removed from the identified co-integrating vector and the vector was shown to be stationary, the identified relationship seems to be the one co-integrating vector suggested by the rank testing.

restrictions on access to foreign exchange which led to a rise in the parallel market premium to almost 150 percent. In 1986, the exchange rate was allowed to devalue strongly, which reduced the tension and led to a fall in the parallel market premium. In 1993-94, exchange market pressure was resisted in a similar manner, with the parallel market premium rising to over 100 percent. The 1995 devaluation was sufficiently large to remove the tension, and to allow the subsequent liberalization of the foreign exchange market.

Co-integration analysis of non-oil output

46. The production function was estimated in two steps. The first step consisted of an estimation of the total factor productivity (*TFP*) implied by a Cobb-Douglas production function. Subsequently, the implied *TFP* was regressed on potential explanatory variables. Table 9 summarizes the results. Co-integration analysis was used to test the imposition of a Cobb-Douglas production function with constant returns to scale. Rank testing on the set of variables { *y*, *ls*, *ss_4*, *k* } suggested the presence of one co-integrating relationship. Constant returns to scale were imposed (and accepted). The joint restriction of a coefficient of 0.6 for *ls* and a coefficient of 0.3 for *k* was accepted. The resulting vector ($y - 0.6 * ls - 0.3 * k - 0.1 * ss_4$) represents *TFP*. In a second step, *TFP* was regressed on a trend and *rho* to estimate the residual impact of these two variables. The resulting relationship for potential output can be written as

$$\text{Eq. 14a} \quad y^p = 0.6 * ls + 0.1 * ss_4 + 0.3 * k - 0.14 * rho + 0.007 * Trend .$$

47. This co-integrating vector is stationary at the 5 percent significance level. The estimated rate of technological progress, 0.7 percent per year, is in line with a priori assumptions. Note the estimated impact of the parallel market premium on potential output: the coefficient suggests that a 10 percent increase in the parallel market premium would lead to a 1.4 percent reduction in potential output. Figure 5 depicts actual non-oil GDP and potential non-oil GDP, as derived above. The difference between the two forms the implied output gap.

48. An alternative production function was estimated with imports as one of the determinants. In the first half of the 1980s, when oil revenues declined sharply, non-oil GDP also fell dramatically. Output reached bottom in 1984, and not until 1987 did non-oil GDP recover to its 1980 level. The problem with a production function including only factor shares and technological progress is that it implies that for several years in the first half of the 1980s, output was more than 10 percent lower than potential. In this period, however, as well as in subsequent episodes of foreign exchange shortages, it is known that companies had to reduce output because of the inability to import essential capital goods and/or spare parts. Public and private sector imports³⁰ were therefore included among the explanatory variables in the second stage (a regression of *TFP* on *rho*, a trend and the import variables). Private sector imports were estimated to have a strong effect on production; however, public sector imports are not significant as a determinant of production. Note that this is despite the fact that the share of

³⁰ In 1990 constant prices.

capital goods is higher in public imports than in private sector imports. The alternative production can be written as

$$\text{Eq 14b} \quad y^p = 0.6 * ls + 0.1 * ss_4 + 0.3 * k - 0.156 * rho + 0.185 * mgpr + 0.022 * Trend$$

where *mgpr* is (the logarithm of) private sector imports of goods. Its coefficient suggests that a permanent 1 percent increase in such imports tends to increase output by about 0.2 percent. Note that the estimated rate of technological progress is significantly higher than in equation (14a): this outcome is the corollary of the inclusion of a variable, *mgpr*, that has declined in value over the estimation period.

D. Dynamic Model

49. The two potential output series implied by the two production functions and the concurrent output gaps differ substantially (see Figure 5). However, the choice of production function turned out not to affect the results of the estimation of the dynamic equations. The equations reported below were estimated using the output gap implied by (14a), that is, the production function without imports as an explanatory variable. After the three relationships that characterize long run equilibrium in the model had been determined, dynamic equations were estimated for the price level, the real exchange rate and non-oil GDP. The dynamic equations were estimated using the single equation equilibrium correction mechanism technique (ECM), with the three co-integrating relationships included as ECM terms³¹.

Price level

50. The final equation, after removal of insignificant variables, is

$$\begin{aligned} \text{Eq 15} \quad dp = & 1.63 * dp(-1) - 1.54 * dp(-2) + 1.22 * dp(-3) - 0.51 * dp(-4) \\ & (15.7) \quad (-9.7) \quad (7.3) \quad (-4.8) \\ & + 0.12 * ECMmon(-1) + 0.37 * dy(-1) - 0.26 - 0.0094 * Q1, \\ & (5.3) \quad (2.3) \quad (-5.1) \quad (-1.9) \\ R^2 = 0.93 \quad \sigma = 0.013 \quad DW = 1.81 \end{aligned}$$

where *ECMmon* is excess money supply and *Q1* is a dummy for the first quarter. Although the output gap exerts no significant effect on prices, the dynamic term in output suggests that a rise in output is associated with a short-run increase in the rate of change of the price level. The extent of overvaluation or undervaluation of the exchange rate (the balance of payments ECM) is not significant. This outcome, which is robust, is remarkable in the light of strongly held views that inflation in Nigeria has often been triggered by devaluation of the naira. The

³¹ *INF*, which was found to be co-integrated by itself (stationary) in the co-integration analysis for the money-price block, was also included in (lagged) level form. However, it was not found to be significant in any of the dynamic equations.

purchasing power parity condition, when included as an additional ECM, is not significant. This result also holds when import prices are valued at the parallel market exchange rate, instead of the formal exchange rate. The result can be explained by the marked decline in the quantitative importance of import prices since the start of the 1980s. The ratio of imports to non-oil GDP has fallen steadily to less than 20 percent in recent years.

51. Excess money supply has a significant impact on the price level. However, the “speed of adjustment” coefficient indicates that it would take two years (eight quarters) before prices are fully adjusted to a shock in excess money supply. These estimation results confirm the tentative conclusions drawn from Figure 2: variations in price increases are well predicted by the stance of monetary policy, but the response of prices is subject to lags. The inclusion of several (four) lagged dependent variables was necessary to avoid serial correlation of the residuals. Note that, since the sum of the coefficients of the lags of the dependent variable is significantly less than one (0.8), no overshooting takes place. The standard deviation (0.013) indicates a fairly good fit, which is shown by the actual and fitted values shown in Figure 6. The dynamic equation passes all diagnostic tests (see attached table).

Real exchange rate

52. Neither excess money supply nor the output gap was estimated to have an impact on the real exchange rate. Moreover, neither the change in money supply, the level of inflation, nor the interest rate differential has a significant impact. The balance of payments ECM impacts strongly on the real exchange rate; the “speed of adjustment” coefficient (0.25) indicates that, after a shock on the balance of payments, the real exchange rate re-adjusts to equilibrium within one year (four quarters). In the final specification shown below, the change in the parallel market premium provides the only dynamic effect. An increase in the parallel market premium of 10 percent is estimated to be associated with a 6 percent appreciation of the real exchange rate:

$$\text{Eq. 16} \quad drer = -0.60 * drho - 0.25 * ECMbop(-1) - 1.34 .$$

(-5.8) (-2.5) (-2.5)

$$R^2 = 0.54 \quad \sigma = 0.146 \quad DW = 1.72$$

53. The equation poses no specification problems. Strictly speaking, the equation fails to pass the test for a normal distribution of the residuals (see attached table), but this outcome is due to one large outlier in the fourth quarter of 1986. Actual and fitted values are shown in Figure 7. The fit is much weaker than for the price equation, as is confirmed by the standard error of 0.146.

Non-oil GDP

54. The estimation of the dynamic equation for non-oil GDP generated some interesting results. Neither the monetary nor the balance of payment disequilibrium were estimated to

have an impact on short-run variations in output. However, an increase in money supply was estimated to increase output in the short run. Remarkably, neither changes in the real exchange rate nor changes in the supply of foreign exchange were found to have a significant effect on short-run output growth. The final dynamic equation for non-oil GDP is:

$$\text{Eq. 17} \quad dy = 1.61 * dy(-1) - 1.58 * dy(-2) + 0.88 * dy(-3) - 0.019 * OPGAP + 0.02 * dm$$

(14.5) (-7.7) (4.8) (-3.3) (2.7)

$$R^2 = 0.92^{32} \quad \sigma = 0.0036 \quad DW = 2.08$$

where *OPGAP*, the output gap, is the deviation of non-oil GDP from potential output. The correct sign of the coefficient and its t-value imply that output is “attracted” to potential output. But the low value of the coefficient of the output gap implies that deviations of output from potential output can be sustained for extended periods. The coefficient on the dynamic term in money supply suggests that a 10 percent rise in (broad) money supply is estimated to increase output by 0.2 percent in the short-run.³³ Figure 8 depicts actual and fitted values.

E. Conclusions

55. A simple model was estimated that determines the price level, the exchange rate, and non-oil GDP in Nigeria. After the long-run equilibrium conditions on the market for broad money (monetary ECM), the market for foreign exchange (balance of payments ECM) and the non-oil goods market (output gap) had been determined, a dynamic model was estimated in which the disequilibria in the three markets were allowed to influence the price level, the real exchange rate, and output. The results are in line with classical assertions. First, the nominal price level is, in the long run, determined by monetary policy, as an excess of money supply over money demand leads to a rise in the rate of inflation, while the long-run effect of import prices is insignificant. Moreover, in the dynamic model, prices do not respond to either the balance of payments disequilibrium or to deviations of output from potential. The price level does, in the short run, respond to variations in output. Second, the long-run equilibrium real exchange rate, the (only) relative price in the model, is determined by the real demand for, and supply of, foreign exchange. A reduced supply of foreign currency requires a real depreciation toward the new equilibrium real exchange rate so as to dampen the demand for foreign currency stemming from import demand. In the dynamic model, the real exchange rate responds rapidly to the balance of payment disequilibrium, but not to excess money supply or the output gap. Third, the dynamic model for output suggests that, although deviations from potential output can be sustained for prolonged periods, output is attracted to potential

³² R^2 does not allow for the mean since there is no constant in the equation.

³³ As is the case for the dynamic equation for the real exchange rate, the distribution of the residuals is, strictly speaking, not normal (see attached table). However, this problem disappeared when the equation was estimated over 1987-96.

output. Although neither monetary nor balance of payments disequilibrium was estimated to have an impact on the growth of output, an increase in the money supply does lead to a short-run increase in output.

56. The most remarkable feature of these results is that they are so straightforward. Although the dynamic model specifically allows for the possibility that the three endogenous variables (prices, the real exchange rate, and non-oil output) are affected by the three disequilibria relationships (ECMs), all three variables are attracted to the one long-run equilibrium that mainstream economic theory suggests.

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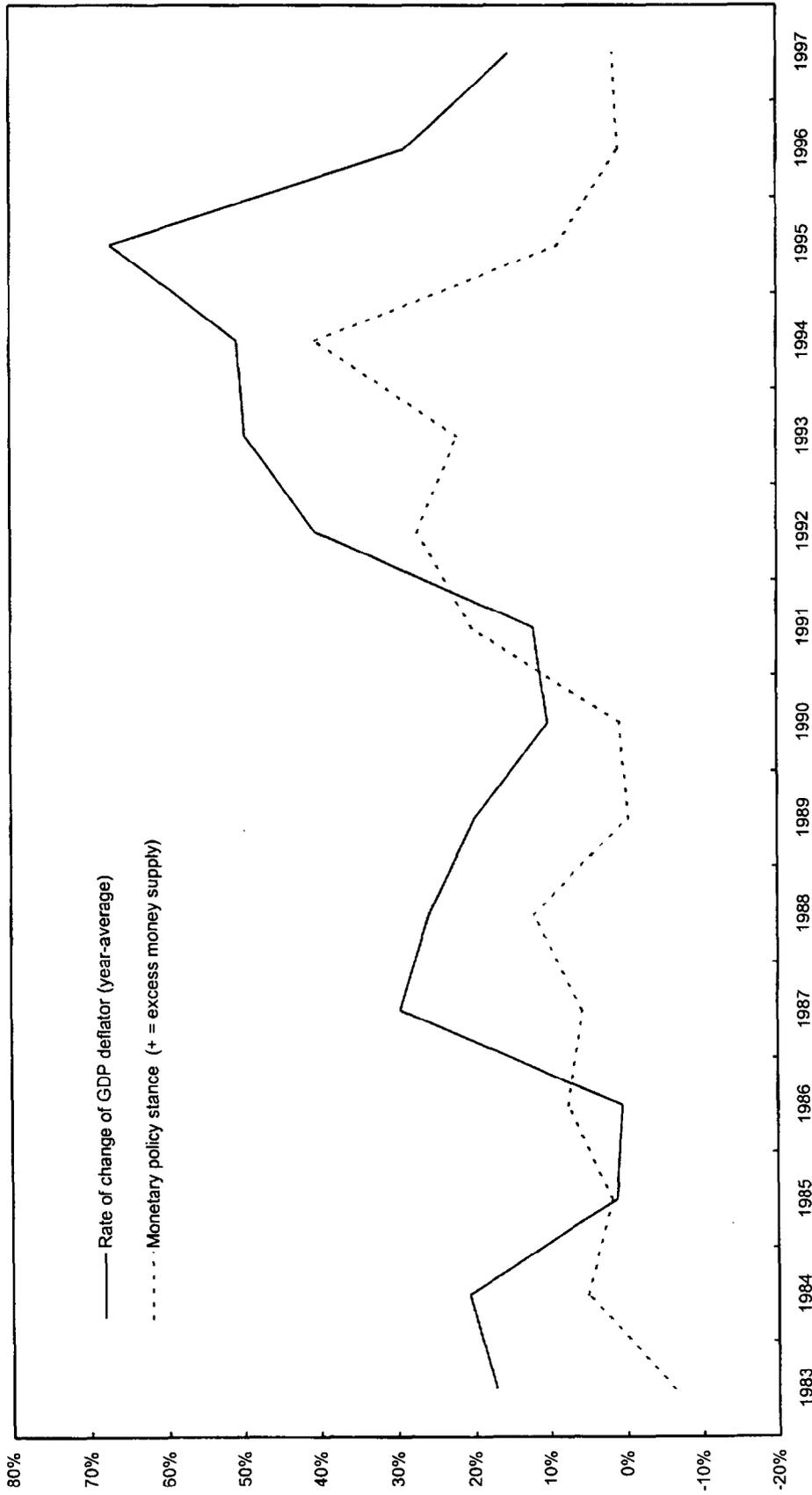
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Description and Sources Data

Mnemonic	Description	Source
<i>M</i>	M2	IFS, country desk
<i>Y¹</i>	Non-oil GDP, constant 1990 prices	IFS, country desk
<i>YN¹</i>	Non-oil GDP, current prices	IFS, country desk
<i>P¹</i>	Non-oil GDP deflator, 1990 = 100	100* <i>YN/Y</i>
<i>INF¹</i>	Inflation	100*(<i>P-P(-4)</i>)/ <i>P(-4)</i>
<i>R</i>	three-month deposit rate	IFS 69460L..ZF...
<i>R*</i>	U.S. Federal funds rate	IFS
<i>RDIFF</i>	Interest rate differential	<i>R-R*</i>
<i>E¹</i>	Formal exchange rate up to January 1995: official rate from February 1995 onward: AFEM rate	IFS, country desk
<i>PAR¹</i>	Parallel market exchange rate	World Currency Handbook/ Currency Alert
<i>RHO</i>	Parallel market premium	log(<i>PAR/E</i>)
<i>MGPR¹</i>	Private sector imports of goods, in U.S. dollars	IFS, country desk
<i>FX[§]</i>	Supply of foreign exchange to Private sector	<i>MGPR¹</i>
<i>Pcomm[§]</i>	Commodity price index, 1990 = 100	'Commodity prices database'
<i>PXGind[§]</i>	Price deflator of exports of goods of industrial countries, 1990 = 100	World Economic Outlook
<i>P[§]</i>	Price of imports (goods), in foreign currency	0.5*(<i>Pcomm[§]</i> + <i>PXGind[§]</i>)
<i>T</i>	Trade-weighted import tariff	Adenikinju, WTO
<i>Pim¹</i>	Price of imported goods, in domestic currency	<i>E*P[§]</i> *(1+ <i>T</i> /100)
<i>MGPR¹</i>	Imports private sector (goods), domestic currency	100*8.04* <i>MGPR¹</i> / <i>P[§]</i> (8.04=1990 exchange rate)
<i>FX[§]</i>	Supply of foreign exchange, 1990 domestic prices	<i>MGPR</i>
<i>D¹</i>	Domestic demand	<i>Y + Fxs</i>
<i>RER¹</i>	Real exchange rate	<i>E</i> *(1+ <i>T</i> /100)* <i>P[§]</i> / <i>P</i>
<i>LS</i>	Labor supply (thousand persons)	World Bank World Development Indicators: SL.TLF.TOTL.IN
<i>SS</i>	Secondary school enrollment rate	World Bank World Development Indicators: SE.SEC.ENRR
<i>Kaplab</i>	Capital labour ratio	Penn world tables
<i>K</i>	Capital stock	<i>Kaplab</i> * <i>LS</i>

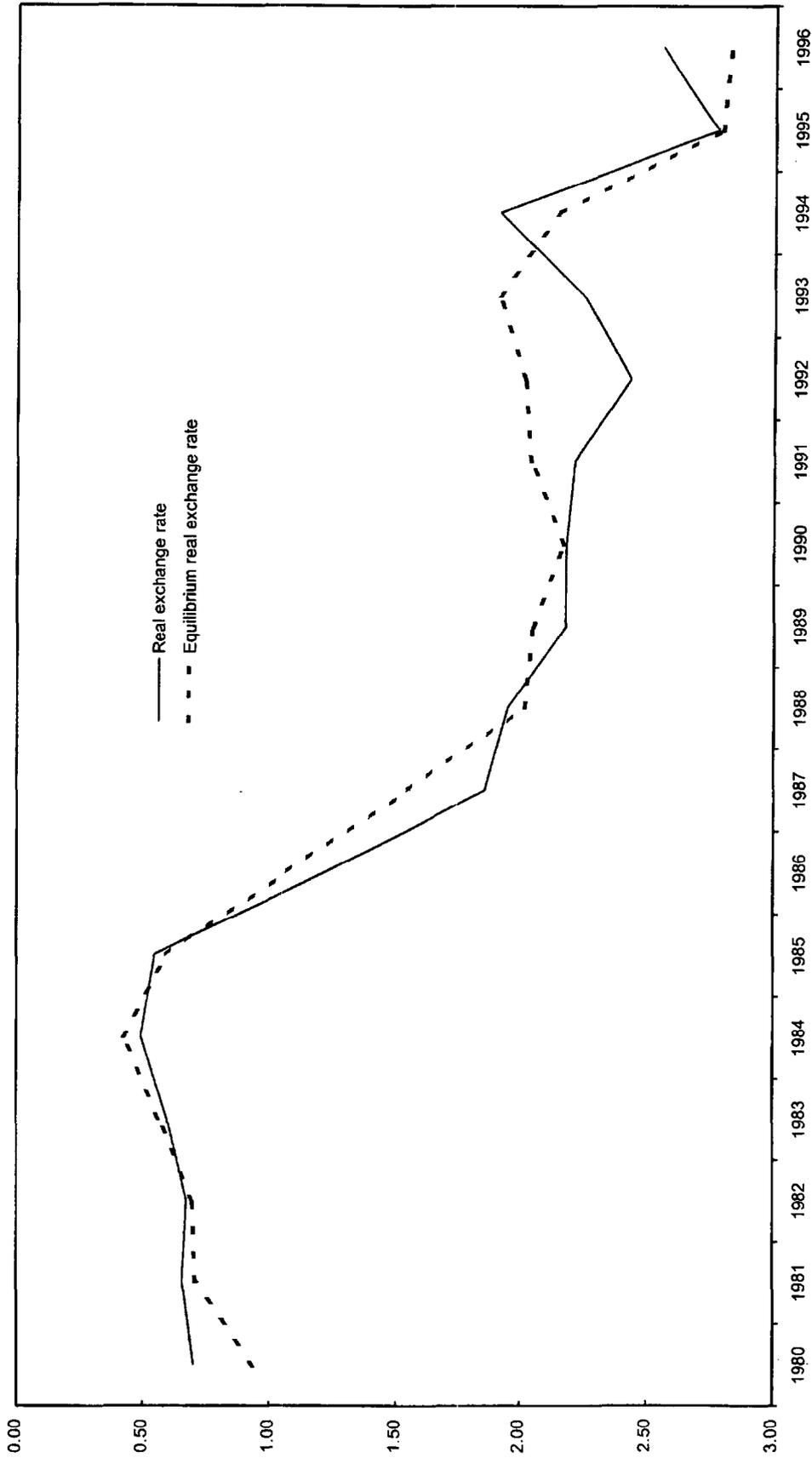
¹ Denotes an endogenous variable.

Figure 2. Nigeria: Monetary Policy Stance and Inflation, 1983-97 I/
(In percent)



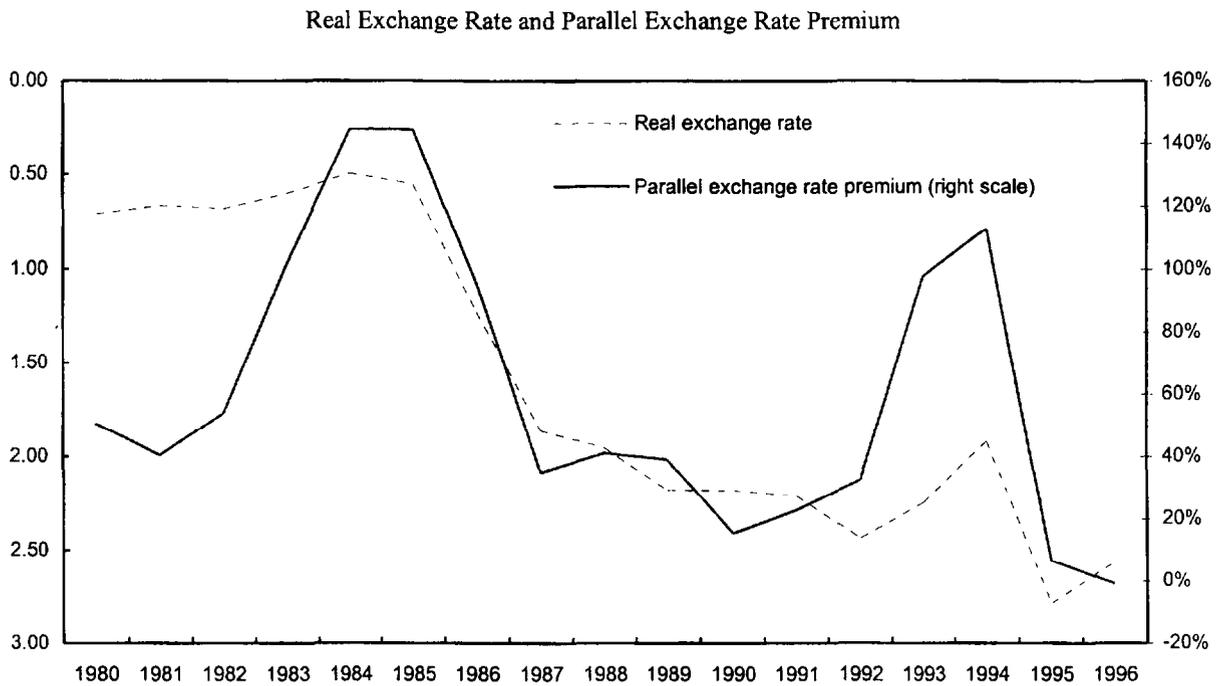
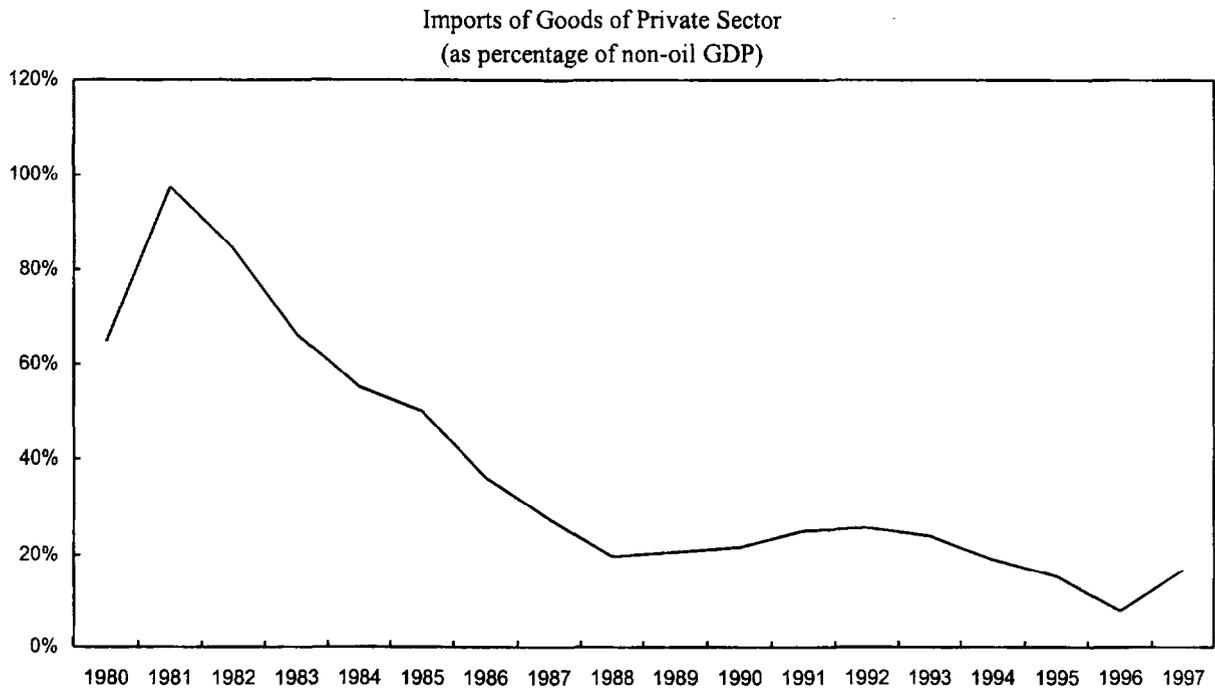
Sources: Nigerian authorities; and staff estimates.

Figure 3. Nigeria: Real Exchange Rate and Long-Run Equilibrium, 1981-96
(Expressed in logarithm)



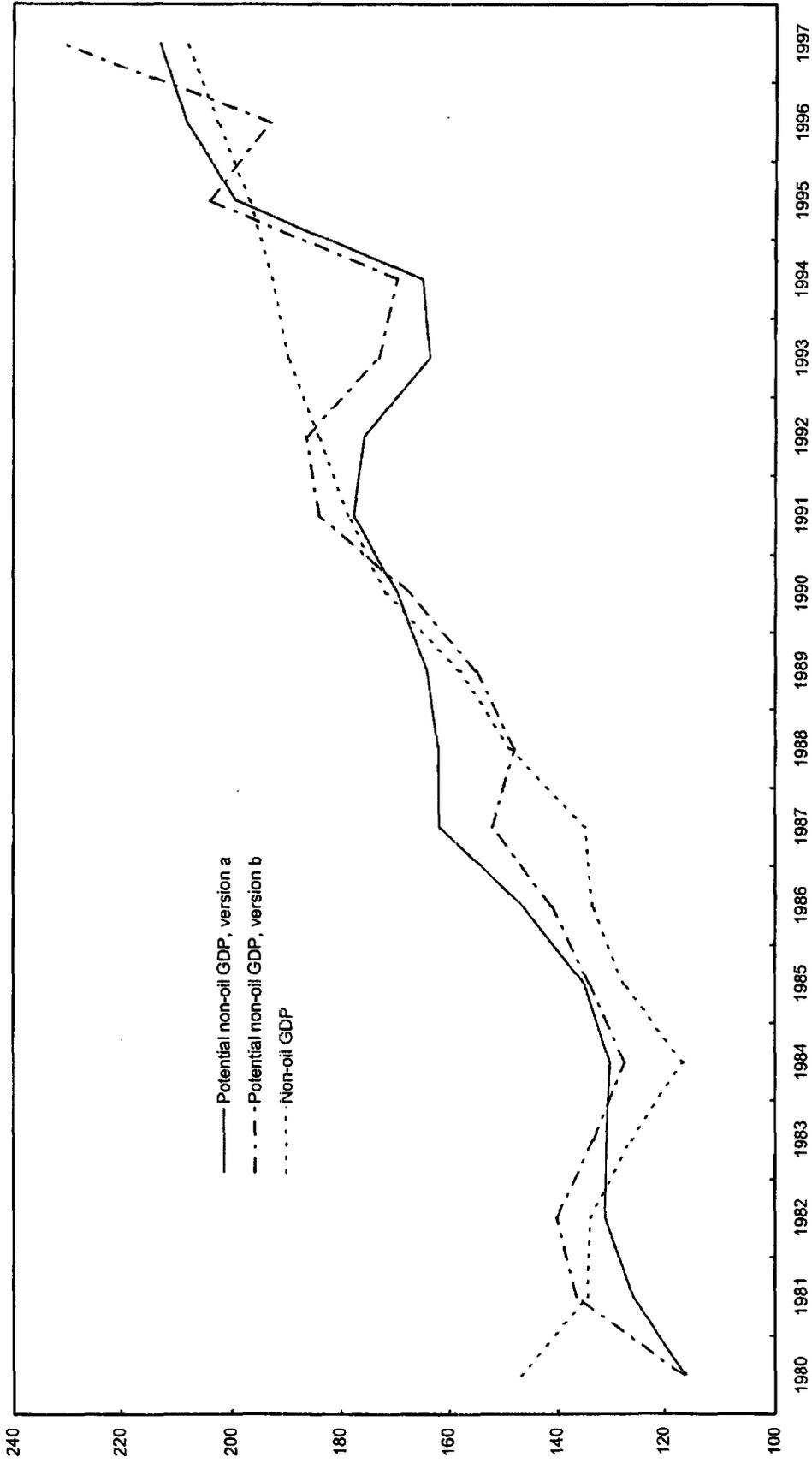
Sources: Nigerian authorities and staff estimates.

Figure 4. Nigeria - Supply of Foreign Exchange and the Exchange Rate, 1980-97



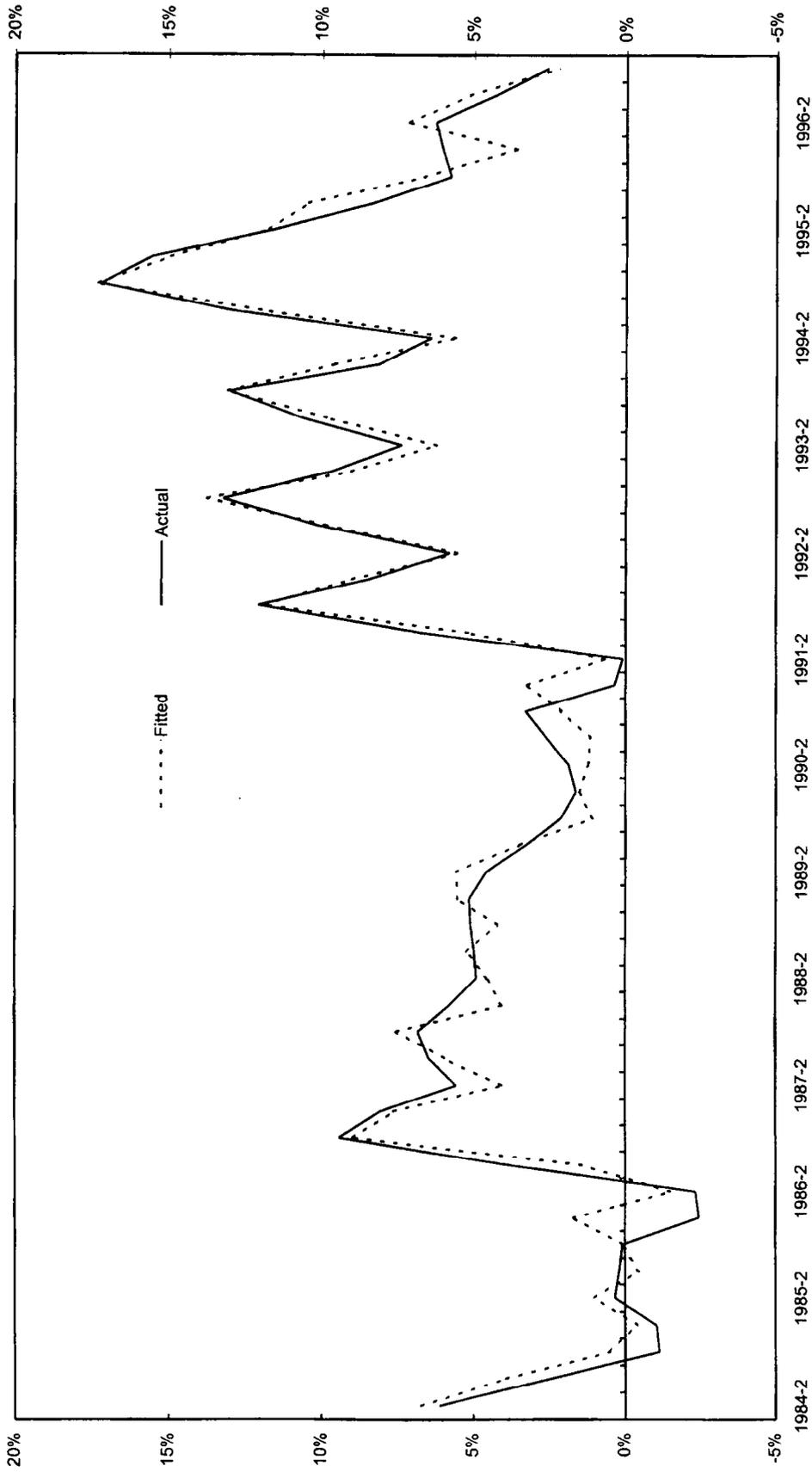
Sources: Nigerian authorities and IMF staff estimates.

Figure 5. Nigeria: Non-Oil GDP and Potential Output, 1980-97
(In constant prices of 1990)



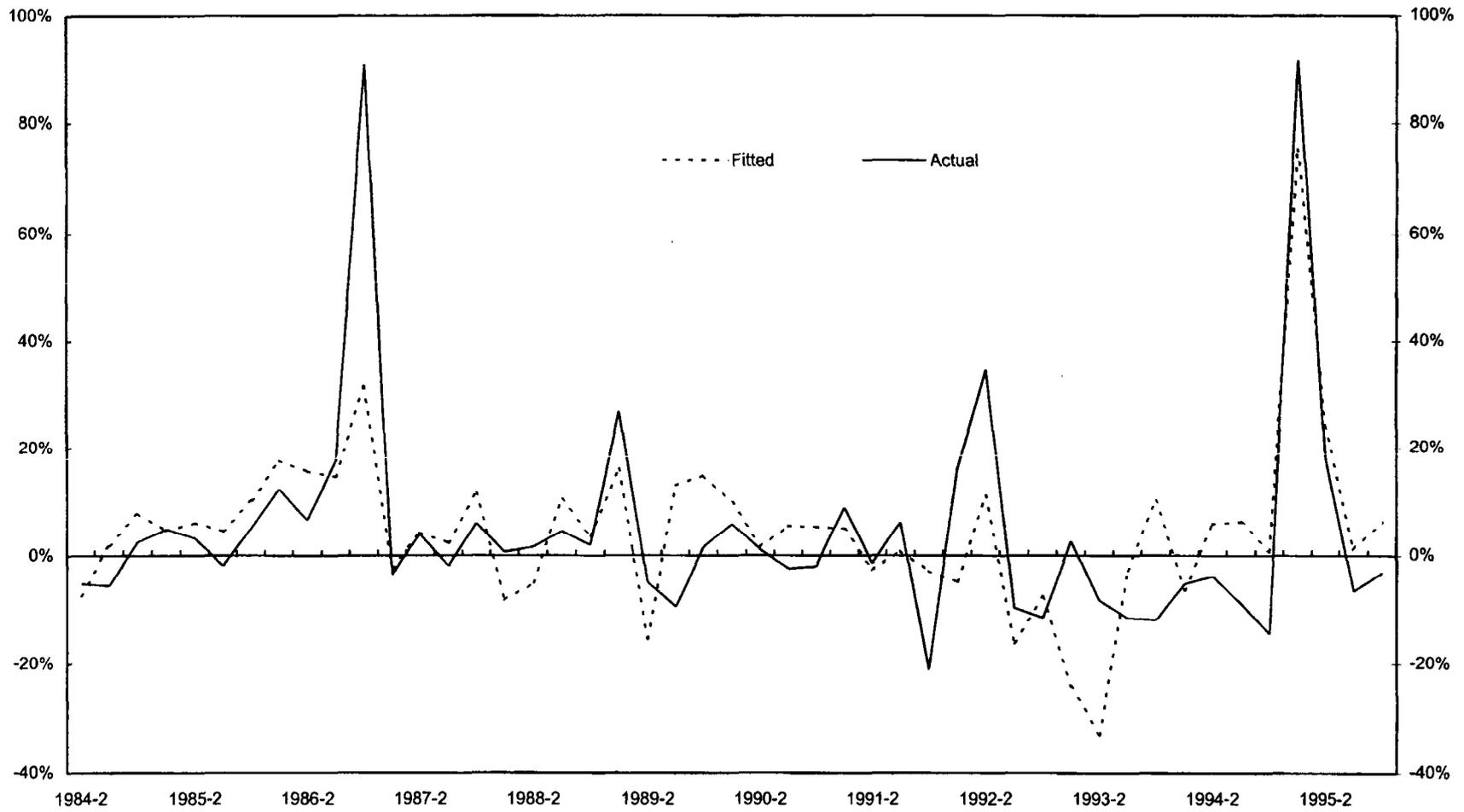
Sources: Nigerian authorities and staff estimates.

Figure 6. Nigeria: Actual and Fitted Values of Price Level, 1984:Q2-1996:Q4
(Quarter-on-quarter change)



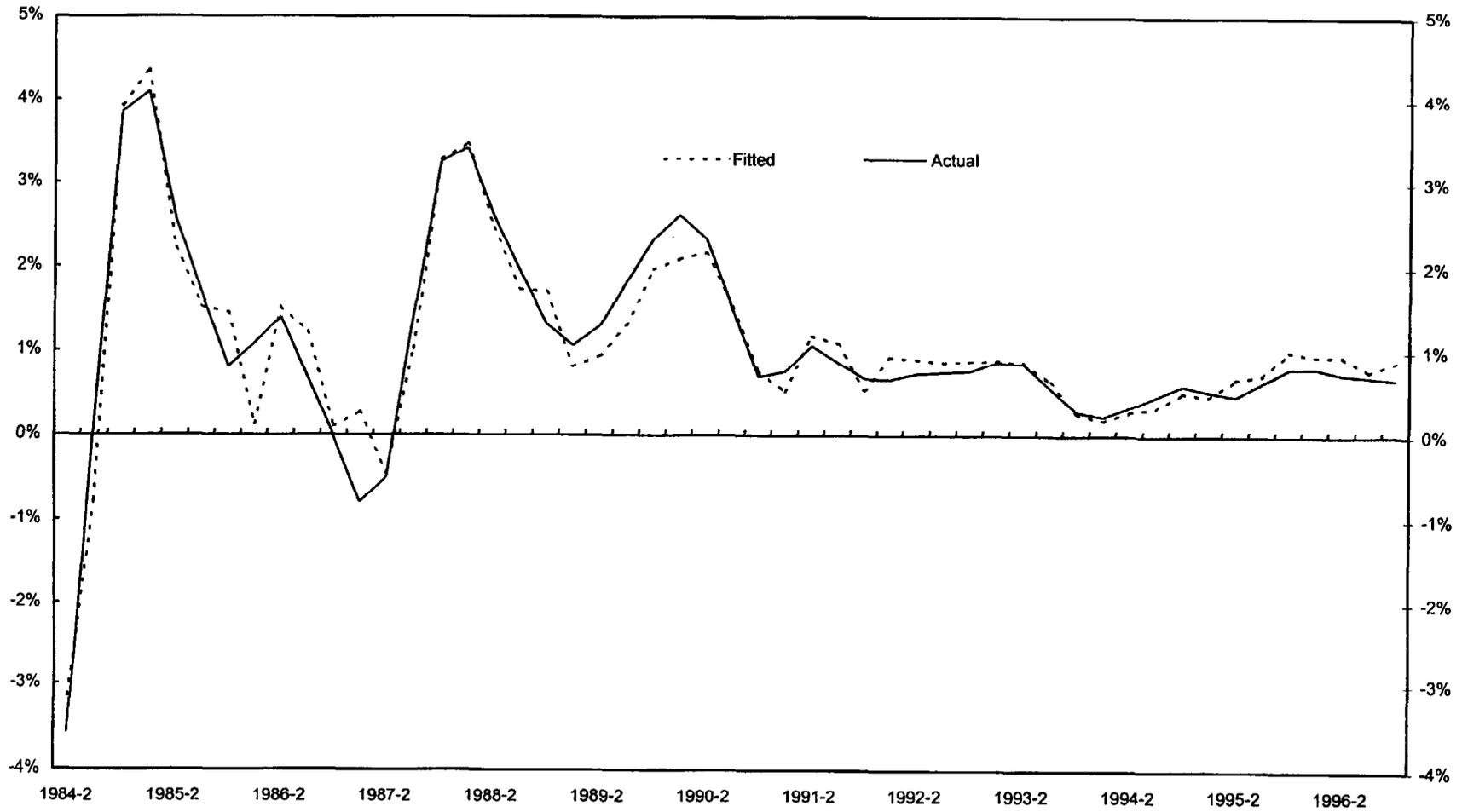
Sources: Nigerian authorities; and staff estimates.

Figure 7. Nigeria: Actual and Fitted Values of Real Exchange Rate, 1984:Q2-1995:Q4
(Quarter-on-quarter change)



Sources: Nigerian authorities; and staff estimates.

Figure 8. Nigeria: Actual and Fitted Values of Non-Oil GDP, 1984:Q2-1996:Q4
(Quarter-on-quarter change)



Sources: Nigerian authorities and staff estimates.

Table 6. Order of Integration: Unit Root ADF Test Statistics

	Level		First Difference	
	Lag	Test Statistic	Lag	Test Statistic
<i>RHO</i>	0	-1.10	0	-6.39 **
<i>M</i>	4	1.53	0	-5.51 **
<i>E</i>	0	2.19	0	-5.59 **
<i>RER</i>	0	0.60	0	-6.67 **
<i>D</i>	0	-0.34	2	-2.62 **
<i>Pim</i>	0	3.05	0	-5.55 **
<i>Y</i>	4	1.96	5	-2.39 *
<i>P</i>	4	2.37	3	-2.44 1/
<i>FXs</i>	2	-2.21 *	2	-2.73 **
<i>RDIFF</i>	1	-0.95	0	-5.22 **
<i>INF</i>	3	-2.62 1/	5	-4.24 **
<i>Y</i>	0	2.11	0	-4.46 **
<i>LS</i>	0	37.77	0	-3.84 ** 1/
<i>K</i>	1	0.64	0	-2.09 *
<i>SECSCH</i>	1	-0.12	1	-2.14 *
<i>RHO</i>	0	-1.27	0	-3.77 **

Notes: Variables are as defined in the text. The estimation period is 1983:Q1-1996:Q4 for the quarterly data (first group) and 1975-97 for the annual data (second group). Asterisks * and ** denote acceptance of the null hypothesis of a unit root at the 5 percent and 1 percent significance levels.
1/ Constant included.

Table 7. Co-integration Analysis of Money and Price levels, 1983:Q1-1996:Q4

<u>General system, including import price</u>						
Hypothesis	$r = 0$	$r \leq 1$	$r \leq 2$	$r \leq 3$	$r \leq 4$	$r \leq 5$
Trace statistic 1/	131.80 **	73.01 *	41.58	15.12	3.94	0.34
95 percent critical value	94.20	68.50	47.20	29.70	15.40	3.80
Standardized eigenvectors						
Normalize, weak exogeneity and coefficient pim in first vector = 0	m	p	d	INF	$RDIFF$	pim
	1.000	-0.836	-1.651	-2.280	-0.006	0.000
	-0.997	1.000	1.310	-0.261	0.016	-0.071
Restriction: coefficient pim in second vector = 0: Chi-square (1) = 2.5 [0.1138]						
<u>Reduced system (excluding import price)</u>						
Hypothesis	$r = 0$	$r \leq 1$	$r \leq 2$	$r \leq 3$	$r \leq 4$	
Trace statistic 1/	120.90 **	56.13 **	28.54	10.70	0.57	
95 percent critical value	68.50	47.20	29.70	15.40	3.80	
Standardized eigenvectors						
	m	p	d	INF	$RDIFF$	
	1.000	-0.757	-0.887	-11.490	0.001	
	-1.243	1.000	2.078	0.069	0.033	
Standardized impact coefficients						
	m	p	d	INF	$RDIFF$	
	-0.010	0.001	-0.003	0.025	-0.379	
	0.116	-0.046	-0.031	-0.027	-3.082	
Restrictions:						
d weakly exogenous for both vectors, $RDIFF$ weakly exogenous for first vector: Chi-square (2) = 6.5 [0.0386]*						
Coefficients of m and p in second vector are 0: Chi-square (2) = 1.31 [0.5194]						
Coefficients of d and $RDIFF$ in second vector are 0, coefficient of INF in first vector is 0: Chi-square (3) = 2.17 [0.5379]						
m homogenous in $(p+d)$: Chi-square (1) = 0.03 [0.8625]						
Standardized eigenvectors						
Chi-square (7) = 12.477 [0.0859]	m	p	d	INF	$RDIFF$	
	1.000	-0.886	-1.114	0.000	-0.014	
	0.000	0.000	0.000	1.000	0.000	
Standardized impact coefficients						
	m	p	d	INF	$RDIFF$	
	-0.081	0.164	0.000	0.133	0.000	
	0.119	0.027	0.000	-0.241	3.770	
Unit root testing vector $\{m - 0.886 * p - 1.114 * d - 0.0136 * RDIFF\}$: t-statistic = -3.4258 * (stationary at 5 percent)						

Notes: Variables are as defined in the text. Asterisks * and ** denote acceptance of the null hypothesis at the 5 percent and 1 percent significance levels.

1/ Adjusted for the number of degrees of freedom.

Table 8. Co-integration Analysis Real Exchange Rate 1981Q1-1996Q4

Hypothesis	$r = 0$	$r \leq 1$	$r \leq 2$	$r \leq 3$
Trace statistic 1/ 95 percent critical value	61.89 ** 47.20	25.39 29.70	7.06 15.40	2.21 3.80
	Standardized eigenvector			
	<i>rer</i>	<i>d</i>	<i>fxs</i>	<i>RHO</i>
	1.000	-2.642	1.845	0.272
Restrictions: <i>d</i> and <i>RHO</i> weakly exogenous				
	Standardized eigenvector			
Chi-square (2) = 4.837 [0.0891]	<i>rer</i>	<i>d</i>	<i>fxs</i>	<i>RHO</i>
	1.000	-2.928	1.652	0.333
	Standardized impact coefficients			
	<i>rer</i>	<i>d</i>	<i>fxs</i>	<i>RHO</i>
	-0.074	0.000	-0.145	0.000
Testing significance:				
<i>RHO</i>	Chi-square (1) = 6.4 [0.0114]*			
<i>d</i>	Chi-square (1) = 24.7 [0.000]**			
<i>rer</i>	Chi-square (1) = 37.1 [0.000]**			
Unit root testing vector ($rer - 2.928 * d + 1.652 * fxs + 0.333 * RHO$): t-statistic = -3.241 * (stationary at 5 percent)				

Notes: Variables are as defined in the text. Asterisks * and ** denote acceptance of the null hypothesis at the 5 percent and 1 percent significance levels.

1/ Adjusted for the number of degrees of freedom

Table 9. Estimation of Production Function, 1976-97

Estimation Cobb-Douglas production function

Hypothesis	$\tau = 0$	$\tau <= 1$	$\tau <= 2$	$\tau <= 3$
Trace statistic 1/ 95 percent critical value	48.82 * 47.20	28.57 29.70	13.73 15.40	0.96 3.80

Standardized eigenvector

γ	ls	ss_4	k
1.000	-1.186	0.096	0.319

Restrictions:

Weak exogeneity of ls and ss_4 : Chi-square (2) = 0.72 [0.698]

Constant returns to scale (coefficients of ls , ss_4 , and k add to -1): Chi-square (1) = 0.53 [0.466]

Coefficient of ls = -0.6, coefficient of k = -0.3: Chi-square (2) = 8.9 [0.0117]*

Standardized eigenvector

Chi-square (5) = 11.163 [0.0482]	γ	ls	ss_4	k
	1.000	-0.600	-0.100	-0.300

Define: $TFP = \gamma - 0.6 * ls - 0.1 * ss_4 - 0.3 * k$

Unit root testing vector TFP : t-statistic = -1.993 (not stationary at 5 percent; critical value = -3.01)

Estimation of total factor productivity (TFP)

A: Regress TFP on $Trend$ and RHO

$$TFP = 0.00706 * Trend - 0.1406 * RHO - 0.588$$

(1.3) (-2.276) (-4.607)

$R^2 = 0.43$ SE = 0.108 DW = 0.6061

B: Regress TFP on $Trend$, RHO , $mgpu$, $mgpr$

$$TFP = 0.022 * Trend - 0.156 * RHO + 0.183 * mgpr + 0.00278 * mgpu$$

(2.6) (-2.7) (2.0) (0.04)

$R^2 = 0.59$ SE = 0.099 DW = 1.23

Unit root testing vector $\{\gamma - 0.6 * ls - 0.1 * ss_4 - 0.3 * k - 0.022 * Trend + 0.156 * RHO - 0.183 * mgpr\}$:
t-statistic = -2.55* (stationary at 5 percent)

Notes: Variables are as defined in the text. Asterisks * and ** denote acceptance of the null hypothesis at the 5 percent and 1 percent significance levels.

1/ Adjusted for the number of degrees of freedom

Diagnostic Tests for Dynamic Equations

	Price Level	Real Exchange Rate	Non-oil Output
AR 1-4 ¹	F(4,39) = 2.275 [0.08]	F(4,40) = 1.203 [0.35]	F(4,28) = 1.689 [0.18]
ARCH 4 ²	F(4,35) = 0,639 [0.64]	F(4,36) = 0.151 [0.96]	F(4,24) = 0.100 [0.98]
Normality ³	$\chi^2(2) = 3.076 [0.22]$	$\chi^2(2) = 18.16 [0.00]**$	$\chi^2(2) = 0.532[0.77]$
$\chi_i^{2,4}$	F(13,29) = 2.136 [0.04]*	F(4,39) = 0.683 [0.06]	F(12,19) = 0.754 [0.69]
$\chi_i^* \chi_i^5$	F(34,8) = 1.706 [0.22]	F(5,38) = 0.538 [0.75]	F(27,4) = 1.609 [0.35]
Reset ⁶	F(1,42) = 0.716 [0.40]	F(1,43) = 10.265 [0.00]**	F(1,31) = 0.01 [0.92]

¹Test for serial correlation of residuals (H_0 : no autocorrelation).

²Test for autoregressive conditional heteroscedasticity (H_0 : no heteroscedasticity).

³Test for normality of distribution of residuals (H_0 : normality).

⁴Test for heteroscedasticity (H_0 : no heteroscedasticity).

⁵White's cross product test for heteroscedasticity (H_0 : no heteroscedasticity).

⁶Test for general misspecification of equation (H_0 : no misspecification).

Asterisks* and ** denote acceptance of the new hypothesis at the 5 percent and 1 percent significance levels.

IV. OVERVIEW OF THE FISCAL ACCOUNTS AND ASSESSMENT OF THE FISCAL STANCE IN NIGERIA³⁴

57. Public finance in Nigeria has historically been opaque and complicated by a multiplicity of off-budget funds and accounting practices that underestimate the actual size of public expenditure.³⁵ In recent years, the Nigerian authorities have undertaken important efforts to increase fiscal transparency and accountability. Notwithstanding these efforts, the structure and presentation of Nigeria's government finance accounts remain a challenge to all but a few who are closely involved in monitoring the day-to-day operations of the treasury. This chapter attempts to remedy this situation. It begins by providing a roadmap of the fiscal accounts in Nigeria. It then explains the difference between the Nigerian authorities' and the IMF staff's presentation of the federal government fiscal accounts, highlights the main problems and constraints in the compilation of these accounts, and derives a consolidated presentation of the fiscal amounts of the three tiers of government. The chapter concludes by providing a conceptual framework for the economic analysis of the impact of the fiscal stance of the consolidated government that takes into consideration the unique characteristics of the Nigerian economy.

A. Overview of the Main Fiscal Accounts in Nigeria

58. Nigeria is a federation consisting of the federal government, thirty-six state governments, a federal capital territory, and some 589 local government councils. In addition, there are a series of off-budget entities and/or accounts that are used to carry out the national agenda. This subsection briefly summarizes the main intergovernmental revenue accounts, notably the federation account, the autonomous foreign exchange market (AFEM) profits account, and the value-added tax (VAT). It then discusses the structure of the fiscal accounts for each of the main tiers of government, including the so-called first charges, the special funds, the Petroleum Special Trust Fund (PSTF), and the Education Trust Fund.

Federation account revenues, AFEM profits, and VAT

59. The federation account serves as a depository for certain nationally generated revenue, with the Federal Ministry of Finance (FMOF) acting as the custodian of the account.

³⁴Prepared by Brian W. Ames.

³⁵For example, prior to 1995 a specified number of barrels of crude oil were set aside to cover the government's oil investment obligations and to help finance its capital budget. This system of off-budget "dedicated accounts" was discontinued in 1995, and all oil-related proceeds are now directly deposited into the treasury. However, the distortion created by the authorities' valuation of oil-related revenue and certain public sector transactions at the official exchange rate (₦22 per US\$) continues up to the present, as does the existence of a plethora of other off-budget funds.

Federation revenue consists of the country's crude oil revenue,³⁶ domestic petroleum product revenue,³⁷ and revenues generated from the company income tax and from customs, excises, and fees (Appendix Table 30). Prior to distribution, however, certain so-called first charges are deducted from federation revenue for expenditures that are considered to be national in scope, such as external debt service payments,³⁸ the national priority projects,³⁹ the oil-related "cash calls,"⁴⁰ the Nigerian National Petroleum Corporation (NNPC) priority projects,⁴¹ the special reserve,⁴² and the excess proceeds reserves.⁴³ Deductions were also made in the past

³⁶Federation oil revenues consist of **export proceeds** from the sale of the government's share of crude oil produced under a series of joint-venture agreements with foreign partners, a **petroleum profit tax** on the earnings of the joint-venture partners, and a **royalty** generated from the export of the country's oil resources. These oil revenues are valued in domestic currency terms at the official exchange rate of ₦22 per US\$1.

³⁷Roughly 250,000 barrels per day of the country's share of crude oil produced under the joint-venture arrangements are transferred to the Nigerian National Petroleum Corporation (NNPC) for use in producing domestic petroleum products. Revenue from the sale of domestic petroleum products is deposited into the Petroleum Trust Fund (PTF), which subsequently disburses these funds to the federation account, the PSTF, and the NNPC. The federation receives ₦2.40 of the ₦11 per liter average petroleum product retail price as compensation for the cost of the crude, while the NNPC receives ₦2.00 per liter for refining, storing and distributing the petroleum products. The PSTF receives a transfer of ₦5.30 per liter for the implementation of various extrabudgetary capital projects in health, education, and infrastructure. The marketers deduct their margin of ₦1.30 per liter directly from the pump price prior to transferring the balance to the PTF.

³⁸Consists of both federal government external debt obligations and state government external debt obligations assumed by the federal government.

³⁹Consists of supplementary or extrabudgetary payments made to certain investment projects, such as the Ajaokuta Steel Works and the Aluminum Smelting Company of Nigeria (ALSCON).

⁴⁰Consists of the government's contribution to the operating and capital costs of the oil industry under the various joint-venture arrangements.

⁴¹Consists of various oil infrastructure projects carried out on behalf of the country by the NNPC, such as the construction of oil pipelines, the rehabilitation of the oil refineries, and the construction of a butinization plant.

⁴²This is a "rainy-day" set-aside reserve account held by the Federal Ministry of Finance.

⁴³There are two excess proceeds reserve accounts, one regarding the petroleum profit tax and the other regarding export receipts. Excess proceeds results from the difference between

(continued...)

regarding the payment of the now-defunct fertilizer subsidy, as well as contributions to the federation stabilization account. In recent years, first-charge deductions have averaged some 70 percent of total federation revenue. Net federation proceeds remaining are then distributed to each of the three tiers of government and to the so-called special funds⁴⁴ according to a statutory revenue-sharing formula.⁴⁵

60. Revenues are also generated from the profits earned on the sale of government oil foreign exchange receipts in the AFEM. These profits arise because the authorities, for accounting purposes, record oil receipts at the official exchange rate of ₦22 per US\$1. When the central bank intervenes in the AFEM and sells foreign exchange sourced from federal government oil revenues at the autonomous rate (presently ₦84 per US\$1), a profit is generated representing the difference between the official rate and the autonomous rate.⁴⁶ Technically speaking, these profits are considered to be federation revenue. In practice, however, the federal government receives its pro rata share of the profits and has held the remaining balances in trust on behalf of the states, the local government councils, and the special funds.⁴⁷

61. In addition to the federation account and AFEM profit revenue, there is also a 5 percent national VAT, whose revenue-sharing formula is determined each year in the context of the national budget. At present, VAT revenues are distributed to the federal government (30 percent), the state governments (50 percent), and the local government councils (20 percent). The special funds do not receive any revenue from the VAT.

⁴³(...continued)

revenue generated at the actual world market oil price and that generated at the notional oil price assumed in the budget (i.e., \$17 per barrel in the 1997 and 1998 budget).

⁴⁴The special funds consist of the Federal Capital Territory Fund, the Ecology Fund, the Statutory Stabilization Fund, the Mineral Derivation Fund, and the Mineral-Producing Areas Fund.

⁴⁵The federation proceeds are to be distributed to the federal government (48.5 percent), the state governments (24 percent), the local government councils (20 percent), and to the special funds (7.5 percent).

⁴⁶AFEM interventions sourced from government oil revenues in 1997 were \$1.7 billion, resulting in AFEM profits of ₦107 billion, of which ₦63 billion was transferred to the federal government and the remaining ₦44 billion was added to reserves held in trust for the other tiers of government.

⁴⁷For the first time, in 1998 the federal government intends to draw down ₦80 billion of these balances to finance ₦18.5 billion in transfers to the state governments, as well as ₦61.5 billion in federal government expenditure.

Federal government

62. In the Federal Ministry of Finance's (FMOF) presentation of the federal government budget (Appendix Table 31), revenue includes the pro rata shares of distributions from the federation account, the national VAT, and the AFEM profits. Federal government revenue also includes certain independent revenues⁴⁸ and customs levies.⁴⁹ In addition, the federal government budget captures the first-charge deduction for external debt service and the PTF transfers to the PSTF as both revenue and expenditure. The FMOF also considers certain financing items from various below-the-line reserve accounts as revenue (see below). Federal government expenditure consists of recurrent expenditure (personnel costs, overhead, and domestic and external interest payments), transfers to the state governments and to the PSTF, and capital expenditure. The FMOF does not include financing in its presentation of the federal government accounts, even though data are available from the external and monetary accounts to do so.

State governments, local government councils, and the special funds

63. The state governments receive their pro rata share of the federation account and of the national VAT. In addition, states collect and receive the national personal income tax, are the recipient of certain grants and transfers, and receive proceeds from the Statutory Stabilization Fund. Local governments also receive their share of the federation account and the national VAT, as well as some miscellaneous internal revenues and grants. The special funds receive only revenues in the form of distributions from the federation account. There is little readily available information on the expenditures of the special funds. A consolidated presentation of the state government, local government councils, and the special funds is found in Appendix Table 38.

The Petroleum Special Trust Fund

64. The PSTF was inaugurated on March 21, 1995 to utilize the gains from the 1994 petroleum product price increase⁵⁰ to complete certain abandoned national projects and to rehabilitate decaying social infrastructure and services nationwide. As such, it serves as an extension of the capital budget of the federal government. The PSTF's primary source of revenue is the ₦5.30 per liter transfer from the PTF regarding the sale of domestic petroleum products. The PSTF received ₦25 billion, ₦46 billion, and ₦39 billion in petroleum product revenue in 1995, 1996, and 1997, respectively. In addition, it earned some marginal income on

⁴⁸These consist of dividends from public enterprises, directors' fees, loan recoveries from public enterprises, and proceeds from privatizations and commercializations.

⁴⁹Customs levies, which are earmarked for the federal government, are above and beyond the import duties and excise taxes received by the federation.

⁵⁰In October 1994, the retail price of gasoline was raised from ₦3.25 per liter to ₦11 per liter.

its balances held in the form of treasury bills and deposits in the commercial banking system, as well as from insurance proceeds. While a small portion of total PSTF expenditure is in the form of recurrent expenditure, such as wages, overhead, and other operating costs, the bulk of its expenditure consists of capital investment in the statutorily mandated areas of infrastructure, health, education, water, food storage and security (Appendix Table 37).

The Education Trust Fund

65. Beginning in 1994, the Federal Inland Revenue Service has assessed an "education tax" equivalent to 2 percent of the taxable income earned by companies operating in Nigeria that are subject to the company income tax. Revenues collected amounted to ₦2.1 billion, ₦1.9 billion, and ₦1.0 billion, and ₦1.7 billion in 1994, 1995, 1996, and 1997, respectively, and are held in the Education Trust Fund account at the Central Bank of Nigeria. No funds have been disbursed from the Education Trust Fund to date, pending the appointment of its trustees, whose mandate is to direct these funds into the primary and secondary education sector. The federal government does not include the education tax as part of budgetary revenue.

B. Reconciliation of the Nigerian and IMF Presentations of the Federal Government Fiscal Accounts

66. Because the FMOF's presentation of the federal government fiscal accounts differs from international practices and excludes a variety of off-budget activities, such as the first charges, the PSTF, and the Education Trust Fund, it clouds the true fiscal stance of federal government operations. The Fund staff therefore adjusts the authorities' federal government accounts, with a view to presenting them in line with conventional standards for the purposes of clearer analysis and international comparability. Adjustments are made to treat as financing certain items that the authorities consider as revenue, and external debt service is presented on an accrual rather than a cash basis. Moreover, the Fund staff incorporates all the first charges, the PSTF, and the Education Trust Fund accounts into their presentation of federal government operations, thereby substantially increasing coverage. As noted above, the Nigerian authorities consider these activities to be "national" in character and therefore outside the definition of the federal government proper. However, since these activities are directly or indirectly under the control of the federal authorities, the Fund staff believes their inclusion in a more broadly defined federal government is warranted.⁵¹ Table 10 highlights the differences between the two presentations, whose main elements can be summarized as follows:

- The FMOF considers fiscal surpluses and reserves generated in previous years to be part of "revenue" in the current year. For example, in 1997 the item "retained unutilized

⁵¹This expanded definition of the federal government is broadly consistent with that in the monetary accounts regarding net credit to government.

accretion to reserves”⁵² was recorded as government revenue. The Fund staff, however, recorded this item below the line as “bank financing.”⁵³

- The FMOF presents the first-charge deduction for external debt service payments on a “cash” basis as both revenue and as recurrent expenditure. In contrast, the Fund staff records interest payments on external debt “due” above the line as recurrent expenditure and external debt amortization payments below the line as negative external financing. In turn, the difference between actual debt-service payments and debt service due (both principal and interest) is recorded below the line as external financing (e.g., change in external arrears).
- Although the FMOF adds the first-charge deduction for external debt service to the federal government fiscal accounts, it does not make similar adjustments for the other first charges. As previously indicated, in order to provide a more comprehensive picture of the federal government’s fiscal stance, the Fund staff adds the national priority projects, the NNPC cash calls, and the NNPC priority projects as both revenue and expenditure items. Similarly, the Fund staff includes the education tax as a revenue item, with the balances reflected as negative bank financing in the form of increases in federal government deposits recorded in the monetary accounts. The FMOF considers the education tax and its net balances to be outside the purview of the federal government.
- The FMOF records transfers to the PSTF in their entirety as both revenue and expenditure. The Fund staff, however, captures the transfers to the PSTF (as well as PSTF independent income) as revenue, but it records only actual PSTF recurrent and capital expenditure, with the net differences reflected below the line as bank financing in the form of federal government deposits.
- The FMOF records only its pro rata share of the AFEM profits as revenue, while the Fund staff records the entire AFEM profit (including that held in trust on behalf of the state governments, local government councils, and special funds) as revenue, with changes in the net balance shown below the line as bank financing in the form of federal government deposits recorded in the monetary accounts.⁵⁴

⁵²This item refers to use of previous years’ overall surplus balances (i.e., increases in government deposits) to finance federal government budgetary expenditure.

⁵³ In the 1998 budget, the authorities also included the items “special allocation” in addition to retained unutilized accretion to reserves. “Special allocation” refers to the federal government’s intended drawdown of the AFEM profit balances held in trust on behalf of the state governments, local government councils, and special funds in order to finance federal government budgetary expenditure, including the ₦18.5 billion in subventions to the states.

⁵⁴The fact that (a) up to 1998 these balances were never distributed to the other tiers of

(continued...)

- The FMOF consistently understates its budget estimate for domestic debt service payments.⁵⁵ The Fund staff presents domestic debt service on the basis of debt-service due.
- The FMOF does not compile data regarding financing. Hence, no systematic exercise is routinely carried out to reconcile the overall fiscal balance with available data on financing.⁵⁶ The Fund staff, however, derives financing from the balance of payments, external debt, and monetary accounts.⁵⁷

C. Problems and Constraints with the Sources of Nigerian Fiscal Data

67. The principal source of fiscal data in Nigeria is the Office of the Accountant General of the Federation (OAGF). According to Nigerian law, the OAGF is statutorily obligated to present financial accounts of the federation and of the federal government within one month of the end of each fiscal month and within two months of the end of each fiscal year.⁵⁸ These data would then be forwarded to the Federal Office of Statistics (FOS) and the Central Bank

⁵⁴(...continued)

government and (b) beginning in 1998 these funds are being tapped to finance federal government expenditure (with only a marginal amount transferred to state governments) serves to further justify the treatment of these profits as federal government revenue and deposits until specifically transferred to the other tiers.

⁵⁵For example, budget estimates for this item were ₦12 billion in both 1996 and 1997, while actual outcomes were ₦20 billion and ₦32 billion, respectively.

⁵⁶A reconciliation effort is, however, carried out on a monthly basis, with a view to identifying any differences between the values of items in individual government accounts and the corresponding balances recorded in the government accounts held at the central bank.

⁵⁷Bank financing is derived as the difference between the stock of net credit to the federal government from one period to another, as presented in the monetary accounts. Since PSTF deposits held in the commercial banking system are classified as private sector deposits in the monetary accounts, while those held in the central bank are considered as federal government deposits, an adjustment is made to net credit to the government in order to make bank financing in the fiscal accounts consistent with the overall balance. Nonbank financing is derived from changes in the government's issuance of domestic debt. External financing is derived as the sum of external borrowing (from the balance of payments and external debt accounts), amortization due (from the balance of payments), and changes in arrears (derived as the difference between the debt service due and the government cash payments actually made).

⁵⁸The fiscal year in Nigeria is the same as the calendar year.

of Nigeria (CBN) for statistical and analytical purposes. In practice, however, significant human and physical capital constraints that impede data processing, as well as logistical constraints in receiving data,⁵⁹ have resulted in long lags in the OAGF's reporting and presentation of the government's accounts. Lags of up to one year regarding the monthly accounts and even longer lags regarding the annual accounts are common.

“Cash-based” versus “commitment-based” fiscal data

68. Because of these limitations, the Department of the Treasury (TRE) has taken the lead in compiling and reporting budgetary revenue and expenditure data on a monthly basis for use by the Minister of Finance and by Fund staff. The TRE fiscal data, however, also suffer from serious limitations. Ideally, fiscal data should be compiled on both a “cash” and a “commitment” basis. By doing so, a set of fiscal accounts could be derived that reflect both the country's commitments and its implicit buildup of domestic and external arrears. In addition, data on below-the-line transactions (i.e., financing) should be compiled in order to ensure that the fiscal accounts are consistent with the external and monetary accounts. In practice, however, the TRE fiscal data fall short of this ideal. Revenue is compiled on a cash basis, while recurrent and capital expenditure are recorded on the basis of warrants. These warrants are issued by the FMOF to the spending ministries on a quarterly basis and systematically reflect one-fourth of the annual budgetary allocation. Recurrent expenditure warrants must be spent during the fiscal year or returned to the TRE, while capital warrants may be carried over to a subsequent fiscal year. There is no assurance, therefore, that actual expenditure in a given period is in line with recorded (i.e., warranted) expenditure.⁶⁰

Unspecified financing

69. The gravity of the mismatch between cash-based and commitment-based fiscal data becomes apparent when attempts are made to reconcile the fiscal and the monetary data. Despite the need for consistency between the overall balance and the available financing recorded in a given year, a significant residual value emerges, representing the difference between the above-the-line transactions recorded in the fiscal accounts and the below-the-line transactions recorded in the monetary and external accounts.⁶¹ The residual varies both in

⁵⁹Each spending ministry has a liaison office in each of the 36 states. Similarly, the FMOF has a pay office in each of these states. The physical distances and the lack of appropriate telecommunications and computer equipment impede the speedy reporting of expenditure data from the field to headquarters.

⁶⁰In fact, capital funds issued last year could be combined with funds issued this year and spent.

⁶¹The CBN *Annual Report* also presents a sizable residual financing item in its presentation of the fiscal accounts entitled “other funds.” See Table 4.1, “Summary of Federal Government

(continued...)

magnitude and in sign from year to year (see Appendix Table 31). Since there is a higher degree of confidence in the monetary and external data, negative “unspecified net financing” implies that the overall surplus (deficit) in a given year may be actually larger (smaller) than reported on an account of higher revenues and/or lower expenditure than reported.⁶² Similarly, positive “unspecified net financing” implies that the overall surplus (deficit) may be actually smaller (larger) than reported on account of lower revenues and/or higher expenditure than reported.

70. Because of this sizable discrepancy, the accuracy of the authorities’ fiscal data falls into question. The most likely causes of the “unspecified financing” problem is the deviation between actual expenditure and that estimated on the basis of warrants.⁶³ There is, however, the possibility that differences in the coverage of federal government transactions between the fiscal and monetary accounts may contribute to the problem.⁶⁴ In order to rectify this situation, the OAGF needs to be provided with appropriately skilled staff and equipment so that it can report actual (versus warrant-based) fiscal data on a timely basis. The FMOF and the CBN should also ensure that the classification of the federal government in the fiscal and monetary accounts is fully consistent.

Distortions related to the dual exchange rate

71. The fiscal data are also clouded by the existence of a dual exchange rate system, whereby certain public sector transactions occur at the highly subsidized official rate (₦22 per US\$), while others occur at the AFEM rate (presently ₦84 per US\$). As previously noted, the authorities record all foreign exchange revenues (the bulk of which are derived from oil-related receipts) at the official rate of exchange. Of the total \$13.1 billion in official foreign exchange receipts earned in 1997, \$8.1 billion was earmarked for the first charges,

⁶¹(...continued)

Finances,” in the 1996 CBN *Annual Report*.

⁶²The Nigerian authorities have benefited from a series of IMF (STA) technical assistance missions aimed at developing a reliable system for compiling and reporting money and banking statistics. As a result of this assistance, the CBN has put in place the foundation for the timely and accurate reporting of monetary statistics.

⁶³Since revenue data are recorded on a cash basis, it is less likely that the unspecified financing problem evolves from here. However, there could be lags between the time that revenues are recorded on the books of the FMOF and those of the CBN.

⁶⁴Although a good-faith effort was undertaken by Fund staff and the authorities to ensure that the coverage of government entities in the budget presentation was consistent with that of the monetary accounts, it is possible that differences remain.

\$1.7 billion was reserved for funding the foreign exchange requirements of the government, and \$3.0 billion was set aside as the government's contribution to AFEM intervention.⁶⁵ Distortions in the budget result from the valuation in local currency of each of these dollar-denominated transactions.

72. From the Nigerian authorities' viewpoint, the use of the official exchange rate in the valuation of the first charges is strictly notional and has no real effect on the fiscal accounts. In their view, if the AFEM rate were used in place of the official rate to value both the first charges and the official foreign exchange receipts financing these expenditures, it would have no net effect on the overall fiscal balance. While it is true that the choice of exchange rate does not have a net effect on the overall balance with regard to certain first-charge deductions (i.e., external debt service, national priority projects, NNPC cash calls, and NNPC priority projects), it does nonetheless result in the understatement of total naira-denominated revenue and naira-denominated expenditure, as well as of the key fiscal ratios generated therefrom.⁶⁶ Moreover, the choice of exchange rate does have a direct impact on the overall balance in the case of the other first-charge deductions (i.e., the special reserve and the excess proceeds reserve), since it affects above-the-line revenue and below-the-line financing, but not above-the-line expenditure.⁶⁷

73. Similarly, while the choice of exchange rate does not have a net impact on the overall balance with regard to public sector transactions funded at the official foreign exchange, it does result in the understatement of these budgetary transactions in local currency. Unlike in the case of the first charges, however, these dollar-denominated expenditures are paid for in naira (i.e., budgetary naira are converted into dollars at the official exchange rate). Hence, these transactions receive an implicit naira subsidy resulting from the difference between the official and autonomous rate of exchange. In 1997, this subsidy amounted to some ₦105 billion, equivalent to 5.7 percent of non-oil GDP.

74. The distortion created by using the official exchange rate to value official foreign exchange used in intervening in the AFEM is a transitional one. The government initially receives the naira counterpart of this foreign exchange valued at the official rate. Once the foreign exchange is subsequently sold in the AFEM, a profit is generated, representing the differential between the official and the autonomous rate of exchange. Over time, therefore, the authorities receive the full naira counterpart value of their foreign exchange valued at the prevailing AFEM rate. At any given point in time, however, naira-denominated revenues are understated.

⁶⁵There were also uses of foreign exchange involving the purchase of travelers checks and bank notes.

⁶⁶It also results in the understatement of these particular revenue and expenditure items relative to others.

⁶⁷It also results in the understatement of total revenue.

75. In light of these limitations, analysis of Nigeria's fiscal data should be pursued with caution, and any policy recommendations derived from the data should be qualified accordingly.

D. Consolidation of Federal Government with the Other Levels of Government

76. In order to capture the full impact of government activity on the Nigerian economy, it is necessary to consolidate the operations of the federal government (including the first charges and the PSTF) with that of the state governments, the local government councils, and the special funds (Appendix Table 27).⁶⁸ A bridge table is provided (Table 11), which shows the relationship between the data presented in the consolidated government accounts table and that found in fiscal tables on the federation, the federal government, and the state and local government (including the special funds).⁶⁹ The following points are particularly noteworthy when reviewing the bridge table:

- The federation accounts can be considered both as the main source of consolidated revenue and as a "pass-through" account, with federation revenues (i.e., oil revenues net of the first charges and net of transfers to the PSTF along with non-oil revenues consisting of the company tax and the import duties) effectively flowing into the accounts of both the federal government and the state and local governments (including the special funds) in the form of a "distribution from the federation account". In addition, the transfer to the PSTF and the first-charge deductions (excluding the special reserve and the excess proceeds reserve) also pass to the federal government as presented here.⁷⁰
- Only the accounts of the federal government and of the state and local government (including the special funds) are combined to derive the consolidated government accounts. The activities of the PSTF and the NNPC (i.e., cash calls and priority projects) are already fully captured in the federal government fiscal accounts as presented here.

⁶⁸The federation account is essentially a "pass-through" account, with federation revenue distributed to the three tiers of government, including the special funds.

⁶⁹Only the federal government and the state and local government (including the special funds) accounts are combined to derive the consolidated government accounts, since the federal government table (Fund format) already takes into account the first charges and the PSTF.

⁷⁰The first-charge deductions for the special reserve and the excess proceeds reserve do not pass through to other levels; instead, they are captured in total consolidated oil revenues and show up below the line as negative bank financing (i.e., government deposits).

- Consolidated total revenue is derived by adding the corresponding items from the federal government and the state and local government (including the special funds) accounts and by adding revenues set aside as the special reserve and the excess proceeds reserve whose counterpart is reflected in government deposits.
- The remaining consolidated revenue and expenditure flows can be mapped to the originating tier of government creating the flow by referring to the bridge table.

E. Analysis of the Main Fiscal Aggregates

77. In order to assess the fiscal stance in Nigeria, and the direction and magnitude of the authorities' policy effort, it is important to separate those elements over which the Nigerian authorities have little control from those over which they have direct control. Oil production is the dominant economic activity in Nigeria⁷¹ and fiscal policy has little, if any, impact on developments in the oil sector, which are predominately determined by world oil prices, the country's reserve base, and preexisting revenue-sharing agreements with the joint-venture partners. With a view to developing an appropriate measurement of government fiscal policy, the Fund staff has therefore isolated domestic revenue and expenditure from external revenue and expenditure, thereby deriving the domestic fiscal balance in the consolidated government accounts.⁷² The Fund staff subsequently employed the fiscal impulse methodology to assess the fiscal stance as reflected in the relative changes in the domestic fiscal balance (Table 12).

78. The fiscal impulse measures the initial stimulus (or "impulse") to aggregate demand that arises from discretionary (noncyclical) fiscal policy during a given period, regardless of the source. As such, it is a useful indicator of the impact of budgetary policies on the external current account balance, as well as on demand pressures affecting domestic resources. Conceptually, it involves adjusting the actual fiscal balance for transitory cyclical effects in order to obtain a more accurate measurement of the stance of discretionary (noncyclical) fiscal policy.⁷³ The cyclical effect of the budget is derived by subtracting the actual budget balance from the cyclically neutral budget balance in a given year. The cyclically neutral budget

⁷¹The production and exportation of crude oil in Nigeria, which accounts for some 40 percent of total GDP and 95 percent of total exports, is essentially an enclave activity that operates outside the domestic economy.

⁷²Since the authorities allocate a portion of the country's oil production (i.e., 250,000 barrels per day) for the purposes of refining domestic petroleum products, the PTF transfers to the federation account and to the PSTF were added to non-oil revenues in order to derive domestic non-oil revenue. Items such as the NNPC cash calls, the NNPC priority projects, foreign interest payments, and official imports were also subtracted from total expenditure in order to derive domestic non-oil expenditure.

⁷³For a discussion of the fiscal impulse, see Sheetal Chand, "Summary Measures of Fiscal Influence," *Staff Papers*, IMF, Vol. 24 (July 1977), pp. 405-49.

balance is computed by applying (a) the ratio of the base-year revenue to GDP to the given year's actual output level and (b) the ratio of the base-year expenditure to GDP to the given year's potential (trend) output level. If the actual budget deficit exceeds (is less than) the adjusted cyclically neutral deficit, the cyclical effect of the budget is considered to be expansionary (contractionary). The fiscal impulse is the first difference of the actual budget balance and the cyclically neutral budget balance (i.e., the change in the cyclical effect of the budget from the preceding year). If the fiscal impulse is positive (negative), the fiscal stance is considered to be expansionary (contractionary). The main parameters and results are presented in the annex. The main conclusions drawn from the simulation can be summarized as follows:

- **Fiscal policy was expansionary in 1991-93.** There was a deficit in the domestic balance in each of these three years and the cyclical effect of the budget was positive, implying that the budget was expansionary.⁷⁴ However, the cyclical effect of the budget declined from the equivalent of 8.9 percent of non-oil GDP in 1991 to 3.3 percent in 1992 before rising to some 17.3 percent in 1993. This, in turn, imparted an expansionary fiscal impulse on the domestic economy in 1991 (equivalent to 8.9 percent of non-oil GDP), a contractionary impulse in 1992 (equivalent to 2.9 percent of non-oil GDP), and, once again, an expansionary impulse in 1993 (equivalent to 15.2 percent of non-oil GDP).
- **The fiscal policy stance became contractionary in 1994 and that stance was maintained through 1996.** The domestic balance recorded declining deficits in each of the three years, falling from the equivalent of 15.6 percent of non-oil GDP in 1994 to 2.5 percent in 1996. While the cyclical effect of the budget was initially positive in 1994 (although less than one-half that recorded in the previous year), it became negative in 1995 and 1996 (equivalent to 5-6 percent of non-oil GDP). The relative decline in the cyclical effect of the budget resulted in the transmission of contractionary fiscal impulses, equivalent to 4.3 percent, 9.8 percent, and 2.2 percent of non-oil GDP, respectively.
- **Fiscal policy became expansionary in 1997.** The deficit in the domestic balance increased to 7.8 percent of non-oil GDP in 1997. Although the cyclical effect of the

⁷⁴The cyclical effect of the budget is derived by subtracting the cyclically neutral budget balance from the actual budget balance in a given year. The cyclically neutral budget balance is computed by applying (a) the base-year revenue-to-GDP ratio to that year's actual output level and (b) the base-year expenditure-to-GDP ratio to that year's potential (trend) output level. If the actual budget deficit exceeds (is less than) the adjusted cyclically neutral deficit, the cyclical effect of the budget is considered to be expansionary (contractionary). The fiscal impulse is the first difference of the actual budget balance and the cyclically neutral budget balance. If the fiscal impulse is positive (negative), the fiscal stance is considered to be expansionary (contractionary).

budget remained slightly negative, it imparted a positive fiscal impulse equivalent to 4.2 percent of non-oil GDP.

79. It is interesting to note the relative contribution of actual revenue and expenditure flows to the fiscal stance in each of the years under review (Table 13). By taking the first difference of actual revenue (expenditure) and cyclically neutral revenue (cyclically neutral expenditure), each component's contribution to the overall cyclical effect of the budget (i.e., the first difference of the cyclically neutral budget and the actual domestic balance), and to the corresponding fiscal impulse can be assessed. There appears to be no set pattern whereby excessive (lower) expenditure or lower-than-expected (excessive) revenue were the main contributors to the transmission of the fiscal impulse in these periods. Expenditure increases contributed more than revenue reductions to the expansionary fiscal impulses in 1991 and 1997, while revenue reductions were more important in 1993. In years with contractionary fiscal impulses, the relative importance of expenditure and revenue varied and tended to partially offset each other, with the exception of 1995, when they both had an equally important contractionary effect.

80. In addition to being a useful tool in identifying the stance of past fiscal policy, the fiscal impulse methodology can be used as one of many tools employed to analyze the effect of proposed government policies on the economy. In carrying out such analyses in the case of Nigeria, the limitations of the underlying data highlighted in Subsection C should be duly noted and policy conclusions and recommendations should be qualified accordingly.

Table 10. Nigeria: Bridge Table for the Federal Government Fiscal Accounts, 1997
(In millions of naira)

Federal Government Format		IMF Format	
Retained revenue	175,120	Retained revenue	254,356
Federal government share of federation account	100,880	Federal government share of federation account	97,262
Independent revenue	13,000	Independent revenue	13,000
External debt service	44,000	External debt service	44,000
Federal government share of value-added tax (VAT)	12,000	Federal government share of VAT	12,000
Customs levies	5,240	Customs levies	5,240
Fertilizer subsidy	0	Fertilizer subsidy	0
Stabilization account drawdown	0	Stabilization account drawdown	0
		National Priority Projects	16,280
		NNPC cash calls/priority projects	53,240
		Education tax	1,733
		Petroleum Special Trust Fund (PSTF) independent revenue	11,601
Autonomous Foreign Exchange Market (AFEM) Intervention	47,000	AFEM Profits generated (including held in trust)	90,247
Petroleum price adjustment	38,000	Transfer from Petroleum Trust Fund (PTF) for PSTF	38,000
Loans, grants, and subventions	2,000	Loans, grants, and subventions	2,000
Special allocation	0	Special allocation (financing item)	0
Retained unutilised accretion to reserves	66,000	Excess proceeds/special reserve (financing item)	0
Total revenue	328,120	Total revenue	384,603
Recurrent expenditure	218,000	Recurrent expenditure	173,337
Subvention to states and Federal Capital Territory	0	Subvention to states and Federal Capital Territory	0
Personnel costs	46,000	Personnel costs	46,000
Overhead costs	55,000	Overhead costs	55,000
Transfer to PSTF	38,000	PSTF recurrent expenditure	513
External debt (paid)	44,000	External debt (foreign interest due)	36,824
Domestic debt	32,000	Domestic debt	32,000
Local contractors	3,000	Local contractors	3,000
Fertilizer subsidy	0	Fertilizer subsidy	0
Recurrent surplus/deficit	110,120	Recurrent surplus/deficit	211,266
Capital expenditure	105,000	Capital Expenditure	225,521
Main capital expenditure	105,000	Main capital expenditure	104,792
Special capital expenditure	0	Special capital expenditure	0
		PSTF capital expenditure	42,984
		National priority projects	16,280
		NNPC cash calls/priority projects	53,240
		Foreign-financed capital expenditure	8,226
Operational surplus/deficit	5,120	Operational surplus/deficit	-14,255
Surplus brought forward	38,000		
Surplus/deficit for the period carried forward	43,120		

Sources: Federal Ministry of Finance; and staff estimates.

Table 11. Nigeria: Bridge Table for Consolidated Government Accounts, 1997
(in millions of naira)

From Consolidated General Government Table (Inter-Government Transactions in italics)	1997 Est.	Federation Account	Federal Government	State, Local, and Special Funds	PSTF 1/ 2/	NNPC 1/ 2/
Total revenues and grants	599,816	200,540	376,536	155,060	41,533	53,240
Petroleum revenue	326,640	326,640			38,000	
Gross export proceeds	167,800	167,800				
Petroleum profit tax and royalties	93,840	93,840				
Domestic petroleum product revenues	65,000	65,000				
<i>Less: transfer to PSTF</i>		-38,000	38,000			
<i>Less: first charges</i>		-177,100	113,520			
<i>External debt service</i>		-44,000	44,000			
<i>National priority projects</i>		-16,280	16,280			
<i>NPC cash calls</i>		-45,100	45,100			45,100
<i>NNPC priority projects</i>		-8,140	8,140			8,140
<i>Special reserve</i>		-29,040				
<i>Excess proceeds reserve</i>		-34,540				
<i>Distribution from federation account</i>		-195,900	97,262	98,638		
Nonpetroleum revenue	271,176	89,000	125,754	56,422	3,533	
Tax revenue	164,395	89,000	18,973	56,422		
Taxes on net income, profits, and capital gains	62,155	26,000	1,733	34,422		
Company income tax	26,000	26,000				
Education tax (Education Trust Fund)	1,733		1,733			
Personal income tax	34,422			34,422		
Domestic taxes on goods and services	34,000	0	12,000	22,000		
Value-added tax revenue	34,000		12,000	22,000		
Excises	0		0			
Taxes on international trade and transactions	68,240	63,000	5,240	0		
Import duties, excises, and fees	63,000	63,000				
Customs levies	5,240		5,240			
Nontax revenue	106,781	0	106,781	0	3,533	
Autonomous Foreign Exchange Market (AFEM) Profits	90,247		90,247			
Federal government independent revenue	13,000		13,000			
PSTF independent revenue	3,533		3,533		3,533	
Grants (loans, grants, and aid)	2,000	0	2,000	0		
Total expenditure and net lending	552,973	0	398,859	154,115	43,497	53,240
Recurrent expenditure	275,361	0	173,337	102,024	513	0
Goods and services	203,537		101,513	102,024	513	
Federal government personnel costs	46,000		46,000			
Wages and salaries	42,320		42,320			
Pensions and gratuities	3,680		3,680			
Federal government overhead	55,000		55,000			
State/local/special funds recurrent expenditure	102,024			102,024		
PSTF recurrent expenditure	513		513		513	
Fertilizer subsidy	0		0			
Pre-Second-tier Foreign Exchange Market (SFEM) payments	0		0			
Interest payments due	71,824		71,824			
Domestic interest	32,000		32,000			
Foreign interest	36,824		36,824			
Other (local contractors)	3,000		3,000			
Capital expenditure	277,612	0	225,521	52,091	42,984	53,240
Domestically financed	269,386		217,296	52,091	42,984	53,240
Federal government capital expenditure	121,072		121,072			
Capital expenditure	104,792		104,792			
Special capital expenditure	0		0			
National priority projects	16,280		16,280			
State/local/special funds capital expenditure	52,091			52,091		
NNPC capital expenditure	53,240		53,240			53,240
Cash calls	45,100		45,100			45,100
NNPC priority projects	8,140		8,140			8,140
PSTF capital expenditure	42,984		42,984		42,984	
Foreign financed	8,226		8,226		0	0
Overall balance (commitment basis)	46,842	4,640	-22,323	945	-1,963	0

Sources: Federal Ministry of Finance; and staff estimates.

1/ Petroleum Special Trust Fund (PSTF) and Nigerian National Petroleum Corporation (NNPC); for informational purposes only. Already included in the definition of "federal government" presented in this table.

2/ Nigerian National Petroleum Corporation (NNPC) cash calls and priority projects only.

Table 12. Nigeria: Fiscal Impulse Indicator Analysis, 1990-97

	1990	1991	1992	1993	1994	1995	1996	1997
(In millions of naira)								
Non-petroleum revenue	17,395	21,446	33,954	40,029	54,199	207,629	248,534	271,176
Plus: Petroleum Trust Fund	8,093	7,487	26,112	2,137	6,396	59,147	71,935	65,000
Less: Autonomous foreign exchange market (AFEM) surplus	0	0	0	0	0	79,645	103,190	90,247
Domestic revenue	25,488	28,933	60,066	42,166	60,595	187,131	217,279	245,928
Total expenditure	102,226	121,080	197,175	273,181	286,001	358,396	415,445	552,973
Less: Nigerian National Petroleum Corporation cash calls/priority projects	11,149	13,746	39,898	47,886	39,898	39,000	51,154	53,240
Less: foreign interest payments	21,000	22,619	36,313	41,614	41,083	42,541	40,066	36,824
Less: official imports	30,737	22,122	28,145	28,003	38,000	52,700	67,701	73,201
Domestic expenditure	39,341	62,593	92,819	155,678	167,021	224,155	256,523	389,708
Domestic fiscal balance	-13,852	-33,660	-32,753	-113,512	-106,426	-37,024	-39,245	-143,779
Cyclically neutral balance 1/	-13,852	-15,898	-23,302	-36,368	-58,621	-103,236	-138,762	-166,443
Cyclical effect of budget 2/	...	17,762	9,451	77,144	47,805	-66,212	-99,517	-22,663
Fiscal impulse 3/	...	17,762	-8,311	67,693	-29,339	-114,017	-33,306	76,854
(in percent of non-oil GDP)								
Actual domestic balance	-8.1	-16.8	-11.3	-25.4	-15.6	-3.2	-2.5	-7.8
Cyclically neutral balance 1/	-8.1	-7.9	-8.0	-8.2	-8.6	-8.8	-9.0	-9.1
Cyclical effect of budget 2/	...	8.9	3.3	17.3	7.0	-5.7	-6.4	-1.2
Fiscal impulse 3/	...	8.9	-2.9	15.2	-4.3	-9.8	-2.2	4.2

Sources: Nigerian authorities; and staff estimates.

1/ The cyclically neutral balance is determined by applying the base-year revenue-to-GDP ratio to that year's actual output level and the base-year expenditure-to-GDP ratio to that year's potential output level.

2/ The cyclical effect of the budget is the difference between the actual budget balance and the cyclically neutral balance. A positive cyclical effect of the budget indicates an expansionary budget effect, while a negative cyclical effect indicates a contractionary budget effect. The cyclical effect of the budget is zero in the base year.

3/ The fiscal impulse is the first difference of the cyclical effect of the budget.

Table 13. Nigeria: Relative Contribution of Revenue and Expenditure to the Fiscal Impulse, 1990-97 1/

	1990	1991	1992	1993	1994	1995	1996	1997
(In millions of naira)								
Cyclical effect of the budget	...	17,762	9,451	77,144	47,805	-66,212	-99,517	-22,663
Revenue contribution	...	780	-17,091	24,051	40,699	-13,685	12,224	26,506
Expenditure contribution	...	16,982	26,542	53,093	7,106	-52,526	-111,741	-49,170
Fiscal impulse	...	17,762	-8,311	67,693	-29,339	-114,017	-33,306	76,854
Revenue contribution	...	780	-17,871	41,142	16,648	-54,384	25,909	14,283
Expenditure contribution	...	16,982	9,560	26,551	-45,987	-59,633	-59,215	62,571
(In percent of non-oil GDP)								
Cyclical effect of the budget	...	8.9	3.3	17.3	7.0	-5.7	-6.4	-1.2
Revenue contribution	...	0.4	-5.9	5.4	6.0	-1.2	0.8	1.4
Expenditure contribution	...	8.5	9.2	11.9	1.0	-4.5	-7.2	-2.7
Fiscal impulse	...	8.9	-2.9	15.2	-4.3	-9.8	-2.2	4.2
Revenue contribution	...	0.4	-6.2	9.2	2.4	-4.7	1.7	0.8
Expenditure contribution	...	8.5	3.3	6.0	-6.7	-5.1	-3.8	3.4

Sources: Nigerian authorities; and staff estimates.

1/ Positive numbers denote expansionary effect; negative numbers denote contractionary effect.

Annex: Application of the Fiscal Impulse Methodology to the Consolidated Government

In applying the fiscal impulse methodology to the case of Nigeria, the following variables and parameters were used:

- **Potential non-oil GDP.** Non-oil GDP growth rates have swung widely from year to year in Nigeria, due to a combination of factors, including the impact of policy reversals. A simple regression was used to calculate the “trend” growth rate of non-oil GDP (4.45 percent) over the period 1985-97 using national accounts data that were revised by Fund staff to take account of the dual exchange rate system. For the purposes of the initial exercise, **total actual non-oil GDP** and **total potential non-oil GDP** were used for the variables Y and Y_p , respectively.
- **Base year.** In a separate exercise, Fund staff determined that 1990 was a year when the exchange rate was in equilibrium. This was also a year when real non-oil GDP grew by 8.6 percent and the consolidated government domestic balance recorded a deficit equivalent to 7.3 percent of non-oil GDP. For the purposes of the simulation, **1990 was selected as the base year.**⁷⁵
- **Fiscal data:** For the purposes of the simulation, fiscal data were used regarding the **consolidated government.**⁷⁶ Data were derived from the African Department’s Nigeria desk data base for the period 1990 to 1997. Data for “domestic non-oil revenue and grants,” “domestic expenditure and net lending,” and the “domestic balance” were used for the variables T , G , and B , respectively. Base-year ratios for “non-oil domestic revenue to actual non-oil GDP,” and “domestic expenditure to potential non-oil GDP” were used for the variables to and go , respectively, which were derived using 1990 as the base year and actual and potential non-oil GDP as described above.

⁷⁵An alternative approach to selecting the base year would be to assess what would be the current account deficit that could be financed through sustainable capital flows (i.e., the sustainable current account deficit). An assessment could then be made as to the appropriate balance of the private sector (i.e., private consumption and investment/savings). From here, one could deduce the appropriate fiscal stance. To the extent that such a stance does not exist for any of the years under consideration, the parameters of this balance could be artificially imposed on a given year (i.e., 1990), which would serve as the base for calculating the ratios of revenue and expenditure to GDP to be used in the fiscal impulse calculations.

⁷⁶Alternatively, the exercise could also be carried out for the federal government alone.

Nigeria: Fiscal Impulse Indicator Analysis, 1990-97
(in millions of naira, unless otherwise indicated)

	1990	1991	1992	1993	1994	1995	1996	1997
National accounts data								
Non-oil GDP at current factor cost	171,685	200,144	289,477	446,027	682,304	1,168,311	1,545,896	1,835,083
Non-oil GDP at constant factor cost	171,685	178,669	184,065	189,644	192,616	197,297	203,004	209,284
Growth rate (in percent)	8.6	4.1	3.0	3.0	1.6	2.4	2.9	3.1
Implicit non-oil GDP Deflator (1990=100)	100	112	157	235	354	592	762	877
Derivation of Potential GDP								
Potential non-oil GDP at current factor cost	171,685	199,052	289,239	447,688	697,879	1,207,459	1,607,131	1,915,292
Potential non-oil GDP at constant factor cost	171,685	177,694	183,913	190,350	197,013	203,908	211,045	218,431
Potential non-oil GDP growth rate assumption (in percent)	3.5							
Implicit potential non-oil GDP deflator (1990=100)	100	112	157	235	354	592	762	877
Consolidated government data								
Domestic revenue	25,488	28,933	60,066	42,166	60,595	187,131	217,279	245,928
Domestic expenditure	39,341	62,593	92,819	155,678	167,021	224,155	256,523	389,708
Domestic balance	-13,852	-33,660	-32,753	-113,512	-106,426	-37,024	-39,245	-143,779
Fiscal impulse calculations								
Cyclically neutral revenue 1/	25,488	29,713	42,975	66,217	101,294	173,446	229,502	272,435
Actual revenue	25,488	28,933	60,066	42,166	60,595	187,131	217,279	245,928
Difference	0	780	-17,091	24,051	40,699	-13,685	12,224	26,506
Cyclically neutral government expenditure 2/	39,341	45,612	66,277	102,585	159,915	276,682	368,264	438,878
Actual government expenditure	39,341	62,593	92,819	155,678	167,021	224,155	256,523	389,708
Difference	0	-16,982	-26,542	-53,093	-7,106	52,526	111,741	49,170
Cyclically neutral budget 3/	-13,852	-15,898	-23,302	-36,368	-58,621	-103,236	-138,762	-166,443
Actual domestic balance	-13,852	-33,660	-32,753	-113,512	-106,426	-37,024	-39,245	-143,779
Cyclical effect of the budget 4/	0	17,762	9,451	77,144	47,805	-66,212	-99,517	-22,663
Fiscal impulse 5/	...	17,762	-8,311	67,693	-29,339	-114,017	-33,306	76,854
Dutch budget impulse 6/	...	E	C	E	C	C	C	E
		E	C	E	C	C	C	E

Sources: Nigerian authorities; and staff estimates.

1/ Cyclically neutral revenue = $to * Y$

2/ Cyclically neutral expenditure = $go * Yp$

3/ Cyclically neutral balance = $(to * Y) - (go * Yp)$

4/ Cyclical effect of the budget (CEB) = $[(to * Y) - (go * Yp)] - (G - T)$

5/ Fiscal impulse = $[(to * ^AY) - (go * ^AYp)] - (^G - ^T)$

6/ Dutch budget impulse = $(^G - (^Yp/Yp-1) * G-1) - (^T - (^Y/Y-1) * T-1)$

V. RECENT CHANGES IN THE EXCHANGE SYSTEM^{77 78}

81. At the beginning of 1995, the Nigerian authorities initiated a substantial liberalization of the country's exchange system, a process that has been gradually reinforced since. The 1995 measures represented a major turnaround from the abandonment of market-based mechanisms that had occurred during 1993 and especially in 1994, and they were accompanied by strong efforts to restore fiscal and monetary discipline. From early 1995 to the present, these policies have produced a fairly stable market-related exchange rate for most price-sensitive transactions despite the continued existence of an overvalued, pegged official rate for certain government transactions. Moreover, notwithstanding certain residual restrictions, the system has for economic purposes become essentially free of restrictions on payments for current international transactions, and for most capital transactions as well. This chapter describes this recent evolution and the present state of the system.

A. Background Through 1994

82. Over the years, the authorities have tried a variety of exchange arrangements, most more than once. These have ranged from fixed official rates, to market-determined official rates, to dual systems with a fixed or lagging official rate and a more depreciated rate or rates based on interbank dealings or various types of auctions.⁷⁹ All have occurred in the context of an extensive parallel market, illegal but generally tolerated, that reflected unmet legitimate market demand as well as illicit transactions. In the early 1990s, as substantial macroeconomic and financial imbalances reemerged and pressures in the foreign exchange market intensified, the Central Bank of Nigeria (CBN) found it increasingly difficult to meet market demand and stem the pace of depreciation. In March 1993, having briefly reintroduced a Dutch auction to replace an interbank system in determining the official rate, the authorities pegged the official rate at ₦ 24.9 per U.S. dollar, revaluing from the latest auction rate of ₦ 30 per U.S. dollar. They then repegged it in April-July 1993 at rates around ₦ 22 per U.S. dollar; the official rate settled at ₦ 21.886 per U.S. dollar (midpoint), where it has remained since. Foreign exchange

⁷⁷Prepared by Michael C. Niebling.

⁷⁸This account is based upon the available documents, extensive investigation of Nigeria's regulations by Fund legal staff members, and staff mission discussions with pertinent Nigerian officials. However, it has not been reviewed by the Nigerian authorities in this form prior to publication. Invaluable background contributions have been made by two staff members of the Legal Department: Mrs. Pascale De Boeck, who participated in a June 1997 staff visit to Nigeria, and Ms. Isabelle Mouysset, who reviewed the 1997 *Foreign Exchange Instructions Manual* and has counseled the consultation team since on exchange system matters.

⁷⁹The history is outlined in Gary Moser, Scott Rogers, and Reinold van Til, *Nigeria: Experience with Structural Adjustment*, IMF Occasional Paper No.148 (Washington: International Monetary Fund, March 1997), pp.13-15 and pp. 42-43.

allocations at the official rate were made by the CBN on a pro rata basis, in proportion to the authorized banks' requests, until suspended in November as reserves neared depletion.

83. A sharp further tightening followed in January and February 1994, with all legal transactions being confined to the official rate. Banks and other authorized dealers were prohibited from dealing directly with clients on their own account and were allowed to collect only the normal charges and prescribed commissions. Foreign exchange bureaus, which had been free since 1989 to deal in currency and travelers' checks at freely negotiated rates, were limited to buying foreign exchange as agents of the CBN at the official rate. These measures apparently sought to preclude profitable arbitrage opportunities that had arisen. The CBN allocated foreign exchange to end users through designated banks on the basis of sectoral shares: 50 percent (later 60 percent) for manufacturing inputs, 10 percent for agricultural inputs, 30 percent (later 20 percent) for finished goods, and 10 percent for service payments.⁸⁰

84. In 1994 as well, proceeds from exports of goods and services were required to be surrendered to the CBN. All imports over ₦1,000 were required to be financed by letters of credit, while less formal forms of import credit, such as the use of bills for collection and open accounts, were suspended in view of perceived abuses for capital flight. With demand far exceeding supply, the frequency of allocations was reduced, and the bureaus were permitted a 10 percent margin in an ineffective effort to divert some demand. By year's end, however, the parallel rate stood at ₦84 per U.S. dollar, having briefly breached ₦90 per U.S. dollar (Appendix Table 56). By then, the authorities had come to the conclusion that attempts to stabilize the naira by administrative means had been ineffective.

B. 1995: Liberalization and "AFEM"

Foreign exchange market – initial liberalization

85. In response, the 1995 budget presentation sharply tightened fiscal and monetary policies and called for economic liberalization, "guided deregulation," and encouragement of private enterprise. The annual CBN guidelines on monetary, trade and foreign exchange matters, issued in mid-January, announced the introduction of an "Inter-bank Foreign Exchange Market (IFEM)" for all nongovernment and nonpetroleum transactions. In this market, also referred to as the "autonomous" market, exchange rates would be determined freely by authorized buyers and sellers of foreign exchange. The CBN would continue to hold official foreign exchange to "meet priority government obligations, strengthen the external reserves and intervene in an influence the IFEM in order to ensure reasonable stability in the market." While all government transactions (federal and state) with the CBN remained at the official rate, government contractors were directed to the IFEM, together with "commercialized" companies. Parastatals and other public enterprises would in principle deal with the CBN at the autonomous rate through domiciliary foreign exchange accounts that they were obliged to

⁸⁰The increase for manufacturing and the decrease for finished goods were effective March 25, 1994.

hold with it.⁸¹ The foreign exchange bureaus were authorized to buy currency and travelers' checks and to sell currency (only, and up to \$2,500 per transaction) at the interbank rate (autonomous) rate plus 2 percent.

Easing of current restrictions

86. The January 1995 guidelines also announced the abolition, with immediate effect, of the Exchange Control Act of 1962, which had required official approval for all foreign exchange transactions. It was subsequently replaced by a Foreign Exchange (Monitoring and Miscellaneous Provisions) Decree, 1995 in July, which was made retroactively effective to January 16. In legislatively establishing what was by then unambiguously termed the "autonomous" foreign exchange market (AFEM), this decree stated that any otherwise legal transaction "adequately supported by appropriate documentation shall ... be an eligible transaction for the purchase of foreign exchange in the Market." Transactors were to be under no obligation to disclose the sources of foreign currency to be sold in the market, unless required by other laws.

87. The January 1995 guidelines also eased some restrictions, while retaining others from the past. In particular, export surrender requirements were replaced with repatriation requirements. Non-oil exporters were permitted to sell their foreign exchange proceeds in the AFEM or hold them in non-oil export domiciliary accounts. Holders of these and other domiciliary accounts were assured of easy access to the funds therein. A number of specific restrictions on payments or transfers for current international transactions remained in effect, however, for AFEM-sourced foreign exchange. These included limits on travel allowances (\$500 per year for individuals and \$5,000 per year for companies) and on personal home remittances by expatriates (to 75 percent of after-tax salary). In addition, "accompanying" (non-working) expatriate wives continued to be denied foreign exchange not only for personal home remittances (redundantly, since they had no salary) but also for transfers "for any purpose whatsoever." In addition, foreign exchange for education abroad remained available for higher education only. Restrictions on income remittances under the debt-conversion program (see below) also remained in effect.

88. Limits, usually set as a percentage of net sales or profits, were also maintained on payments under license, technical services, management, consultancy, and intellectual property agreements; since these limits were imposed on the underlying transactions themselves, however, under both commercial regulations and tax laws, they did not give rise to exchange restrictions. Although also not necessarily exchange restrictions under the Fund's Articles, rather extensive documentation requirements remained in effect as well.⁸² These included

⁸¹In practice, certain major parastatals (such as those for power and telecommunications) continued to have access to foreign exchange at the official rate.

⁸² These were carried over from a 1986 second-tier foreign exchange market (SFEM) decree
(continued...)

application forms (so-called Form “M” for imports, “A” for invisibles, “NXP” for non-oil exports, etc.), evidence of pre-shipment inspection for all imports over \$1,000, and a variety of supporting invoices, clearances and other papers attesting to the legitimacy of the transaction. The use of bills for collection and open accounts remained suspended. As under earlier market-based systems, forward exchange contracts were permitted between dealers and their customers, provided that they related to underlying import or export transactions; in practice, this market has remained practically nonexistent. Parallel market transactions, although still extensive (see below) and evidently tolerated, remained explicitly illegal.

Evolution of the foreign exchange market and CBN intervention

89. In the new interbank (autonomous) market (IFEM), there was initially some ambiguity as to the intended extent of official intervention in the market and official influence on the rate. The CBN, according to a January 1995 circular, would be an “active participant” and would deal with authorized dealers as needed. It continued, however, to purchase foreign exchange directly from parastatals, other public enterprises, and the foreign oil companies rather than through banks (albeit at “prevailing autonomous rates”)—a provision apparently aimed at precluding a few major enterprises and key banks from dominating the market. The CBN would then “use these funds and other government foreign exchange [such as oil revenues] to intervene in and influence the autonomous market.” Nevertheless, the first specific guidelines on the then IFEM specifically envisaged that there would be “no regular bidding for or allocation of foreign exchange ...[by the CBN] for the time being.” The apparent intention was to leave the market largely dependent on sources other than oil revenues, an approach that would be consistent with the announced policy goal of a “deliberate build-up and strengthening of external reserves...” Evidently, the exchange rate that would clear such a market would be considerably more depreciated than the rate of a market sustained by oil revenues. Indeed, the rate quickly established itself at around ₦ 80 per U.S. dollar, just below the parallel rate.

90. Further specific guidelines on intervention followed in February 1995 that modified the initial policy indication, for what was now referred to consistently as the “autonomous” market. These announced that the CBN would intervene as necessary “to sell foreign exchange directly to end users through selected banks”; as under earlier arrangements, the banks would act only as agents for these transactions between the central bank and end users. Upon notification of a forthcoming intervention, end users were to submit their applications to the banks concerned. The banks, in turn, would summarize them for presentation to the CBN on forms that indicated the name, address and nature of the company purchasing foreign exchange, its turnover, the type and value of the envisaged import or other transaction, and previous recourse to the AFEM. The banks were responsible for verifying and retaining the supporting documentation, but it could be called up for review by the CBN. Although other banks remained free to participate in the market, CBN intervention funds could not be

⁸²(...continued)

and the April 1990 version of the *Foreign Exchange Instructions Manual*.

transferred or used for interbank transactions. Banks were not permitted to add to the CBN selling rate anything but the normal transactions charges and commissions prescribed by the existing bankers' tariffs. It was stated that the CBN would sell its exchange at "the current autonomous rate in the market"—a phrasing that blurred the distinction between an interbank rate proper and its intervention rate. Six AFEM intervention exercises took place in 1995, with funding totaling \$1,741 million at rates of ₦80-85 per U.S. dollar, as compared with 15 allocations the year before at the official rate for \$1,961 million. Foreign exchange bureau transactions remained much smaller than those in the AFEM, at purchases and sales of about \$20 million each.

Capital account liberalization

91. The 1995 measures also included a substantial liberalization of controls on capital movements, as well as on related current income flows. The new foreign exchange decree permitted any person (individual or juridical) to invest in any enterprise through an AFEM dealer, who would register the capital import with the CBN; that done, transferability in convertible currency was guaranteed (after tax) for dividends and profits, debt service, and proceeds of whole or partial sale or liquidation. In addition, any person, whether national or resident, was permitted to "deal in, invest in, acquire or dispose of, create or transfer any interest in securities and other money market instruments whether denominated in foreign currencies in Nigeria or not." This language, it has been confirmed, means that Nigerians may invest in securities abroad provided there is documentation, but that they may not simply make deposits abroad, a process still regarded as capital flight for want of documentation as to purpose.

92. A new law intended to encourage and monitor foreign investment in the country was also issued in July 1995, with retroactive effect to January, the Nigerian Investment Promotion Commission Decree, 1995. Replacing the Nigerian Enterprise Promotion Decree of 1989 and provisions of earlier "indigenization" measures that had required majority Nigerian ownership of foreign enterprises in the country, the new decree allowed foreigners to invest and participate in any sector to any extent, except for crude oil and gas (if not covered by bona fide joint ventures) and a negative list covering munitions, military goods, and narcotics. It echoed the exchange decree on transferability and also guaranteed that no nationalization would take place without just compensation and the possibility of recourse to the courts. On the other hand, waiting periods remained in effect for remittance under the 1988 debt conversion program of income (five years from investment) and capital (ten years). Accompanying the investment decree and also effective in January 1995 was a decree on money-laundering that sought to curb the placement of illicit drug money and other illegally acquired funds into the financial system.

C. Refinements in 1996 and 1997

93. The policies instituted in 1995 remained in effect during 1996, with a few modifications. In the annual guidelines issued in February, the administration of diverse export incentives was concentrated in a Nigerian Export Promotion Council to reduce bureaucracy and facilitate

non-oil exports; requirements that visitors pay hotel bills and official service fees such as airport taxes in foreign currency were abolished; importers were made responsible for paying pre-shipment inspection charges; and all exports (oil and non-oil) were also made subject to pre-shipment inspection. A circular issued in April withdrew the requirement for importers to produce a tax clearance certificate for all their current tax obligations, thus removing an exchange restriction in this regard.⁸³ Meanwhile, in a February 1996 restatement of AFEM rules, the CBN announced that it would now intervene monthly, and in May the pace of intervention was increased to weekly. In all, 35 intervention exercises were conducted in 1996; CBN sales to the market totaled \$1,846 million, at rates gradually appreciating from ₦ 85 per U.S. dollar to ₦ 80 per U.S. dollar.

94. The beginning of 1997 saw some further liberalization within the same basic system. AFEM purchases were now allowed for all levels of education, and the limitation of expatriates' personal home remittances to 75 percent of net salary was lifted, subject to evidence of earnings and taxes paid. In addition, the limits on travel allowances for individual Nigerians and for businesses were removed. In light, however, of unexpected demand for large amounts well in excess of any likely travel needs, it proved necessary for the CBN to tighten documentation requirements and require the banks to scrutinize applications closely for bona fide travel, so as to curtail the use of this vehicle for capital flight. Import financing was eased by again permitting the use of bills for collection and open accounts. The practice of denominating contracts in foreign currency as well as in naira was prohibited in favor of naira only.

95. A new *Foreign Exchange Instructions Manual* was released in August 1997 (dated April) in order to codify existing practice. It removed some further provisions giving rise to exchange restrictions (under Article VIII of the Fund's Articles); these included a requirement when applying for foreign exchange for training abroad that official certification be obtained to the effect that the training course was not available domestically as well as a stipulation that prior years' audited accounts be submitted (beyond those of the year concerned) in support of profit and dividend remittances. However, the new manual, apparently through drafting problems, introduced some inconsistencies and inadvertently left some restrictions in place.⁸⁴ As of early 1998, these matters had been brought to the CBN's attention and circulars to address these unintended restrictions were subsequently issued in mid-May 1998. However, the Manual still provides that any exporter that fails to repatriate export proceeds within 90

⁸³The restriction arose from the fact that the required tax clearance certificate related to the taxes of the importer, as opposed to taxes due specifically on the amount to be remitted.

⁸⁴ While a requirement that tax clearance certificates accompany applications for expatriates' personal home remittances was removed, the text still retained the requirement of submission of tax related documentation. In addition, there were inconsistent references to "salary" and "income" and to both 100 percent and the former 75 percent limit on personal home remittances. Moreover, the new *Manual* retained language denying nonworking expatriate wives access to foreign exchange for purposes such as travel.

days would be embargoed from access to foreign exchange for any purpose, including meeting bona fide obligations not related to the export transaction.

D. AFEM Operations and Relation to Interbank Rates

96. In the AFEM, practice had evolved by 1997 such that the CBN was conducting interventions every Wednesday, establishing a rate applicable to its sales to end users then and for its further transactions (other than those as agent for the government at the official rate) until the following Wednesday. This intervention rate is what is known as the "AFEM" rate, rather than the interbank rates, which can and do differ from it. The AFEM rate is administratively determined by the CBN on the basis of a review of not only the prevailing interbank market rates but also the parallel market rates, all of which it monitors closely. The CBN also has before it the summaries of end-user applications submitted previously by the banks, which together represent total demand for the weekly exercise. The CBN meets this demand in full at its established rate, deviating if necessary from the weekly amounts set earlier in its indicative budget. Shortfalls between stated and effective demand can arise from banks' not having adequate naira cover or from deficiencies in the applications, but these are minor. Thus there is a continuous feedback among the parallel, interbank, and AFEM rates that keeps them fairly close and allows the CBN to dominate the markets so long as it freely provides foreign exchange at the AFEM rates it determines. In 1997, the AFEM rate first rose from ₦ 80 per U.S. dollar to ₦ 85 per U.S. dollar, then tended back toward ₦ 80 per U.S. dollar. It ended the year at ₦ 75 per U.S. dollar, with the appreciation anticipating a then-expected unification with the official rate, which in the event did not take place. CBN AFEM sales totaled \$2,939 million, 59 percent more than in 1996.

97. The banks may also sell foreign exchange to the CBN on any day of the week on their own initiative. Petroleum companies and parastatals may also, as previously indicated, sell foreign exchange to the CBN from their domiciliary accounts at their own initiative. These transactions take place at the CBN's established AFEM rate for the week, with a spread of about 1 percent between the selling AFEM rate (which is the rate relevant to the weekly interventions) and the corresponding buying rate. Meanwhile, transactions continue among banks and between them and their customers (notably non-oil exporters and expatriate Nigerians remitting funds home) at rates freely determined in the interbank market. Such purchases by clients from banks require the same supporting documentation as for AFEM interventions. Although much smaller in volume than the AFEM interventions, interbank transactions for some banks reportedly exceed one-fourth of their AFEM business.

98. With free rate determination in the interbank market and an administrative (albeit market-related) determination of the AFEM rate, there is no mechanism to ensure that the various buying and selling rates, on any given day, do not differ from each other by more than 2 percent. While the spread is most often within 2 percent, it has at times amounted to 3- 5 percent. In the absence of a mechanism to ensure that the spread does not exceed 2 percent, a multiple currency practice arises under the Fund Agreement's Article VIII, additional to that arising from the simultaneous existence of the official rate. This divergence between the AFEM and interbank rates largely reflects timing, as the rates are virtually

identical on intervention days but diverge thereafter. It also reflects the fact that despite the use of the word “intervention,” the AFEM mechanism consists of the provision of foreign exchange to end users at an administratively determined (albeit market-related) rate, rather than conventional central bank intervention proper, with authorized dealers alone in an interbank market. In retaining the mechanism of past allocation practices, even while meeting all demand and eschewing any restrictive allocation, the CBN also retains the capacity to review detailed summaries of transactions by user and purpose and to call up and review the detailed documentation and ensure the bona fide nature of the transactions when it feels that market abuse or turbulence warrant such actions.

E. 1998: Cutback in Access to the Official Rate and Further Measures

99. Policies put in place early in 1998 have reduced further the scope of transactions and allocations made at the official exchange rate. On January 2, it was announced in the annual general guidelines that all foreign exchange transactions by federal, state, and local governments, by parastatals, and by OMPADEC and the Petroleum (Special) Trust Fund⁸⁵ would be conducted at the autonomous rate, except where the Head of State specifically approved otherwise. In addition, foreign exchange for all official estacodes (per diem), travel expenses, and medical and “other” bills would be provided by the CBN at the AFEM rate. A supplementary notice from the Federal Ministry of Finance on January 9 limited allocations at the official rate to a list comprising diplomatic expenditures, defense and security outlays (as approved by the Head of State), the presidential fleet, police munitions and equipment (again, as approved by the Head of State), official debt service, a key steel project and renovation of the national railway, and a few very specific special purposes (junior championship football infrastructure, certain civil training aircraft, and customs scanning equipment); otherwise, specific authorization was required from the Head of State. The intent was clearly to make official access to the official rate the exception rather than the rule.

100. One effect of this reduction in access to foreign exchange at the official exchange rate was to diminish further the distortive effects of the official rate. Much of the remaining activity at the official rate consists more or less of accounting entries—for receipts in foreign exchange that are then paid out for uses inherently in foreign exchange, such as debt service, petroleum cash calls, and major project contracts. Some bias nevertheless remains in favor of foreign procurement and against local content and value added. Moreover, transparency in government transactions remains obscured by the mixture of rates—a consideration that, together with continuing vested advocacy of the official rate, suggests considerable remaining opportunities for economic rents.

⁸⁵OMPADEC is a special fund for social and economic development projects in oil-and mineral-producing states; the Petroleum (Special) Trust Fund was set up in 1995 to receive and spend for designated purposes the revenues accruing from increases in domestic petroleum product prices.

101. Also at the beginning of 1998, the authorities announced the stepwise phasing out of preshipment inspection for imports, in view of the introduction of the United Nations Conference on Trade and Development's Automated System for Customs Data (ASYCUDA) and the installation of X-ray scanning equipment at the ports during the year. Effective immediately, imports from all of Africa and from 15 European, Asian, and Pacific countries became subject to inspection and assessment of duty only on arrival. Other countries were to be announced later. At the same time, the policy on personal home remittances was clarified to refer to 100 percent of salary net of tax, but banks were still obliged to obtain evidence of earning and taxes paid; no mention was made of transfers by nonworking spouses.

102. AFEM regulations proper remained essentially unchanged in early 1998. Early demand in the interventions, however, proved exceptionally and unexpectedly large, reaching \$477 million in January, three-and-a-half times the year-earlier level and 11 times that of January 1996. The authorities continued to meet the demand, but let the rate depreciate to ₦ 81 per U.S. dollar in late January and to ₦ 84 per U.S. dollar by late February. Various factors were considered responsible for the situation, including the unusual earliness of the budget speech and accompanying policy measures in a normally wait-and-see period, the more expansionary fiscal stance announced, and the unanticipated decline in world oil prices. It was also suspected that the previous year's reinstatement of easier import financing and the partial elimination of import pre-inspection were leading to abuse and capital flight through false claims and non-shipment. Accordingly, the authorities reinstated all import preinspection for the time being, acknowledging that domestic mechanisms to substitute for it were not yet fully in place. The CBN also required the banks to forward to it all documents regarding payments against bills for collection during the first seven interventions. These measures, like the similar episode with travel allowances a year earlier, apparently sufficed to quell the market. Demand fell to more normal seasonal levels and totaled \$661 million in the next two months, compared with \$614 million a year earlier. The rate remained, however, at ₦84 per U.S. dollar.

F. Summary of the System as of Early 1998

103. Nigeria's exchange rate arrangements as of early 1998 may be characterized as essentially a dual-rate system but technically a multiple-rate one, with an artificially overvalued official rate pegged at ₦ 21.886 per U.S. dollar used for a positive list of government transactions and a band of rates clustered at market levels influenced by official intervention. In this cluster, the AFEM rate dominates, being administratively determined in a managed float with reference to other rates determined by supply and demand in the interbank and parallel markets, and being supported by substantial net infusions of foreign exchange obtained from government oil revenues. A second multiple currency practice arises from the coexistence of the AFEM rate and the interbank market rate in the absence of a mechanism to prevent spreads in excess of 2 percent from arising between them (i.e., between either the buying or selling rate in the one market and either in the other market). Exchange bureaus conduct a much smaller market in currency and travelers' checks at rates based on the autonomous rates plus a 2 percent spread, but since these are not spot telegraphic transfer transactions, any spread over 2 percent against other rates does not constitute a multiple currency practice under the Fund's Articles.

104. The parallel market—conducted curbwise in cash, between customers of domestic commercial banks, and between residents holding accounts at home and abroad and paying each other's obligations (so-called "free funds" transactions)—is reportedly quite large; illegal but tolerated, it is informally estimated by commercial bankers to amount to roughly \$1 billion in cash and half that amount in noncash transactions annually. Its scope reflects in part the willingness of some transactors to pay a premium for avoiding documentation requirements on transactions eligible for AFEM allocations, as well as the demand for capital flight and illegal undertakings. The fact that the parallel rate has generally kept within 5 percent of the AFEM rate reflects the liberal availability of foreign exchange from the CBN and indicates that the documentation requirements and residual restrictions have a limited impact from an economic perspective.

105. The few restrictions on payments and transfers for current international transactions that continue to exist, as well as the few on capital outlays, appear to reflect a continuing concern about capital flight using foreign exchange derived mainly from a public resource. Chief among the restrictions are those imposing lengthy waiting periods for income and capital remittances from investments through the debt conversion program. There is also the embargoing of exporters who fail to repatriate foreign exchange earning from access to funds for unrelated transactions, seen as a means to husband the nation's reserves. A similar sanction has been reported in the case of importers who fail to provide evidence of physical arrival of goods paid for.

106. In sum, the policies introduced in 1995 have moved Nigeria to a substantially liberalized foreign exchange market, despite persistence of a "dual" exchange rate structure and residual restrictions. The CBN, in opening its 1998 general exchange guidelines, stated:

In order to consolidate its gains, the policy of guided deregulation introduced in 1995 shall continue in 1998. In this regard, it is necessary to emphasize that with the abrogation of the Exchange Control Act of 1962, all exchange restrictions on current transactions have been removed. However, foreign exchange transactions shall continue to be subject to minimum documentation requirements while available foreign exchange is expected to be channeled to the productive sectors.

107. Although the foregoing qualifies the statement on removal of all restrictions from the perspective of Fund jurisdiction and practice, it does not invalidate the intent and policy thrust evident in the recent past.

VI. EXTERNAL PUBLIC DEBT⁸⁶

A. Introduction

108. Nigeria's external public debt amounted to approximately \$28.7 billion at the end of 1997, according to an amalgam of debtor and creditor data (Table 14). This amount was equivalent to approximately 75 percent of GDP in 1997, and the debt service obligations falling due in 1998 were projected at some 36 percent of exports of goods and nonfactor services. Of the total debt, some \$20.6 billion (72 percent) was owed to Paris Club creditors, and of this, \$15.0 billion (52 percent of the total debt stock) was in arrears. Most of the rest of the debt was owed to multilateral creditors (15 percent) and banks and other commercial and/or private creditors (13 percent) in the form of par ("Brady") bonds and central bank promissory notes arising from past restructurings, in the servicing of which Nigeria has generally remained current.

109. Most of this debt reflects the prolific external borrowing on commercial terms that took place during the 1980s, first in the boom period of exceptionally high oil prices early in the decade and then to offset and postpone the effects of the collapse in oil prices that followed. Total debt peaked in 1990 at about \$34 billion, of which only about \$2 billion was in arrears since much of the arrears that had built up in the 1980s had already been rescheduled. The decline in total debt thereafter occurred largely as a result of commercial debt restructuring in 1992, but it has also reflected ongoing debt conversions, debt buybacks at discount, appreciation of the U.S. dollar against many of the currencies owed, and some changes in accounting practices, along with a policy of sharply limiting new borrowing.⁸⁷ The steady and substantial growth of arrears has reflected a policy adopted in 1993 of limiting actual debt service payments to no more than 30 percent of net oil revenues, which has led in particular to the nonservicing of debt contracted before the Paris Club cutoff date of October 1, 1985.

110. After outlining some of the general data problems, this chapter discusses the debt by each major group of creditor. The country's debt conversion program and other elements of its debt-management strategy are then discussed briefly.

B. Data Limitations and Considerations

111. Despite continuing efforts by the responsible Nigerian officials to improve and reconcile the external debt statistics, the recording and accounting of Nigeria's external debt and debt service have remained problematic, especially with respect to debt to Paris Club creditors. Data were largely reconciled with creditors at the time of the last rescheduling, in early 1991, but it is not clear that all of the bilateral accords were reflected identically in Nigerian and

⁸⁶ Prepared by Michael C. Niebling.

⁸⁷ Given the break in the series caused by using creditor data for debt to Paris Club creditors in 1997 (see below), the decline may have been larger than suggested here.

creditor databases thereafter. The last loan-by-loan reports to the World Bank's Debtor Reporting System (DRS) were also made in 1991, at the time of the last DRS mission to Nigeria, and World Bank *World Debt Tables* for the country now reflect mainly extrapolations and other estimates, particularly for bilateral debt. Fund staff estimates, similarly extrapolated from the early 1990s, have also become increasingly tenuous. An important technical assistance exercise was launched by the Commonwealth Secretariat in 1990 to help in computerization and the installation of the Secretariat's debt recording system in the External Debt Department of the Federal Ministry of Finance (FMOF), but further assistance has since been suspended as a part of the ongoing sanctions against Nigeria. The mainframe computer system is no longer working properly, and the database now consists for all practical purposes of personal-computer-based spreadsheets. At least one nongovernmental organization assisting heavily indebted poor countries on debt management has also been barred by its funding sources from working with Nigeria. The Nigerian authorities have, however, recently requested technical assistance from the World Bank on their debt statistics.

112. Over the past two years, Nigerian delegations have visited most of the Paris Club creditor capitals in an effort to reconcile data, and discussions regarding the reconciliation and other data issues were held with Fund and Bank staff in late 1997, with follow-up during the March 1998 consultation mission. Despite these efforts, there remain significant differences between creditor reports and the FMOF data, as well as internal inconsistencies in the latter between the reported stock and flow data, even after allowance is made for exchange rate valuation changes. There are also indications that arrears and late interest may not be fully accounted for and that penalty charges may have been systematically excluded. Moreover, the fluidity of recent revisions suggests that the figures have not yet settled down. Hence, Fund staff have developed and employed alternative estimates of debt to Paris Club creditors on the basis of aggregate creditor data on debt balances and future principal and interest obligations compiled as of early 1997. These have been adjusted on the basis of debt service due during the rest of the year and likely payments, to derive estimates for end-1997 stocks and scheduled debt service thereafter. Unfortunately, the creditor data do not distinguish between scheduled interest that has fallen into arrears on the one hand, and "late" interest and penalties accruing on arrears of interest and principal on the other hand; otherwise, however, they provide a detailed and internally consistent basis for analysis. No judgment is, nevertheless, implied as to specific differences between debtor and creditor data, which remain to be reconciled between the parties.

113. As for creditors other than Paris Club members, the data reported by the FMOF on multilateral debt appear to be reliable. World Bank reports on outstanding debt to the IBRD and IDA differ only marginally from the FMOF's data, which have accordingly been retained here. Discrepancies remain, however, with respect to the data on promissory notes, which, as discussed below, exaggerate the apparent decline in their level.

114. Overall, the available Nigerian annual stock data, published through 1994 and updated by the FMOF for 1995-97, cannot be considered wholly consistent from one year to the next or with the flow data, but they do provide a broad indication of past trends (Appendix

Table 53).⁸⁸ The substitution of creditor data for the Paris Club components in 1997 raises the total debt stock by nearly \$1.6 billion, increasing not only arrears but the principal balance as well. DRS stock estimates, published in the World Bank's *World Debt Tables*, are considerably larger still. All sources, however, tend to reflect the same major developments. As regards debt service and changes in arrears, FMOF components and aggregate series from the Central Bank of Nigeria (CBN) have diverged in recent years and have not yet been reconciled. Fund staff have therefore relied on the CBN data for balance of payments actuals.

C. Debt to Multilateral Institutions

115. Among multilateral institutions, the World Bank Group is Nigeria's largest creditor, accounting for nearly 10 percent of the total debt disbursed and outstanding at the end of 1997 (Table 14); indeed, the Bank appears to be the third or fourth largest single creditor after the leading Paris Club creditors (the United Kingdom, Germany, and perhaps Japan, depending on the data used). Loans on market terms from the IBRD proper still dominate the Bank's portfolio. Nigeria was declared IDA eligible in 1988, and by 1993, the last year in which new Bank loans or credits were contracted, all new Bank commitments were concessional IDA credits, although they still account for under one-fifth of the disbursed balance outstanding. A number of slow-moving loans and credits were canceled in 1997, leaving only about \$600 million in Bank commitments available for future disbursements, but even then the Bank remained the largest source of new disbursements.

116. The African Development Bank Group accounts for another 5 percent of Nigeria's total debt, with nearly one-third disbursed on concessional terms through its "soft-window" affiliate. The European Investment Bank follows well behind, at 1 percent of the total debt. It is the only multilateral agency to which the FMOF reported debt-service arrears at the end of 1997; at \$10 million, however, they were much reduced from a year earlier. Otherwise, and with what appear to have been very small and temporary exceptions, Nigeria has successfully endeavored to stay current on its debt-service obligations to multilateral lenders.

117. Nigeria's Structural Adjustment Programme of the late 1980s and early 1990s was supported by three noncontinuous stand-by arrangements with the IMF covering 42 months between 1986 and 1992. The Fund committed a total of SDR 1,444 million under these arrangements, but the authorities, supported by a national referendum on the subject, chose not to make any purchases under them. There has been no Fund arrangement since, and the country therefore has no use of Fund resources outstanding. It has, however, pledged SDR 1.08 million a year in support of the ESAF Trust.

⁸⁸This series is published for 1986-95 in I.A. Ayua and Bolaji Owasanoye, eds., *External Debt and Debt Management in Nigeria* (Lagos: Nigerian Institute of Advanced Legal Studies, 1997), p.21, and is recognizable despite many revisions in the debt data published in the *Annual Reports* of the Central Bank of Nigeria.

118. Altogether, the debt service due to the multilateral creditors in 1998 comes to about \$860 million. As such, it represents 28 percent of Nigeria's scheduled debt service, but with estimated late and penalty interest due (almost entirely to Paris Club creditors) included in the total, the share falls to less than 20 percent.

D. Debt to Paris Club Creditors

Past reschedulings

119. There have been three multilateral reschedulings of Nigeria's bilateral debt to Paris Club creditors—in December 1986, March 1989, and January 1991—during the period of programs supported by stand-by arrangements with the Fund. The outstanding balance due on these reschedulings as of end-1997, on the basis of creditor data, amounted to some \$16.6 billion (58 percent of total debt), of which nearly \$12.5 billion (44 percent of total debt) consisted of amounts overdue and the late interest accruing thereon.

120. Under the December 1986 Paris Club accord, approximately \$5 billion was rescheduled, consisting of current maturities of principal and interest on medium- and long-term debt falling due during October 1986-December 1987, and arrears on short-term and medium- and long-term debt (excluding late interest) as of end-September 1986.⁸⁹ By establishing the cutoff date as October 1, 1985, the creditors made debt contracted from this date forward ineligible for this or future reschedulings, while also in principle encouraging new inflows by obliging Nigeria to remain current on post-cutoff-date debt service. Nigeria nevertheless soon experienced payment difficulties, and some of the rescheduled obligations were rescheduled again under the subsequent Paris Club accords. As of the end of 1997, the amount still classified as outstanding under this first accord came to nearly \$5.8 billion (\$4.6 billion in principal). All of this amount was in arrears, since the last of the rescheduled maturities had fallen due in May 1997.

121. The rescheduling that followed in March 1989 entailed some \$5.6 billion, comprising current maturities on medium- and long-term debt falling due in January 1989-April 1990 and arrears on short-term and medium- and long-term debt up to the end of 1988, including, as noted above, some that were previously rescheduled (60 percent of that in arrears). Almost all of the new maturities for rescheduled arrears and debt service were set to fall due during February 1995-August 1999, as only short-term and previously rescheduled arrears were due earlier. Data reconciliation problems, consequent delays in completing the bilateral agreements to implement the accord, and delays in concluding a new stand-by arrangement led to the emergence of arrears on this accord as well. Although a substantial paydown was accomplished in late 1990 (after the mid-1990 rise in oil prices and in anticipation of a new

⁸⁹In reports at the time of the rescheduling, the Paris Club amounts are mixed with estimates of rescheduling agreed in principle with London Club banks that did not in fact materialize until later. The total principal reported by Paris Club creditors in early 1997 was \$4,552 million, a figure that would not include amounts paid or rescheduled after 1986.

program and rescheduling), arrears subsequently began to reemerge. By end-1997, they amounted to \$4.9 billion (\$3.0 billion in principal). The total principal still to fall due as of end-1997 was reported as \$1.9 billion, with half of it, or \$937 million, due in 1998, together with interest of \$113 million.

122. The third and last rescheduling, in January 1991, involved approximately \$3.3 billion in pre-cutoff-date medium- and long-term debt maturities (excluding late interest) falling due during January 1991-March 1992 and arrears as of the end of 1990 on pre-cutoff medium- and long-term debt. While maturing amounts from the 1986 accord were included, those from the 1989 accord and short-term debts were not. As with the previous exercises, almost all of the debt in question consisted of commercial credits guaranteed or insured by governments or agencies of the creditor countries, and only a very small amount was official development assistance. As with the previous accords as well, rescheduling was provided on nonconcessional terms, even though the Paris Club had introduced concessional ("London") terms in October 1988. Repayment periods varied by type of debt; commercial debt (the bulk) fell due during February 2000-August 2006, previously rescheduled amounts matured sooner (February 1996-August 1999), and official development service was put off until later and over a longer period (February 2002-August 2011). Following standard procedures, interest rates were to be set in the bilateral agreements with each creditor country on the basis of market rates for the creditor or currency concerned; that for official development assistance (aid) was to be at least as low ("favorable") as in the original debt. As of the end of 1997, some \$4.1 billion was outstanding under this accord, including principal arrears of \$0.7 billion and interest arrears of \$1.2 billion. Debt service due in 1998 came to \$329 million in principal and \$134 million in interest. Scheduled principal payments should decline by about one third after 1999 and become almost negligible after 2006.

Other and total pre-cutoff-date debt

123. In addition to the rescheduled amounts, Nigeria has about \$1.9 billion in pre-cutoff-date debt to Paris Club creditors that has not been rescheduled. As the loans were contracted and disbursed many years ago, the bulk is in arrears. Only \$180 million of principal remains payable after 1997, one-third of which falls due in 1998. Scheduled interest for 1998 is small, but late interest would bring total debt service due to nearly 5 percent of the total.

124. Altogether, the pre-cutoff-date Paris Club debt (previously rescheduled and not) totaled \$18.5 billion at the end of 1997, representing almost 65 percent of the total debt stock and 90 percent of total debt to the Paris Club. The pre-cutoff arrears alone came to \$14.2 billion, representing just under 50 percent of total debt and 69 percent of debt to the Paris Club. Given these proportions, any future rescheduling that were to apply to these arrears would to a considerable degree amount de facto to a stock-of-debt operation. In the meantime, the late interest accruing on these growing arrears has risen to the point where it accounts for over one-half of the interest obligations falling due. The interest rate implicit in pre-cutoff principal due after 1997 and the scheduled interest thereon in 1998 is 6.0 percent. With penalty rates added, late interest may be charged at a rate on the order of 8.0 percent, and the resulting

interest accruing on these arrears would amount to some \$1.2 billion in 1998.⁹⁰ This amount raises the total debt service due on these debts in 1998 from the \$1.6 billion of scheduled principal and interest to \$2.8 billion, representing over 64 percent of total debt service accruing in the year. Principal repayments to reduce the arrears, as under a new rescheduling, would of course raise the debt service further, except to the extent they might be deferred. Apart from very small new borrowing, the continual addition to the debt stock of unpaid scheduled interest and the compounding late interest on arrears owing to the authorities' budgetary cap on debt service is the reason for Nigeria's growing debt to the Paris Club.

Post-cutoff-date debt

125. Post-cutoff-date debt to Paris Club creditors amounted to approximately \$2.0 billion at the end of 1997, consisting mainly of commercial project financing contracted in the late 1980s and early 1990s. The federal government is responsible for most of this debt; debts for petrochemical and refinery projects assumed from the Nigerian National Petroleum Corporation, mainly in 1996, account for the bulk of the federal portion, although it also includes power, steel and infrastructure projects. Borrowing by the states has been mainly for irrigation and power projects, together with small amounts for social purposes such as hospitals. There is also some \$0.3 billion in official development assistance, which consists mainly of adjustment-related lending from 1989-90.

126. Arrears have been a recurring problem with respect to post-cutoff-date debt, as the budgetary cap has not provided for enough funds to cover the multilateral debt service and that on the restructured commercial debt as well as the nominally favored post-cutoff-date amounts. The total arrears on post-cutoff-date debt can be estimated, on the basis of the creditor data and the authorities' stated efforts to reduce such arrears during 1997, at some \$0.8 billion in total by the end of the year.⁹¹ Maturities falling due in 1998 are reported by the creditors as \$322 million. As for short-term debt, Paris Club data identify only \$23 million as of early 1997, largely in arrears; for presentational convenience and in line with the authorities' intention of cleaning up small problems, it has been assumed in estimating the end-1997 debt levels that these were paid off in the latter part of the year.

E. Debt to Other Bilateral Creditors

127. Remaining debt to bilateral official creditors other than Paris Club members had been reduced to only \$79 million by the end of 1997, \$10 million of which was in arrears. The debt

⁹⁰ On the end-1997 balance, late interest (with penalties) would be \$1.1 billion, but it is assumed the balance would continue to grow in 1998. Together with accruals on arrears to other creditors, total late interest is estimated at \$1.3 billion in 1998.

⁹¹Data from the FMOF indicate a smaller total for post-cutoff-date debt (\$1.7 billion) and much smaller arrears (under \$ 0.3 billion) at the end of 1997. As stated earlier, the use of creditor data is not to prejudge the relative accuracy of particular components.

was owed to five creditor countries, with Korea accounting for half of it in loans for railway equipment. None was still owed on the amounts rescheduled bilaterally with three countries (Singapore, India, and the then U.S.S.R.) following the 1991 Paris Club accord. The total has been reduced over the years by various direct and indirect buyback deals, in which Nigeria has been able to clear accounts at a discount with creditors ready to clear their books of problem debts. The largest such accommodation occurred in late 1996 with Russia, removing debt carried in the Nigerian records at the equivalent of \$949 million. The operation as reported was in fact considerably larger, covering the equivalent of \$1,988 million (mainly in Deutsche mark) in bills of exchange due on several steel plant projects (\$1,208 million), other debts, late interest, and miscellaneous project expenses. Against this amount, intermediaries reportedly paid the equivalent of \$640 million (DM 973 million), for a discount of 68 percent. The fiscal cost to Nigeria was presumably somewhat higher, but it has not been reported. Other recent buybacks with bilateral creditors, including smaller Paris Club members, have been reported, but details are not readily available.

F. Commercial Debt—Par Bonds and Promissory Notes

128. The \$2,043 million in par bonds outstanding are the result of a debt- and debt-service-reduction operation (“DROP”) affecting \$5,814 million owed to London Club commercial banks arising from trade credit arrears that developed during the 1980s. This operation was agreed upon in principle in March 1991 following several failed attempts at rescheduling but was consummated only in January 1992, with no banks opting to provide the “new money” envisaged earlier. In this operation, Nigeria bought back some \$3,391 million of the debt at a 60 percent discount (i.e., eliminating \$2,035 million and paying off \$1,357 million). Another \$2,049 million was converted at par to “Brady” bonds, whose principal was collateralized in full by U.S. Treasury zero-coupon (original issue discount) bonds, maturing in 2020 at this amount but costing Nigeria only \$224 million in 1992. Nonreschedulable arrears of \$373 million had to be paid at this time. One year’s interest of \$128 million was also collateralized one year in advance, a practice that has been continued subsequently. Thus for a cash outlay of less than \$2.0 billion in principal (\$1.4 billion for the buyback, \$0.2 billion for the principal collateral, and \$0.4 billion in arrears paid off), the authorities reduced this \$5.8 billion in debt to a little over \$2 billion. A small amount of debt conversion (see below) reduced the balance of par bonds to the present \$2,043 million. As there are no annual principal payments and the lump sum falling due in 2020 is already covered, the only debt service on these bonds is \$128 million annually in interest, on which Nigeria has kept current.

129. The promissory notes are unsecured obligations of the CBN, guaranteed by the federal government. The notes were originally issued in the mid-1980s to refinance overdue trade credits owed to unsecured suppliers and were restructured, together with capitalized interest on arrears, in 1988. Their “face value” of \$4,891 million in 1988 represented the total nominal value of a stream of equal quarterly payments (consisting of declining interest and rising

principal) through January 2010, equal in sum to 170 percent of the debt restructured.⁹² Their reported value has been reduced by payments of this annuity-like stream, other transactions, and accounting changes to \$1,613 million at the end of 1997. A buyback at discount occurred in late 1992 of \$1,136 million of the total, the details of which remain somewhat clouded, and a further buyback of \$210 million occurred in late 1997. These notes have also been the main object of Nigeria's debt conversion program, accounting for the bulk of the over \$1 billion in debt eliminated by this program since 1988 (see below). In 1997, moreover, the FMOF stopped including the remaining interest due with the principal, reducing the reported value by 25 percent (from \$2,140 million reported earlier for end-1997). In fact, the amount has not yet settled down, as a reconciliation exercise is still going on with the international bank managing the notes on behalf of the CBN.

G. Debt Conversion

130. Under Nigeria's debt conversion program, which began operation in July 1988, holders of Nigerian external debt instruments can convert them to naira for specified uses at a premium over their international market value, as measured at the prevailing exchange rate (currently, the AFEM rate). Nigeria benefits from retiring external debt at a discount from face value, as well as from a transaction commission of 2.5 percent of the discounted value paid in U.S. dollars to the CBN; however, it must be cautious about the inflationary implications of the amounts and source of naira provided. The converting party (redeemtor) benefits from what is effectively an exchange rate premium on the foreign exchange converted, for which he accepts restrictions on the use of the funds and on the timing of income and capital repatriation.

131. The naira proceeds may have four uses: the making of a gift or grant to a Nigerian nonprofit charitable, educational, research or religious entity; acquisition of CBN domestic debt instruments; expansion or recapitalization of existing enterprises, including privatized ones; and investment in new projects. Applications, whose value has greatly exceeded that of approvals, are screened by a ministerial-level committee, chaired by the CBN governor, that maintains annual and monthly ceilings on the aggregate amounts (initially established under the structural adjustment programs of the time) and reviews potential investors and purposes. Most conversions take place through auctions, with those offering the largest discounts from face value succeeding up to the amount offered. Exceptionally, awards are made outside the auctions at rates reflecting recent discounts. In practice, redeemtors do not necessarily buy the external debt instruments until assured of conversion, but they must then do so and surrender them within three weeks.

132. The naira proceeds are released from CBN blocked accounts, upon committee approval, for the needs of the approved projects. Investments through the program are

⁹²During the first eight quarters, the payments were only 1.25 percent of the "face value"; thereafter, they became 2.0 percent each for 80 quarters. The implicit interest rate is 5.092 percent.

recognized and treated as foreign investments, but interest, dividends and other current income may not be remitted abroad until five years after funds are released for investment, and capital proceeds from disposal of the investment may not be remitted for at least ten years, and then only up to 20 percent a year. The stated purpose of these restrictions is to ensure not only that the savings of external reserves is not frustrated, but also that redeemors are not given more favorable repayment terms than those provided to other creditors under existing rescheduling agreements.

133. The CBN promissory notes, as mentioned above, have been the main vehicle for debt conversion, but FMOF promissory notes, certain investment bonds, and debt under rescheduling agreements have also been eligible. Provision for the par bonds was added in 1989, but suspended in 1995; they are a less attractive vehicle since their market discount is smaller, owing to their collateralized principal. Under terms of the 1991 Paris Club accord, up to 10 percent (or \$20 million if higher) of commercial debts rescheduled and all official development and governmental loans rescheduled could be disposed of by the creditor agency in debt swaps for nature, aid, equity, or other objectives. The limit for commercial debt was raised to 20 percent in June 1996. Available records (with some unresolved inconsistencies) indicate that through the end of 1997, the debt-conversion program had resulted in the cancellation of some \$950 million in promissory notes since 1988 (other than the special buybacks totaling \$1,346 million noted above). Also canceled under the program were some \$230 million in debt restructured or refinanced in 1990-91, less than \$8 million in par bonds, \$48 million in Paris Club debt in 1996-97, and another unspecified \$42 million in 1989, for a total of \$1,276 million (Table 15). The pace of conversions was fastest in 1990-91, shortly after the program began; it slowed markedly during 1993-94, owing to artificial exchange rate appreciation and program suspensions, but it has picked up since, averaging about \$130 million per year in 1995-97.

H. Debt Management

134. As suggested above, the Nigerian authorities' efforts to manage and reduce the country's external debt burden have taken several forms. First, of course, has been the cap imposed since 1993 on actual debt-service payments. Said to represent 30 percent of the federal government's oil revenues net of outlays required for the oil industry (i.e., cash calls for joint-venture operations), the cap has in practice held actual payments to a range of \$1.3-2.1 billion a year. This unilateral limit has inevitably led to the rapid accumulation of arrears to the creditors concerned, mainly on pre-cutoff-date Paris Club debt, as discussed previously. The authorities have also repeatedly indicated their desire to conclude a new rescheduling agreement with Paris Club creditors on these amounts, but on terms—such as concessional rescheduling or discounted buybacks—that would result in a reduction of the net present value of the debt. They have recently indicated their intention to eliminate arrears on post-cutoff-date debt and preclude the emergence of new ones, as a step toward improving relations with the Paris Club. The effort to reconcile data with these creditors has been a related step in this direction. In the meantime, the authorities have continued to pursue piecemeal debt-reduction through the debt conversion program and buybacks at discount with interested bilateral creditors.

135. The authorities also embarked in 1996 on an appraisal of some 145 past projects reportedly financed by \$13,150 million in loans, obtained mainly under the aegis of export credit agencies (the bulk of the debt to Paris Club creditors), but also from commercial banks and other bilateral lenders. The appraisal categorized the projects according to whether they had never been completed (6 percent by loan value), had closed down shortly after completion (37 percent), or were successful enough to be operating at some level of capacity (57 percent). Public inquiries and some prosecutions were under way regarding some of the failed projects, and reappraisals were conducted in 1997 and continued into 1998, with a view to reviving other projects that could be made viable and assessing the cost of doing so. In light of this experience with externally financed projects and the persistent debt overhang arising mainly from them, the authorities have sought to limit new borrowing strictly since 1993. Reflecting this policy and some creditor reticence, medium- and long-term external loan disbursements recorded in the balance of payments have averaged only about \$486 million annually over the past five years. With actual debt-service payments estimated to have averaged \$1,653 million during this period, Nigeria has experienced an annual average net outflow on account of loan transactions of \$1,167 million.

Table 14. Nigeria: External Debt Outstanding, End-1997, and Debt Service Due, 1998

	Debt Outstanding, End-1997					Debt Service Due, 1998				
	Total, incl. arrears	Arrears		Principal balance	Principal	Scheduled debt service			Late interest 1/	Total due 2/
		Principal	Interest			Principal	Interest	Total		
(In millions of U.S. dollars)										
Multilateral	4,373	3	7	11	4,362	518	344	861	1	862
World Bank Group	2,782	0	0	0	2,782	352	206	558	0	558
IBRD	2,376	0	0	0	2,376	351	202	553	0	553
IDA	406	0	0	0	406	1	4	6	0	6
ADB Group	1,293	0	0	0	1,293	131	110	241	0	241
ADB	889	0	0	0	889	131	107	238	0	238
ADF	404	0	0	0	404	0	3	3	0	3
EIB	275	3	7	10	265	31	25	56	1	57
Other	22	0	0	0	22	4	2	6	0	6
Paris Club	20,553	10,342	4,644	14,986	5,567	1,570	334	1,904	1,306	3,209
Pre-cutoff-date	18,520	9,625	4,593	14,219	4,301	1,327	255	1,581	1,249	2,830
Not rescheduled	1,918	1,383	355	1,738	180	61	8	69	147	217
Rescheduled	16,602	8,243	4,238	12,481	4,121	1,266	246	1,512	1,101	2,614
Paris Club 1 (Dec. 1986)	5,752	4,552	1,200	5,752	0	0	0	0	479	479
Paris Club 2 (Mar. 1989)	6,753	3,032	1,848	4,880	1,874	937	112	1,049	450	1,499
Paris Club 3 (Jan. 1991)	4,097	658	1,191	1,849	2,248	329	134	463	173	636
Post-cutoff-date	2,032	716	51	767	1,266	243	79	322	57	379
Non-Paris Club bilateral	79	7	2	10	70	11	5	16	1	17
London Club (par bonds)	2,043	0	0	0	2,043	0	128	128	0	128
Promissory notes	1,613	0	0	0	1,613	93	81	174	0	174
Total	28,660	10,352	4,654	15,006	13,654	2,192	892	3,084	1,308	4,392
(In percent of total debt, including arrears)										
Multilateral	15.3	0.0	0.0	0.0	15.2	23.6	38.5	27.9	0.1	19.6
World Bank Group	9.7	0.0	0.0	0.0	9.7	16.1	23.1	18.1	0.0	12.7
IBRD	8.3	0.0	0.0	0.0	8.3	16.0	22.6	17.9	0.0	12.6
IDA	1.4	0.0	0.0	0.0	1.4	0.1	0.5	0.2	0.0	0.1
ADB Group	4.5	0.0	0.0	0.0	4.5	6.0	12.4	7.8	0.0	5.5
ADB	3.1	0.0	0.0	0.0	3.1	6.0	12.0	7.7	0.0	5.4
ADF	1.4	0.0	0.0	0.0	1.4	0.0	0.3	0.1	0.0	0.1
EIB	1.0	0.0	0.0	0.0	0.9	1.4	2.8	1.8	0.1	1.3
Other	0.1	0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.0	0.1
Paris Club	71.7	36.1	16.2	52.3	19.4	71.6	37.4	61.7	99.8	73.1
Pre-cutoff-date	64.6	33.6	16.0	49.6	15.0	60.5	28.5	51.3	95.5	64.4
Not rescheduled	6.7	4.8	1.2	6.1	0.6	2.8	0.9	2.2	11.3	4.9
Rescheduled	57.9	28.8	14.8	43.5	14.4	57.8	27.6	49.0	84.2	59.5
Paris Club 1 (Dec. 1986)	20.1	15.9	4.2	20.1	0.0	0.0	0.0	0.0	36.6	10.9
Paris Club 2 (Mar. 1989)	23.6	10.6	6.4	17.0	6.5	42.7	12.6	34.0	34.4	34.1
Paris Club 3 (Jan. 1991)	14.3	2.3	4.2	6.5	7.8	15.0	15.0	15.0	13.2	14.5
Post-cutoff-date	7.1	2.5	0.2	2.7	4.4	11.1	8.9	10.5	4.3	8.6
Non-Paris Club bilateral	0.3	0.0	0.0	0.0	0.2	0.5	0.5	0.5	0.1	0.4
London Club (par bonds)	7.1	0.0	0.0	0.0	7.1	0.0	14.4	4.2	0.0	2.9
Promissory notes	5.6	0.0	0.0	0.0	5.6	4.2	9.1	5.7	0.0	4.0
Total	100.0	36.1	16.2	52.4	47.6	100.0	100.0	100.0	100.0	100.0

Sources: External Debt Department, Federal Ministry of Finance; Central Bank of Nigeria; Paris Club secretariat; and staff estimates.

1/ Estimated at interest and penalty rate of 8.0 percent, compounded, on average estimated arrears for 1997 and 1998.

2/ Excludes \$8 million in estimated interest on borrowings during 1998.

Table 15. Nigeria: Debt Canceled Under the Debt-Conversion Program, 1988-97

(In millions of U.S. dollars)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	Total
Promissory notes	40.0	210.5	80.4	61.3	183.7	29.6	13.4	95.1	135.0	99.7	948.7
Restructured	0.0	0.0	116.7	48.7	0.0	0.0	0.0	0.0	0.0	0.0	165.4
Refinanced	0.0	0.0	55.8	8.4	0.0	0.0	0.0	0.0	0.0	0.0	64.1
Par bonds	0.0	0.0	0.0	0.0	0.0	5.0	0.0	2.8	0.0	0.0	7.8
Paris Club	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.2	48.2
Others	0.0	42.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.2
Total	40.0	252.7	252.9	118.4	183.7	34.6	13.4	97.8	135.0	147.9	1,276.4

Sources: Central Bank of Nigeria; and staff estimates.

Table 16. Nigeria: Gross Domestic Product by Sector of Origin at Current Prices, 1992-97 1/

	1992	1993	1994	1995	1996	1997 Est.
	(In millions of naira)					
Primary sector	466,794	746,609	891,065	1,414,255	2,038,435	2,320,699
Agricultural activities	145,225	231,833	349,245	619,805	841,456	1,023,833
Agriculture	120,720	196,134	296,967	527,474	713,786	866,399
Livestock	15,566	24,724	36,707	65,704	88,150	105,353
Forestry	2,740	3,633	5,480	7,560	9,498	11,614
Fishing	6,199	7,342	10,091	19,067	30,022	40,467
Mining and quarrying	321,568	514,776	541,821	794,450	1,196,978	1,296,866
<i>Of which: crude petroleum and gas</i>	320,645	513,567	540,264	792,373	1,194,561	1,294,160
Secondary sector	33,863	48,051	72,414	120,853	150,602	169,282
Manufacturing	26,349	38,431	60,347	105,154	132,554	149,248
Utilities	1,405	1,601	1,743	1,915	2,006	2,070
Building and construction	6,110	8,019	10,325	13,784	16,042	17,964
Tertiary sector	109,465	164,934	259,089	425,576	551,420	639,263
Transport	8,752	14,574	31,032	48,025	62,138	72,845
Communication	551	723	738	830	944	1,072
Wholesale and retail trade	62,296	100,849	158,395	273,913	357,053	415,176
Hotel and restaurants	756	1,217	1,989	2,712	3,328	4,286
Finance and insurance	15,125	16,276	12,555	20,398	27,752	33,447
Real estate	578	696	921	1,093	1,456	1,574
Housing	5,923	9,275	27,412	46,224	60,599	68,908
Community and other services	1,314	2,194	5,435	11,547	17,108	20,594
Government services	14,169	19,130	20,614	20,835	21,043	21,361
Gross domestic product at factor cost	610,122	959,594	1,222,568	1,960,683	2,740,457	3,129,243
Oil	320,645	513,567	540,264	792,373	1,194,561	1,294,160
Non-oil	289,477	446,027	682,304	1,168,311	1,545,896	1,835,083
Total indirect taxes (net)	16,055	15,486	25,555	22,355	86,791	106,000
Subsidies	-6,100	-7,800	-11,001	-5,301	-3,316	-1,348
Gross domestic product at market prices	620,077	967,280	1,237,123	1,977,737	2,823,932	3,233,896
	(In percent of GDP)					
Memorandum items:						
Oil GDP	52.6	53.5	44.2	40.4	43.6	41.4
Non-oil GDP	47.4	46.5	55.8	59.6	56.4	58.6
Primary sector	24.0	24.3	28.7	31.7	30.8	32.8
Secondary sector	5.6	5.0	5.9	6.2	5.5	5.4
Tertiary sector	17.9	17.2	21.2	21.7	20.1	20.4

Sources: Federal Office of Statistics; and staff estimates.

1/ Reflects revisions made by the Fund staff, through exchange rates used for petroleum sector.

Table 17. Nigeria: Gross Domestic Product by Sector of Origin at Constant 1990 Prices, 1992-97 1/

	1992	1993	1994	1995	1996	1997 Est.
	(In millions of naira)					
Primary sector	197,241	198,617	197,902	203,825	215,196	224,478
Agricultural activities	89,116	90,330	92,504	95,889	99,802	104,018
Agriculture	74,079	76,421	78,657	81,605	84,659	88,024
Livestock	9,552	9,633	9,723	10,165	10,455	10,704
Forestry	1,681	1,416	1,451	1,170	1,127	1,180
Fishing	3,804	2,861	2,673	2,950	3,561	4,111
Mining and quarrying	108,124	108,287	105,398	107,936	115,394	120,460
<i>Of which : crude petroleum and gas</i>	107,552	107,767	104,965	107,590	115,067	120,130
Secondary sector	20,975	20,643	20,137	20,172	20,416	20,645
Manufacturing	16,321	16,510	16,781	17,551	17,969	18,202
Utilities	870	688	485	320	272	252
Building and construction	3,784	3,445	2,871	2,301	2,175	2,191
Tertiary sector	73,401	78,152	79,543	80,890	82,458	84,290
Transport	5,850	6,858	9,472	9,094	9,277	9,609
Communication	368	340	225	157	141	141
Wholesale and retail trade	41,874	47,994	48,806	52,170	53,440	54,732
Hotel and restaurants	506	573	607	513	497	565
Finance and insurance	10,109	7,659	3,832	3,863	4,143	4,412
Real estate	386	327	281	207	217	208
Housing	3,959	4,365	8,367	8,753	9,047	9,089
Community and other services	878	1,032	1,659	2,187	2,554	2,716
Government services	9,471	9,002	6,292	3,945	3,142	2,818
Gross domestic product at factor cost	291,617	297,412	297,581	304,887	318,070	329,413
Oil	107,552	107,767	104,965	107,590	115,067	120,130
Non-oil	184,065	189,644	192,616	197,297	203,004	209,284
Total indirect taxes (net)	2,669	3,300	2,200	2,138	8,368	9,623
Subsidies	-126	-81	-1,009	-507	-320	-122
Gross domestic product at market prices	294,160	300,630	298,772	306,517	326,118	338,914
Memorandum items:	(In percent)					
Growth rate (in percent)						
GDP at factor costs	2.9	2.0	0.1	2.5	4.3	3.6
Oil sector	2.7	0.2	-2.6	2.5	6.9	4.4
Non-oil sector	3.0	3.0	1.6	2.4	2.9	3.1
Agricultural activities	2.1	1.4	2.4	3.7	4.1	4.2
Agriculture	3.4	3.2	2.9	3.7	3.7	4.0
Livestock	1.3	0.9	0.9	4.5	2.9	2.4
Forestry	-15.9	-15.8	2.5	-19.4	-3.7	4.7
Fishing	-9.7	-24.8	-6.6	10.4	20.7	15.5
Secondary sector	-2.3	-1.6	-2.5	0.2	1.2	1.1
<i>Of which : manufacturing</i>	1.0	1.2	1.6	4.6	2.4	1.3
Tertiary sector	6.0	6.5	1.8	1.7	1.9	2.2

Sources: Federal Office of Statistics; and staff estimates.

1/ Reflects revisions made by the Fund staff, through exchange rates used for petroleum sector.

Table 18. Nigeria: Gross Domestic Product by Expenditure Category at Current Prices, 1992-97 1/
(In millions of naira)

	1992	1993	1994	1995	1996	1997 Est.
External balance	10,776	-29,780	12,296	41,598	584,559	211,677
Exports of goods and nonfactor services	261,913	455,794	516,569	875,895	1,359,582	1,321,418
Goods	258,684	449,556	492,219	825,667	1,289,352	1,249,177
Nonfactor services	3,229	6,239	24,350	50,228	70,229	72,241
Imports of goods and nonfactor services	-251,137	-485,574	-504,273	-834,297	-775,023	-1,109,741
Goods	-193,497	-375,650	-338,270	-575,801	-497,281	-760,277
Nonfactor services	-57,640	-109,924	-166,003	-258,496	-277,742	-349,465
Domestic demand	609,301	997,060	1,224,826	1,936,139	2,239,373	3,022,219
Consumption	474,103	771,810	981,941	1,617,701	1,878,973	2,526,463
Government	114,003	169,282	176,395	219,395	226,810	275,361
Private	360,100	602,527	805,546	1,398,305	1,652,163	2,251,102
Gross investment	135,198	225,251	242,886	318,439	360,400	495,755
Stock changes	300	450	293	351	386	447
Gross fixed investment	134,898	224,801	242,593	318,088	360,014	495,308
Government	83,172	103,899	109,606	139,001	188,634	277,612
Private	51,726	120,901	132,987	179,086	171,380	217,696
Gross domestic product at market prices	620,077	967,280	1,237,123	1,977,737	2,823,932	3,233,896
Net factor income from abroad	-55,912	-106,289	-123,027	-156,241	-178,468	-181,442
Gross national product at market prices	564,165	860,992	1,114,096	1,821,496	2,645,464	3,052,453
Net transfers from abroad	16,881	38,346	26,161	51,548	70,137	122,224
National disposable income	581,046	899,338	1,140,257	1,873,044	2,715,601	3,174,678
National savings 2/	106,943	127,529	158,316	255,344	836,628	648,214
Gross domestic savings 3/	145,973	195,471	255,182	360,037	944,959	707,432

Sources: Federal Office of Statistics; Federal Ministry of Finance; Central Bank of Nigeria; and staff estimates.

1/ Reflects revisions made by the Fund staff.

2/ National disposable income less aggregate consumption.

3/ Domestic disposable income (GDP) less aggregate consumption.

Table 19. Nigeria: Gross Domestic Product by Expenditure Category at Constant 1990 Prices, 1992-97 1/
(In millions of naira)

	1992	1993	1994	1995	1996	1997 Est.
External balance	29,488	25,991	42,014	54,007	88,279	44,232
Exports of goods and nonfactor services	129,604	124,616	133,598	156,075	174,430	176,550
Goods	128,006	122,910	127,300	147,125	165,419	166,898
Nonfactor services	1,598	1,706	6,298	8,950	9,010	9,652
Imports of goods and nonfactor services	-100,116	-98,625	-91,584	-102,067	-86,151	-132,317
Goods	-77,138	-76,298	-61,435	-70,443	-55,277	-90,650
Nonfactor services	-22,978	-22,327	-30,149	-31,624	-30,874	-41,668
Domestic demand	264,672	274,639	256,758	252,509	237,839	294,682
Consumption	195,805	182,811	166,752	175,531	172,291	216,017
Government	77,917	97,447	64,676	46,552	37,223	39,059
Private	117,889	85,364	102,076	128,979	135,068	176,958
Gross investment	68,867	91,828	90,006	76,978	65,548	78,665
Stock changes	617	608	239	162	140	144
Gross fixed investment	68,250	91,220	89,767	76,816	65,408	78,521
Government	42,080	42,160	40,558	33,568	34,271	44,009
Private	26,170	49,059	49,209	43,248	31,137	34,511
Gross domestic product at market prices	294,160	300,630	298,772	306,517	326,118	338,914
Net factor income from abroad	-22,289	-21,588	-22,344	-19,114	-19,838	-21,634
Gross national product at market prices	271,871	279,042	276,428	287,402	306,280	317,280
Net transfers from abroad	6,730	7,789	4,751	6,306	7,796	14,573
National disposable income	278,601	286,831	281,179	293,709	314,076	331,853
National savings 2/	82,796	104,020	114,428	118,177	141,785	115,836
Gross domestic savings 3/	98,355	117,819	132,020	130,985	153,827	122,897

Sources: Federal Office of Statistics; Federal Ministry of Finance; Central Bank of Nigeria; and staff estimates.

1/ Reflects revisions made by the Fund staff.

2/ National disposable income less aggregate consumption.

3/ Domestic disposable income (GDP) less aggregate consumption.

Table 20. Nigeria: Selected Petroleum Statistics, 1992-97

	1992	1993	1994	1995	1996	1997 Est.
Production and exports (Millions of barrels per day)						
Production 1/	1.959	2.038	1.897	1.990	2.173	2.265
Domestic consumption	0.291	0.303	0.276	0.290	0.267	0.268
Stock changes	-0.012	0.000	0.004	0.000	0.000	0.000
Exports 2/	1.678	1.735	1.621	1.700	1.906	1.997
World price (U.S. dollars per barrel)						
Unit value of exports	20.00	17.40	15.80	17.20	20.80	19.63
U.K. Brent, average price	19.30	17.00	15.81	17.04	21.00	19.64
Export values 2/ (In millions of U.S. dollars)						
	12,026	11,022	9,302	11,448	15,830	14,850
Domestic petroleum product prices (In naira per liter, unless otherwise indicated)						
Crude oil (naira per barrel)	20.00	20.00	183.00	374.00	374.00	374.00
Premium motor spirits	0.70	3.25	11.00	11.00	11.00	11.00
Kerosene	0.50	0.50	6.00	6.00	6.00	6.00
Gas oil/diesel	0.55	0.55	9.00	9.00	9.00	9.00
Fuel oil 3/	0.50	0.50	7.00	7.00	7.00	7.00
Liquefied petroleum gas (naira per kilogram)	2.00	2.00	2.00	2.00	2.00	2.00
Aviation spirits	1.05	1.05	8.00	8.00	8.00	8.00
Domestic consumption of petroleum products (In thousands of metric tons)						
Premium motor spirits	4,595.0	5,282.0	4,231.5	4,126.4	5,254.4	5,120.0
Kerosene	1,957.0	1,764.0	1,231.0	1,831.3	1,418.6	1,456.0
Gas oil/diesel	2,234.0	2,961.0	2,170.5	2,050.9	1,678.3	1,660.6
Fuel oil (high and low "pour")	1,012.0	868.0	705.7	645.7	715.4	667.7
Liquefied petroleum gas	48.9	36.3	20.6	11.4	53.3	46.0
Aviation spirits	389.0	372.1	363.4	336.9	566.6	861.2

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

1/ Includes condensates.

2/ Balance of payments basis, including exports of condensate.

3/ Average price of high "pour" and low "pour" fuel oil.

Table 21. Nigeria: Selected Indicators of Agricultural Production and Prices, 1992-97

	1992	1993	1994	1995	1996	1997 Est.
	(In thousands of metric tons)					
Food crops						
Millet	4,501	4,602	4,757	5,563	5,803	5,997
Sorghum	5,909	6,951	6,197	6,997	7,514	7,954
Maize	5,840	6,290	6,902	6,931	6,217	6,285
Rice (paddy)	3,260	3,065	2,427	3,203	3,122	3,230
Yams	19,781	21,632	23,153	22,818	23,928	24,713
Cassava	29,184	30,128	31,005	31,404	32,950	33,510
Export crops						
Cocoa	292	306	323	203	323	325
Groundnuts	1,297	1,416	1,453	1,579	2,078	2,101
Palm kernels	1,321	491	503	543	548	550
Cotton	346	192	218	251	301	309
Shea nuts	331	336	353	384	367	373
Rubber	220	225	230	255	245	250
	(Naira per metric ton)					
Average prices for food crops						
Millet	5,681	7,463	7,240	14,296	19,323	16,257
Sorghum	4,678	6,397	6,833	19,063	17,276	16,031
Maize	5,514	6,690	6,646	15,199	19,799	20,519
Rice	12,606	18,184	21,717	33,823	40,861	45,048
Yams	5,942	10,404	10,510	17,528	21,336	25,956
Cassava	2,001	4,960	6,388	11,600	14,067	11,014
Average prices for export crops						
Cocoa	12,745	25,278	61,180	73,402	80,222	86,697
Groundnuts	6,843	12,958	13,500	20,067	24,125	17,797
Palm kernels	5,692	10,567	14,374	31,730	22,185	16,554
Cotton	3,778	18,000	45,000	45,232	37,757	35,883
Shea nuts	...	...	...	...	...	...
Rubber	12,520	24,091	34,400	34,775	51,917	56,722

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

Table 22. Nigeria: Index of Industrial Production, 1992-97

	1992	1993	1994	1995	1996	1997 Est.
	(1985 = 100)					
Total industrial production	136.2	129.4	122.8	128.7	131.4	131.6
Manufacturing	169.5	145.5	132.8	136.3	137.7	138.7
Sugar confectionary	176.7	134.4	104.8	59.4	56.9	57.1
Soft drinks	186.5	159.7	147.8	153.2	164.9	163.1
Beer and stout	104.5	99.0	95.2	103.9	108.3	116.7
Cotton textiles	151.1	106.4	92.1	89.6	100.4	104.6
Synthetic fabrics	1,891.6	1,229.0	1,066.9	794.0	814.3	743.7
Footwear	92.0	88.0	59.0	42.6	53.3	51.9
Paints	99.7	110.6	94.4	118.1	123.5	115.3
Refined petroleum	113.7	112.0	109.7	117.9	135.2	...
Cement	100.5	104.1	95.0	93.0	94.6	91.1
Roofing sheets	41.2	39.3	30.8	37.8	30.3	28.1
Vehicle assembly	18.3	18.9	17.4	11.7	14.6	13.5
Soap and detergent	154.1	164.0	153.0	152.6	164.3	207.1
Radio and televisions	11.6	10.1	8.9	6.0	4.8	6.8
Mineral production	119.9	124.9	123.2	124.4	127.9	131.7
Petroleum	124.3	125.7	124.8	125.4	130.2	133.3
Gas	170.2	172.3	171.0	172.1	196.2	196.3
Cassiterite	6.6	10.7	11.0	12.4	13.9	8.1
Columbite	59.7	25.8	20.4	56.2	54.2	31.1
Coal	70.8	38.5	44.8	13.8	14.2	14.6
Limestone	2.6	1.7	1.8	2.0	1.9	2.0
Electricity production	139.2	142.2	145.4	150.2	136.1	132.9
	(In thousands of megawatts)					
Electricity consumption	8,716.1	8,860.0	10,463.1	9,435.9	9,209.4	10,990.8
Industrial	2,183.0	2,203.0	2,146.7	2,037.2	2,200.0	2,615.8
Commercial and street lightin	2,163.0	2,207.0	2,690.0	2,448.9	2,083.0	2,846.6
Residential	4,370.1	4,450.0	5,626.4	4,949.8	4,926.4	5,528.4

Source: Central Bank of Nigeria.

Table 23. Nigeria: National Consumer Price Indices, 1992-97
(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
1992 average	478.4	506.8	460.2	498.1	298.3	617.9	443.6	440.7	405.9	412.2
March	406.8	421.6	394.6	469.6	275.9	553.6	371.2	384.6	357.8	361.4
June	499.3	537.9	460.0	505.1	287.3	631.6	457.8	431.3	406.9	404.5
September	528.9	567.4	504.0	515.4	317.3	655.3	493.5	477.6	438.5	437.2
December	540.3	567.7	555.5	555.7	343.9	692.3	517.7	523.5	456.9	517.7
1993 average	751.9	800.2	746.0	723.1	474.8	938.8	662.9	706.3	654.7	628.7
March	634.0	672.0	634.7	645.9	392.0	805.2	594.4	571.0	525.2	603.5
June	780.6	855.6	732.9	716.5	430.4	907.8	616.1	653.4	619.9	620.4
September	837.5	894.2	813.8	780.9	547.3	1,032.6	732.9	753.4	704.4	644.9
December	871.3	892.1	933.9	873.0	633.5	1,149.5	836.6	1,021.2	908.9	719.3
1994 average	1,180.7	1,174.6	1,195.4	1,107.4	1,056.7	1,583.6	1,188.5	1,532.0	1,236.2	1,114.9
March	955.5	975.7	1,000.2	942.0	705.4	1,284.4	972.9	1,101.2	1,033.2	866.9
June	1,105.1	1,115.1	1,177.7	1,053.1	916.2	1,401.7	1,101.2	1,267.5	1,142.8	1,156.3
September	1,341.5	1,320.9	1,321.7	1,183.3	1,322.3	1,735.9	1,285.7	1,904.9	1,379.0	1,243.7
December	1,540.1	1,490.4	1,531.7	1,470.4	1,519.0	2,361.1	1,650.0	2,026.6	1,623.8	1,369.1
1995 average	2,040.4	2,017.7	1,973.2	1,996.3	1,844.9	3,042.1	2,013.1	2,374.3	2,154.3	1,960.4
March	1,732.3	1,668.1	1,698.5	1,749.3	1,684.4	2,792.5	1,867.7	2,153.7	1,859.4	1,681.7
June	2,094.9	2,107.3	2,005.3	1,947.3	1,805.5	3,040.2	1,949.6	2,324.3	2,116.2	1,941.3
September	2,278.9	2,277.9	2,114.8	2,173.7	2,046.4	3,295.5	2,146.9	2,541.4	2,332.7	2,130.5
December	2,334.6	2,306.7	2,338.1	2,359.9	2,091.8	3,313.6	2,354.9	2,784.5	2,496.9	2,264.0
1996 average	2,638.1	2,630.7	2,463.3	2,657.7	2,394.2	3,464.3	2,728.6	3,022.8	2,878.4	2,526.7
March	2,458.2	2,420.4	2,316.4	2,583.1	2,307.6	3,409.4	2,494.9	2,876.8	2,673.3	2,312.3
June	2,699.2	2,715.4	2,387.8	2,644.3	2,441.5	3,475.1	2,762.1	3,033.1	2,859.6	2,525.2
September	2,818.0	2,850.0	2,561.1	2,766.0	2,457.7	3,562.8	2,911.4	3,065.0	3,012.0	2,657.8
December	2,668.8	2,600.1	2,605.1	2,818.1	2,536.7	3,622.5	2,932.6	3,298.1	3,234.4	2,665.6
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	2,940.6	2,900.3	2,705.7	3,003.4	2,571.2	3,638.3	3,355.1	3,589.0	3,699.6	2,821.7

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

Table 24. Nigeria: Urban Consumer Price Indices, 1992-97
(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
1992 average	514.3	546.3	570.1	487.6	302.6	569.3	622.4	624.2	542.1	431.7
March	430.0	443.4	495.9	439.0	291.6	504.1	483.6	526.7	473.0	370.7
June	527.2	567.0	582.6	494.4	296.9	571.6	683.4	594.5	543.9	421.0
September	566.0	606.8	628.9	524.9	309.2	630.1	709.6	692.8	591.8	445.5
December	604.6	643.2	676.8	546.1	343.3	650.9	729.8	768.6	604.3	644.5
1993 average	830.2	882.5	977.9	716.3	493.9	853.7	880.2	1,049.7	950.9	735.2
March	695.7	743.4	775.7	643.4	412.1	742.3	759.6	819.6	708.5	680.3
June	846.5	921.0	1,021.3	727.8	466.2	854.1	804.6	951.8	915.8	704.1
September	916.1	976.2	1,063.0	765.5	559.9	915.4	972.3	1,143.8	1,058.1	774.7
December	989.6	1,007.9	1,248.2	861.6	635.7	1,020.7	1,111.9	1,543.8	1,347.0	848.0
1994 average	1,317.1	1,282.4	1,492.7	1,108.8	1,077.0	1,371.4	1,526.0	2,274.1	1,792.2	1,263.0
March	1,108.9	1,108.7	1,365.8	932.9	849.6	1,175.4	1,304.1	1,630.1	1,535.1	902.5
June	1,232.3	1,218.0	1,450.2	1,086.7	980.7	1,288.3	1,496.5	1,839.4	1,658.2	1,278.6
September	1,504.3	1,427.8	1,598.8	1,171.0	1,462.0	1,411.7	1,554.6	2,802.2	1,912.7	1,405.0
December	1,617.0	1,550.2	1,796.2	1,417.9	1,374.2	1,856.5	1,974.7	2,750.2	2,357.6	1,470.4
1995 average	2,134.9	2,095.7	2,424.7	2,056.8	1,672.4	2,656.6	2,320.4	3,204.1	2,968.5	1,830.1
March	1,842.3	1,789.2	2,098.2	1,736.6	1,454.6	2,369.9	2,074.7	2,917.2	2,605.4	1,639.1
June	2,156.4	2,148.1	2,473.8	2,010.9	1,635.9	2,647.3	2,337.1	3,076.8	2,872.1	1,879.0
September	2,301.4	2,251.6	2,541.0	2,247.4	1,844.4	2,916.2	2,489.5	3,427.5	3,198.3	1,986.4
December	2,428.1	2,358.2	2,820.6	2,463.8	1,880.0	2,936.4	2,696.0	3,944.1	3,407.0	2,063.7
1996 average	2,771.0	2,680.1	3,033.8	2,800.3	2,344.8	2,982.0	3,332.0	4,206.6	3,982.0	2,953.0
March	2,604.1	2,523.0	2,896.2	2,618.5	2,179.7	2,879.5	2,991.1	3,989.7	3,518.4	2,873.6
June	2,867.7	2,787.5	2,991.8	2,821.9	2,515.3	2,939.6	3,455.5	4,252.7	3,900.0	3,080.8
September	2,883.3	2,809.9	3,085.5	2,988.4	2,343.8	3,177.0	3,649.3	4,170.9	4,309.0	3,189.0
December	2,853.4	2,675.0	3,130.5	3,033.1	2,523.8	3,167.8	3,727.2	4,662.8	4,504.1	3,199.0
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

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

Table 25. Nigeria: Rural Consumer Price Indices, 1992-97
(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	698.5	49.6	47.7	114.5	36.1	10.8	18.3	12.5	12.0
1992 average	471.4	499.4	444.0	500.4	296.9	627.0	402.7	340.8	364.1	408.0
March	402.3	417.5	379.7	475.2	272.0	562.9	345.5	307.2	322.6	359.5
June	493.8	532.4	442.0	507.1	284.9	643.0	406.2	342.4	364.9	401.1
September	521.6	560.0	485.6	513.8	319.3	660.1	444.0	360.4	391.6	435.4
December	527.8	553.5	537.6	557.4	344.0	700.1	469.2	390.1	411.8	491.0
1993 average	736.7	784.6	711.9	724.3	470.1	954.8	613.1	519.3	564.1	606.3
March	622.0	658.5	613.9	646.4	387.1	817.0	556.6	435.6	469.1	587.3
June	767.7	843.2	690.4	714.5	421.6	918.0	572.9	491.0	529.4	602.8
September	822.2	878.3	777.1	783.7	544.3	1,054.7	678.1	540.8	596.2	617.6
December	848.4	870.3	887.6	875.0	633.0	1,173.8	773.6	736.8	774.9	692.2
1994 average	1,154.2	1,154.2	1,151.6	1,107.2	1,051.7	1,623.7	1,111.2	1,127.9	1,066.2	1,083.8
March	925.7	950.6	946.4	943.6	669.9	1,305.0	897.0	813.3	879.7	859.4
June	1,080.4	1,095.6	1,137.5	1,047.0	900.3	1,423.1	1,010.7	956.1	985.2	1,125.4
September	1,309.9	1,300.7	1,280.8	1,185.5	1,288.0	1,797.1	1,224.1	1,416.4	1,215.7	1,209.7
December	1,525.1	1,479.1	1,479.1	1,479.9	1,554.6	2,456.4	1,575.7	1,632.7	1,399.3	1,347.8
1995 average	2,022.0	2,003.0	1,906.7	1,985.4	1,887.4	3,114.9	1,942.8	1,922.5	1,905.2	1,987.8
March	1,710.9	1,645.2	1,639.6	1,751.6	1,740.9	2,872.3	1,820.3	1,738.1	1,631.2	1,690.7
June	2,083.0	2,099.6	1,936.3	1,935.8	1,847.2	3,114.4	1,860.9	1,914.7	1,885.1	1,954.4
September	2,274.5	2,282.9	2,052.0	2,160.3	2,096.1	3,367.2	2,068.6	2,059.0	2,068.0	2,160.8
December	2,316.5	2,297.0	2,267.1	2,341.1	2,144.0	3,384.8	2,276.8	2,153.5	2,218.6	2,306.1
1996 average	2,612.2	2,621.4	2,379.3	2,631.9	2,406.3	3,555.3	2,590.5	2,378.4	2,540.9	2,436.9
March	2,429.8	2,401.1	2,231.0	2,576.7	2,339.0	3,509.5	2,381.4	2,270.9	2,414.8	2,194.2
June	2,666.4	2,701.8	2,298.9	2,612.1	2,423.3	3,576.2	2,603.4	2,369.2	2,541.3	2,408.2
September	2,805.3	2,858.5	2,483.8	2,725.8	2,485.7	3,635.6	2,742.5	2,463.0	2,615.2	2,546.0
December	2,633.0	2,586.0	2,527.8	2,779.2	2,539.8	3,708.4	2,750.7	2,555.2	2,846.0	2,582.3
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

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

Table 26. Nigeria: National Unemployment Rates, 1992-97 1/
(In percent)

Surveys	Composite	Urban	Rural
1992			
March	3.4	4.7	3.1
June	3.2	4.2	3.0
September	4.0	5.8	2.6
December	3.4	4.6	3.2
1993			
March	4.0	4.2	4.0
June	...	...	...
September	3.4	4.1	3.2
December	2.7	3.8	2.4
1994			
March	2.2	2.9	2.0
June	2.1	2.5	2.0
September	1.5	3.5	1.1
December	2.0	3.2	1.7
1995			
March	2.0	3.1	1.8
June	1.8	3.6	1.4
September	2.1	3.8	1.7
December	1.8	3.9	1.6
1996			
March	2.5	3.5	2.3
June	3.8	5.9	3.4
September	1.9	3.6	1.5
December	3.4	6.1	2.8
1997			
March	2.2	2.9	2.0
June	2.6	3.8	2.4
September	4.0	5.8	3.7
December	4.5	6.5	4.1

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

1/ Survey data measuring "open" unemployment; the data do not capture "disguised" unemployment. 1997 data are estimated.

Table 27. Nigeria: Consolidated Government Finance, 1992-97 1/

	1992	1993	1994	1995	1996	1997 Prov.
(In millions of naira)						
Total revenues and grants	217,386	246,922	225,985	444,040	558,136	599,816
Petroleum revenue	183,432	206,893	171,786	236,411	307,602	326,640
Nonpetroleum revenue	33,954	40,029	54,199	207,629	248,534	271,176
Tax revenue	27,716	31,908	52,093	103,672	134,615	164,395
Taxes on net income, profits, and capital gains	11,661	16,162	26,539	42,729	44,512	62,155
Domestic taxes on goods and services	0	0	7,260	20,509	31,033	34,000
Taxes on international trade and transactions	16,055	15,745	18,295	40,434	59,071	68,240
Nontax revenue	6,239	8,121	2,106	103,958	113,919	106,781
Grants	0	0	0	0	2,000	2,000
Total expenditure and net lending	197,175	273,181	286,001	358,396	415,445	552,973
Of which: nondebt	136,107	193,757	216,439	285,825	350,379	481,149
Recurrent expenditure	114,003	169,282	176,395	219,395	226,810	275,361
Personnel costs	7,056	18,199	22,153	30,700	40,858	46,000
Overhead costs	8,562	20,500	25,486	36,194	35,469	55,000
Interest payments due	61,068	79,424	69,562	72,572	65,066	71,824
Domestic interest	24,756	37,810	28,479	28,027	20,000	32,000
Foreign interest	36,313	41,614	41,083	42,541	40,066	36,824
Other (local contractors)	0	0	0	2,004	5,000	3,000
Other 2/	37,317	51,159	59,194	79,930	85,417	102,537
Capital expenditure	83,172	103,899	109,606	139,001	188,634	277,612
Domestically financed 3/	74,036	91,930	96,296	133,002	174,821	269,386
Of which: Petroleum Special Trust Fund	...	...	...	275	18,077	42,984
Foreign financed	9,136	11,969	13,310	5,999	13,814	8,226
Overall balance	0	0	0	0	0	0
Overall balance	20,211	-26,259	-60,016	85,644	142,691	46,842
Financing	-20,211	26,259	60,016	-85,644	-142,691	-46,842
External	-54,961	20,015	14,475	-736	11,124	30,326
Borrowing	9,136	11,969	13,310	5,999	13,814	8,226
Amortization due	-110,074	-57,469	-59,150	-63,683	-71,755	-49,137
Exceptional financing	7,321	0	0	0	0	0
Change in arrears	38,657	65,515	60,316	56,949	69,065	71,237
Domestic	83,152	90,573	63,732	18,085	-204,340	-59,606
Banking system (net) 4/	64,774	91,014	42,111	28,803	-214,294	-69,606
Nonbank	18,378	-441	21,621	-10,717	9,954	10,000
Unspecified net financing 5/	-48,402	-84,328	-18,192	-102,994	50,525	-17,562
(In percent of non-oil GDP)						
Total revenue and grants	75.1	55.4	33.1	38.0	36.1	32.7
Of which: petroleum revenue	63.4	46.4	25.2	20.2	19.9	17.8
Total expenditure and net lending	68.1	61.2	41.9	30.7	26.9	30.1
Recurrent expenditure	39.4	38.0	25.9	18.8	14.7	15.0
Of which: foreign interest due	12.5	9.3	6.0	3.6	2.6	2.0
domestic interest due	8.6	8.5	4.2	2.4	1.3	1.7
Capital expenditure	28.7	23.3	16.1	11.9	12.2	15.1
Overall balance	7.0	-5.9	-8.8	7.3	9.2	2.6
Foreign financing	-19.0	4.5	2.1	-0.1	0.7	1.7
Domestic financing	28.7	20.3	9.3	1.5	-13.2	-3.2
Of which: bank financing 4/	22.4	20.4	6.2	2.5	-13.9	-3.8
Unspecified financing 5/	-16.7	-18.9	-2.7	-8.8	3.3	-1.0
Memorandum items:						
Primary balance 6/	29.0	12.3	1.4	13.5	13.4	6.5
Nominal non-oil GDP (in millions of naira)	289,477	446,027	682,304	1,168,311	1,545,896	1,835,083
Price of Nigerian oil (U.S. dollars per barrel)	19.59	17.41	15.76	17.17	20.81	19.68

Source: Federal Ministry of Finance.

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

2/ Includes fertilizer subsidy, pre-Second-tier Foreign Exchange Market (SFEM) payments, PSTF recurrent expenditure, and state and local government (including the special funds) recurrent expenditure.

3/ Consists of federal government budgetary capital expenditures, national priority projects, estimated capital expenditure by the state and local governments (including the special funds), Nigerian National Petroleum Corporation (NNPC) cash calls and priority projects, and capital expenditure by the PSTF.

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

5/ Unspecified net financing represents difference between net credit to government derived from the monetary accounts and total expenditure derived from the fiscal accounts.

6/ Primary balance is defined as total revenue and grants less total expenditure net of pre-SFEM payments and interest payments due.

Table 28. Nigeria: Consolidated Government Revenue, 1992-97 1/
(In millions of naira)

	1992	1993	1994	1995	1996	1997 Est.
Total revenue and grants	217,386	246,922	225,985	444,040	558,136	599,816
Tax revenue	57,613	71,619	82,444	161,500	211,282	258,235
Taxes on net income, profits, and capital gains	41,558	55,874	56,889	100,557	121,179	155,995
Petroleum profits tax and royalty	29,897	39,712	30,351	57,828	76,667	93,840
Company income tax 2/	5,416	9,401	12,275	21,878	22,000	26,000
Education tax	0	0	2,128	1,845	1,000	1,733
Personal income tax 3/	6,245	6,762	12,136	19,005	21,511	34,422
Domestic taxes on goods and services (value-added tax)	0	0	7,260	20,509	31,033	34,000
Taxes on international trade and transactions	16,055	15,745	18,295	40,434	59,071	68,240
Import duties, excises, and fees 4/	16,055	15,745	18,295	37,967	55,000	63,000
Customs levies 5/	0	0	0	2,467	4,071	5,240
Nontax revenue	159,773	175,303	143,542	282,541	344,854	339,581
Oil export proceeds	127,423	165,045	135,040	119,436	159,000	167,800
Autonomous foreign exchange market profits	0	0	0	79,645	103,190	90,247
Domestic petroleum product revenues 6/	26,112	2,137	6,396	59,147	71,935	65,000
Funds earmarked for federation account	...	...	...	38,687	30,000	27,000
Funds earmarked for Petroleum Special Trust Fund	...	...	...	20,460	41,935	38,000
Federal government independent revenue 7/	6,239	8,121	2,106	19,121	3,407	13,000
Petroleum Special Trust Fund independent revenue 8/	0	0	0	5,192	7,322	3,533
Grants	0	0	0	0	2,000	2,000

Sources: Federal Ministry of Finance; and staff estimates.

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

2/ Federal Inland Revenue Service revenue, primarily from company income tax, but also includes "other tax" income.

3/ Consists of personal income tax collected by state governments. Federal Inland Revenue Service also collects personal income tax from armed forces personnel and inhabitants of the Federal Capital Territory, which is reported as "other tax" income.

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

5/ Consists of import levies of a 5 percent port development surcharge, a 1 percent Nigerian Shipper's Council surcharge, and a 1 percent Raw Materials Research and Development Council surcharge that go directly to the federal government budget.

6/ From 1994 onward, consists of the statutory allocation from the Petroleum Trust Fund (PTF) to the federation account and to the PSTF.

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

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

Table 29. Nigeria: Consolidated Government Expenditure, 1992-97 1/
(In millions of naira)

	1992	1993	1994	1995	1996	1997 Est.
Total expenditure and net lending	197,175	273,181	286,001	358,396	415,445	552,973
Recurrent expenditure	114,003	169,282	176,395	219,395	226,810	275,361
Goods and services	50,280	85,518	103,167	141,234	156,409	203,537
Federal government personnel costs	7,056	18,199	22,153	30,700	40,858	46,000
Wages and salaries	6,002	16,733	20,381	28,244	37,589	42,320
Pensions and gratuities	1,054	1,466	1,772	2,456	3,269	3,680
Federal government overhead	8,562	20,500	25,486	36,194	35,469	55,000
State and local government 2/	34,662	46,819	55,528	74,195	79,806	102,024
Petroleum Special Trust Fund	0	0	0	145	276	513
Fertilizer subsidy	0	2,600	3,667	5,590	5,335	0
Pre-Second-tier Foreign Exchange Market payments	2,655	1,740	0	0	0	0
Interest payments due	61,068	79,424	69,562	72,572	65,066	71,824
Domestic interest	24,756	37,810	28,479	28,027	20,000	32,000
Foreign interest	36,313	41,614	41,083	42,541	40,066	36,824
Other (local contractors)	0	0	0	2,004	5,000	3,000
Capital expenditure	83,172	103,899	109,606	139,001	188,634	277,612
Domestically financed	74,036	91,930	96,296	133,002	174,821	269,386
Federal government	11,976	21,100	31,300	58,582	64,257	121,072
Budgetary	...	17,220	27,100	43,182	51,065	104,792
National priority projects	...	3,880	4,200	15,400	13,192	16,280
State and local government 2/	22,162	22,944	25,098	35,145	41,333	52,091
Nigerian National Petroleum Corporation	39,898	47,886	39,898	39,000	51,154	53,240
Cash calls	...	...	...	...	38,504	45,100
Priority projects	...	...	...	...	12,648	8,140
Petroleum Special Trust Fund	0	0	0	275	18,077	42,984
Foreign financed	9,136	11,969	13,310	5,999	13,814	8,226

Sources: Federal Ministry of Finance; and staff estimates.

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

2/ Includes the special funds.

Table 30. Nigeria: Federation Account Operations, 1992-97
(In millions of naira)

	1992	1993	1994	1995	1996	1997 Prov.
Total revenue	125,256	131,196	115,698	177,536	178,345	200,540
Petroleum revenue	103,785	106,051	85,128	117,691	101,345	111,540
Petroleum dollar revenue (net)	77,673	103,914	78,733	79,004	71,345	84,540
Gross government export proceeds	127,423	165,045	135,040	119,436	159,000	167,800
Royalty and petroleum profit tax	29,897	39,712	30,351	57,828	76,667	93,840
Less: first charges/dedicated accounts	79,647	100,843	86,658	98,260	164,322	177,100
Petroleum naira revenue (net)	26,112	2,137	6,396	38,687	30,000	27,000
Petroleum naira revenue (gross)	26,112	2,137	6,396	59,147	71,935	65,000
Less: transfer to Petroleum Special Trust Fund	...	...	...	20,460	41,935	38,000
Nonpetroleum revenue	21,471	25,146	30,570	59,845	77,000	89,000
Federal Inland Revenue Service	5,416	9,401	12,275	21,878	22,000	26,000
Customs and excise	16,055	15,745	18,295	37,967	55,000	63,000
Total expenditure	124,800	132,960	116,346	168,173	171,338	195,900
Deduction for fertilizer subsidy	0	2,600	3,667	5,590	5,335	0
Transfers to stabilization account	47,456	24,397	5,057	8,524	0	0
Federation account distribution 1/	77,344	105,964	107,622	154,058	166,003	195,900
Federal government	38,240	51,798	53,661	73,524	81,056	97,262
State government	19,360	25,632	25,674	39,221	41,522	48,130
Local government	15,210	21,360	21,395	32,684	34,602	40,108
Special funds	4,534	7,174	6,892	8,629	8,824	10,401
Federal Capital Territory	778	1,068	1,070	1,634	1,730	2,005
Ecology	1,218	2,136	2,139	3,268	3,460	4,011
Statutory Stabilization	389	534	535	817	865	1,003
Mineral Derivation	640	859	787	727	692	845
Mineral-Producing Areas	1,509	2,577	2,361	2,182	2,076	2,536
Overall balance	456	-1,764	-648	9,364	7,007	4,640
Financing	-456	1,764	648	-9,364	-7,007	-4,640
Memorandum items:						
First charges/dedicated accounts	79,647	100,843	86,658	98,260	164,322	177,100
First charges	39,898	47,886	39,898	98,260	164,322	177,100
Nigerian National Petroleum Corporation cash calls	39,898	47,886	39,898	39,000	38,504	45,100
Nigerian National Petroleum Corporation priority projects	...	...	...	...	12,648	8,140
External debt service	...	...	...	43,860	44,000	44,000
National priority projects	...	...	...	15,400	13,192	16,280
Special reserve/excess proceeds	...	...	...	...	55,978	63,580
Dedicated accounts	39,749	52,957	46,760	...	...	...

Sources: Federal Ministry of Finance; and staff estimates.

1/ Since 1992, gross statutory allocations of the federation account have been 48.5 percent to the federal government, 24.0 percent to the state governments (including the Federal Capital Territory), 20.0 percent to the local government councils, and 7.5 percent to the special funds.

Table 31. Nigeria: Summary Federal Government Fiscal Operations, 1992-97 1/
(In millions of naira, unless otherwise indicated)

	1992	1993	1994	1995	1996	1997 Prov.
Total revenues and grants	97,598	109,328	103,073	317,671	368,405	384,603
Distribution from federation account	38,240	51,798	53,661	73,524	81,056	97,262
Drawdown of federation stabilization account	23,325	12,128	2,453	4,134	0	0
Federal government share of value-added tax	0	0	1,452	7,433	10,746	12,000
Independent revenue 2/	6,239	8,121	2,106	19,121	3,407	13,000
Autonomous foreign exchange market profit distributed to federal government	0	0	0	79,645	103,190	90,247
Education tax	0	0	2,128	1,845	1,000	1,733
Customs levies	0	0	0	2,467	4,071	5,240
Other 3/	16,544	19,123	19,261	0	0	0
First-charge deductions	13,250	15,559	18,346	98,260	108,344	113,520
External debt service	0	0	0	43,860	44,000	44,000
National priority projects	0	0	0	15,400	13,192	16,280
Nigerian National Petroleum Corporation (NNPC) cash calls and priority projects	0	0	0	39,000	51,152	53,240
Transfer from federation account for fertilizer subsidy	0	2,600	3,667	5,590	5,335	0
Transfer from Petroleum Trust Fund (PTF) for Petroleum Special Trust Fund (PSTF)	0	0	0	20,460	41,935	38,000
PSTF independent revenue 4/	0	0	0	5,192	7,322	11,601
Loans/grants/aid	0	0	0	0	2,000	2,000
Total expenditure and net lending	94,519	154,132	162,912	249,057	294,304	398,859
Recurrent expenditure	79,341	122,463	120,867	145,200	147,004	173,337
Goods and services	15,618	38,699	47,639	67,039	76,603	101,513
Federal government personnel costs	7,056	18,199	22,153	30,700	40,858	46,000
Federal government overhead	8,562	20,500	25,486	36,194	35,469	55,000
PSTF	...	...	...	145	276	513
Fertilizer subsidy	0	2,600	3,667	5,590	5,335	0
Pre-Second-tier Foreign Exchange Market (SFEM) payments	2,655	1,740	0	0	0	0
Interest payments due	61,068	79,424	69,562	72,572	65,066	71,824
Domestic interest	24,756	37,810	28,479	28,027	20,000	32,000
Foreign interest	36,313	41,614	41,083	42,541	40,066	36,824
Other (local contractors)	0	0	0	2,004	5,000	3,000
Capital expenditure	21,111	33,069	44,610	103,856	147,299	225,521
Domestically financed	11,976	21,100	31,300	97,857	133,486	217,296
Budgetary	...	17,220	27,100	43,182	51,065	104,792
National priority projects	...	3,880	4,200	15,400	13,192	16,280
NNPC cash calls/priority projects	0	0	0	39,000	51,152	53,240
PSTF	0	0	0	275	18,077	42,984
Foreign financed	9,136	11,969	13,310	5,999	13,814	8,226
Net lending 5/	-5,933	-1,400	-2,565	0	0	0
Overall balance	3,078	-44,804	-59,839	68,615	74,101	-14,255
Financing	-3,078	44,804	59,839	-68,615	-74,101	14,255
External	-54,961	20,015	14,475	-736	11,124	30,326
Borrowing	9,136	11,969	13,310	5,999	13,814	8,226
Amortization due	-110,074	-57,469	-59,150	-63,683	-71,755	-49,137
Exceptional financing 6/	7,321	0	0	0	0	0
Change in arrears	38,657	65,515	60,316	56,949	69,065	71,237
Domestic	84,849	88,960	62,521	18,184	-250,155	-53,835
Banking system (net) 7/	66,472	89,402	40,900	28,901	-260,109	-63,835
Nonbank	18,378	-441	21,621	-10,717	9,954	10,000
Unspecified net financing 8/	-32,967	-64,171	-17,158	-86,063	164,929	37,765
As a percentage of non-oil GDP	-11.4	-14.4	-2.5	-7.4	10.7	2.1
Memorandum item:						
Primary balance 9/	66,801	36,360	9,723	141,187	139,167	57,569
As a percentage of non-oil GDP	23.1	8.2	1.4	12.1	9.0	3.1

Sources: Federal Ministry of Finance; and staff estimates.

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

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

3/ Miscellaneous revenues.

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

5/ To state governments.

6/ Consists of rescheduling of external debt amortization and interest.

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

8/ Unspecified net financing represents difference between net credit to government derived from the monetary accounts and total expenditure from the fiscal accounts.

9/ Primary balance is defined as total revenue and grants less total expenditure net of pre-SFEM payments and interest payments due.

Table 32. Nigeria: Budgeted Recurrent Expenditure of the Federal Government
by Functional Classification, 1992-97 1/

	1992	1993	1994	1995	1996	1997 Prov.
	(In millions of naira)					
Administration	8,855	18,366	20,535	28,758	47,123	61,332
General administration	3,553	10,409	11,934	16,903	26,302	37,908
Defense	2,754	4,645	4,205	6,598	11,902	13,343
Internal security	2,548	3,313	4,396	5,257	8,919	10,082
Economic services	3,140	4,656	3,910	5,918	5,841	7,794
Agriculture and water resources	465	1,084	1,183	1,510	1,818	2,421
Construction	1,163	1,396	1,144	1,699	608	0
Transport and communications	563	1,218	446	1,081	1,199	2,185
Others	949	959	1,137	1,628	2,216	3,188
Social and community services	3,665	8,807	10,086	13,821	17,687	21,331
Education	1,907	5,336	7,383	9,746	11,667	12,983
Health	1,390	2,326	2,094	3,321	3,175	4,702
Others	368	1,145	609	754	2,845	3,645
Transfers	65,134	136,800	75,606	106,396	75,867	59,348
Interest due	61,068	79,424	69,562	70,568	60,066	48,824
Domestic	24,756	37,810	28,479	28,027	20,000	12,000
External	36,313	41,614	41,083	42,541	40,066	36,824
Others 2/	4,066	57,376	6,044	35,828	15,801	10,524
Total	80,794	168,630	110,136	154,893	146,518	149,805
	(In percent of total)					
Administration	11.0	10.9	18.6	18.6	32.2	40.9
General administration	4.4	6.2	10.8	10.9	18.0	25.3
Defense	3.4	2.8	3.8	4.3	8.1	8.9
Internal security	3.2	2.0	4.0	3.4	6.1	6.7
Economic services	3.9	2.8	3.6	3.8	4.0	5.2
Agriculture and water resources	0.6	0.6	1.1	1.0	1.2	1.6
Construction	1.4	0.8	1.0	1.1	0.4	0.0
Transport and communications	0.7	0.7	0.4	0.7	0.8	1.5
Others	1.2	0.6	1.0	1.1	1.5	2.1
Social and community services	4.5	5.2	9.2	8.9	12.1	14.2
Education	2.4	3.2	6.7	6.3	8.0	8.7
Health	1.7	1.4	1.9	2.1	2.2	3.1
Others	0.5	0.7	0.6	0.5	1.9	2.4
Transfers	80.6	81.1	68.6	68.7	51.8	39.6
Interest due	75.6	47.1	63.2	45.6	41.0	32.6
Domestic	30.6	22.4	25.9	18.1	13.7	8.0
External	44.9	24.7	37.3	27.5	27.3	24.6
Others 2/	5.0	34.0	5.5	23.1	10.8	7.0
Total	100.0	100.0	100.0	100.0	100.0	100.0

Sources: Central Bank of Nigeria; and staff estimates.

1/ Figures are based on budgetary data and exclude extrabudgetary expenditures, except for 1993 and 1994, which include the authorities' estimate of extrabudgetary expenditure.

2/ Includes pensions, gratuities, grants, subventions, and exchange rate losses.

Table 33. Nigeria: Budgeted Capital Expenditure of the Federal Government
by Functional Classification, 1992-97 1/

	1992	1993	1994	1995	1996	1997 Prov.
Administration	5,119	8,082	8,785	13,338	14,864	40,529
General administration	1,724	5,807	5,219	9,271	9,565	33,656
Defense	2,068	1,737	2,403	2,763	3,784	3,778
Internal security	1,327	538	1,164	1,304	1,515	3,095
Economic services	2,337	4,975	7,276	43,149	35,861	29,122
Agriculture and water resources	941	1,824	2,179	2,414	3,895	4,976
Manufacturing, mining, and quarrying	540	2,224	3,321	4,164	3,114	4,146
Transport and communications	349	803	1,070	2,511	8,619	1,018
Special projects	...	...	...	26,000	16,280	16,280
Others	506	124	707	8,060	3,954	2,702
Social and community services	2,133	3,575	4,994	9,215	8,656	10,522
Education	507	995	2,052	2,426	3,216	3,303
Health	244	242	749	1,312	1,660	2,016
Housing	1,164	1,980	1,836	4,818	2,831	4,467
Others	218	359	357	659	950	736
Transfers	1,329	3	12,299	2,004	49,899	82,345
Outstanding domestic liabilities	1,311	0	4,354	2,004	7,964	14,552
Other	19	3	7,945	...	41,935	67,792
Total	10,917	16,635	33,355	67,706	109,280	162,517
Administration	46.9	48.6	26.3	19.7	13.6	24.9
General administration	15.8	34.9	15.6	13.7	8.8	20.7
Defense	18.9	10.4	7.2	4.1	3.5	2.3
Internal security	12.2	3.2	3.5	1.9	1.4	1.9
Economic services	21.4	29.9	21.8	63.7	32.8	17.9
Agriculture and water resources	8.6	11.0	6.5	3.6	3.6	3.1
Manufacturing, mining, and quarrying	4.9	13.4	10.0	6.2	2.8	2.6
Transport and communications	3.2	4.8	3.2	3.7	7.9	0.6
Special projects	0.0	0.0	0.0	38.4	14.9	10.0
Others	4.6	0.7	2.1	11.9	3.6	1.7
Social and community services	19.5	21.5	15.0	13.6	7.9	6.5
Education	4.6	6.0	6.2	3.6	2.9	2.0
Health	2.2	1.5	2.2	1.9	1.5	1.2
Housing	10.7	11.9	5.5	7.1	2.6	2.7
Others	2.0	2.2	1.1	1.0	0.9	0.5
Transfers	12.2	0.0	36.9	3.0	45.7	50.7
Outstanding domestic liabilities	12.0	0.0	13.1	3.0	7.3	9.0
Other	0.2	0.0	23.8	0.0	38.4	41.7
Total	100.0	100.0	100.0	100.0	100.0	100.0

Sources: Central Bank of Nigeria; and staff estimates.

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

Table 35. Nigeria: Fixed Capital Formation Under the Rolling Plan
by Source of Financing, 1993-95 through 1995-97

	1993-95		1994-96		1995-97	
	Naira (billions)	In percent of total	Naira (billions)	In percent of total	Naira (billions)	In percent of total
Public sector	330.8	76.4	361.6	82.8	660.8	89.8
Federal government	75.7	17.5	97.6	22.4	374.1	50.9
State governments	26.3	6.1	45.1	10.3	88.7	12.1
Local governments	20.4	4.7	35.1	8.0	22.7	3.1
Subtotal	122.4	28.3	177.8	40.7	485.5	66.0
Special funds	12.8	3.0	25.0	5.7	...	...
Parastatals	68.1	15.7	28.1	6.4	...	...
Joint ventures	90.6	20.9	90.4	20.7	135.0	18.3
External loans	36.9	8.5	40.3	9.2	40.3	5.5
Contingency	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal	208.4	48.1	183.8	42.1	175.3	23.8
Private sector	102.4	23.6	74.9	17.2	74.9	10.2
Total	433.2	100.0	436.5	100.0	735.7	100.0

Source: Ministry of National Planning.

Table 36. Nigeria: Fixed Capital Formation Under the Rolling Plan by Sector, 1993-95 through 1995-97 1/
(In millions of naira)

	Federal Government			State Government			Local Government			Total		
	1993-95	1994-96	1995-97	1993-95	1994-96	1995-97	1993-95	1994-96	1995-97	1993-95	1994-96	1995-97
Economic sector	11,934	24,157	22,807	2,720	8,098	9,571	146	387	0	14,800	32,642	32,378
Agriculture	5,868	8,323	8,198	813	2,735	1,492	0	67	0	6,681	11,125	9,690
Manufacturing	1,756	2,898	3,441	242	1,043	1,357	146	0	0	2,143	3,941	4,798
Transport	2,822	4,719	3,597	1,019	3,676	5,784	0	0	0	3,840	8,395	9,381
Others	1,490	8,217	7,572	646	644	938	0	321	0	2,136	9,181	8,510
Social sector	3,225	7,994	15,547	1,843	4,690	8,486	1,350	1,350	1,350	8,566	13,294	24,034
Education	945	6,048	7,287	774	2,777	4,298	2,734	610	0	4,453	9,435	11,584
Health	743	145	4,626	562	1,445	3,705	550	0	0	1,854	1,590	8,331
Others	1,537	1,801	3,634	508	468	484	214	0	0	2,259	2,269	4,119
Regional and environmental development	1,967	2,474	3,515	1,472	4,360	4,028	74	490	151	3,512	7,324	7,694
Water supply	10	223	121	350	3,069	3,249	33	396	151	392	3,688	3,520
Urban and regional planning	1,698	1,341	3,114	233	819	230	5	0	0	1,935	2,160	3,344
Others	260	910	280	889	472	550	36	95	0	1,185	1,477	830
Administration	7,835	20,047	20,990	1,024	0	0	0	0	0	8,858	20,047	20,990
Defense and security	4,217	9,918	12,524	0	0	0	0	0	0	4,217	9,918	12,524
General administration	3,618	10,129	8,466	1,024	0	0	0	0	0	4,642	10,129	8,466
Total	24,961	54,672	62,859	7,058	17,148	22,086	1,570	2,228	1,501	35,736	73,308	85,096

Source: Ministry of National Planning.

1/ Figures relate only to the treasury component of the government investment program; the project loan component, parastatal investment, and joint-venture cash calls are not included.

Table 37. Nigeria: Petroleum Special Trust Fund Income and Expenditure Account, 1995-97 1/
(In millions of naira)

	1995	1996	1997
Total revenue	25,652	49,257	41,533
Petroleum gains receipts	24,603	46,327	38,893
Investment income	1,049	2,927	2,638
Interest on treasury bills	107	1,630	671
Interest on deposits	942	1,297	1,967
Insurance proceeds	0	3	3
Total expenditure	420	18,353	43,497
Recurrent expenditure	145	276	513
Wages and salaries	4	17	39
Overhead	141	257	471
Interest payments/bank charges	0	2	3
Capital expenditure	275	18,077	42,984
Fixed asset acquisitions	275	779	870
Projects	...	17,298	42,114
Roads, road transport and waterways	...	11,863	12,412
Health	...	1,855	5,925
Education	...	408	68
Water	...	1,365	828
Food storage	...	430	506
Security	...	694	20,523
Other	...	1,052	1,907
Less: Depreciation	...	-369	-56
Overall balance	25,232	30,903	-1,963
Financing	-25,232	-30,903	1,963
Bank financing	-6,899	-43,887	...
Central bank	-5,447	2,604	...
Commercial and merchant banks	-1,451	-46,491	...
Nonbank financing 2/	-17,655	12,715	...
Other	-678	269	...
Debtors less current liabilities	-678	269	...
Cash	0	0	...
Memorandum items:			
Deposits in banking system	6,899	50,786	49,029
Holdings of treasury bills	17,655	4,940	4,822

Source: Petroleum Special Trust Fund.

1/ The PSTF came into existence in April 1995; hence, the data for 1995 are for nine months.

2/ Consists solely of holdings of 90-day Nigerian treasury bills.

Table 38. Nigeria: Summary of Budgetary Operations of State and Local Governments and Special Funds, 1992-97 1/

(In millions of naira)

	1992	1993	1994	1995	1996	1997 Est.
Revenue	48,531	65,551	76,678	120,659	145,155	155,060
Statutory share of Federation Account (gross)	39,104	54,166	53,961	80,534	84,947	98,638
Statutory share of Federation Stabilization Account (gross)	1,974	2,731	1,065	436	631	0
Independent and VAT revenue 2/	0	0	5,808	13,076	20,287	22,000
Expenditure and net lending	1,207	1,892	3,708	7,608	17,778	0
Recurrent	0	0	0	0	0	0
Capital	62,757	71,163	83,191	109,340	121,139	154,115
Net lending to Federal Government	34,662	46,819	55,528	74,195	79,806	102,024
Balance (deficit -)	5,933	1,400	2,565	0	0	0
Financing	-14,227	-5,612	-6,514	11,319	24,016	945

Sources: Central Bank of Nigeria; and staff estimates.

1/ These data, which are based on limited budgetary information and staff estimates, should be viewed only as illustrative of general budgetary trends.

2/ State governments only.

Table 39. Nigeria: Monetary Survey, 1992-97 1/

	1992	1993	1994	1995	1996	1997 Prov.
(In millions of naira; end of period)						
Net foreign assets	10,130	8,947	-4,009	62,114	113,500	184,050
Central Bank of Nigeria (net)	-15,445	-23,324	-26,598	-11,288	53,289	116,478
Foreign assets	43,357	32,240	33,820	42,338	93,830	179,201
Foreign liabilities	-58,802	-55,564	-60,419	-53,626	-40,541	-62,722
Commercial and merchant banks (net)	25,575	32,271	22,589	73,402	60,211	67,571
Foreign assets	27,968	33,680	25,449	76,390	63,440	70,797
Foreign liabilities	-2,393	-1,409	-2,860	-2,988	-3,229	-3,226
Net domestic assets	182,718	287,318	389,051	388,730	366,187	383,911
Domestic credit	155,064	257,315	347,579	435,152	263,012	275,444
Consolidated government (net)	96,240	187,254	229,365	258,168	43,874	-25,732
Claims	148,185	251,569	309,590	468,643	368,846	398,888
Deposits	-51,945	-64,315	-80,225	-210,475	-324,973	-424,621
Of which: federal government (net)	100,344	189,746	230,646	260,998	47,380	-16,455
Nonfinancial public enterprises	2,031	1,977	545	1,197	2,357	2,015
Other financial institutions	1,468	3,100	2,941	3,160	3,267	5,916
Claims on private sector	55,323	64,983	114,728	172,628	213,514	293,245
Other items (net)	27,654	30,003	41,472	-46,422	103,175	108,467
Broad money	120,682	186,450	258,537	305,324	319,900	380,148
Narrow money	73,452	117,860	174,384	197,383	234,748	270,161
Quasi money	47,230	68,590	84,153	107,941	85,152	109,987
Bonds and money market instruments	779	955	3,359	9,285	10,591	16,495
Capital accounts	71,388	108,862	123,148	136,239	149,198	171,319
(Annual percentage change, unless otherwise indicated)						
Net domestic assets	...	57.2	35.4	-0.1	-5.8	4.8
Domestic credit	...	65.9	35.1	25.2	-39.6	4.7
Of which:						
Net credit to the consolidated government	...	94.6	22.5	12.6	-83.0	...
Net credit to the federal government	...	89.1	21.6	13.2	-81.8	...
Claims on private sector	...	17.5	76.6	50.5	23.7	37.3
Broad money	...	54.5	38.7	18.1	4.8	18.8
Narrow money	...	60.5	48.0	13.2	18.9	15.1
Quasi-money	...	45.2	22.7	28.3	-21.1	29.2
Velocity (non-oil GDP/broad money)	...	2.9	3.1	4.1	4.9	5.2
Contribution to growth of M2 (in percentage points)						
Net foreign assets	...	-1.0	-6.9	25.6	16.8	22.1
Net domestic assets	...	86.7	54.6	-0.1	-7.4	5.5
Domestic credit	...	84.7	48.4	33.9	-56.4	3.9
Net credit to the consolidated government	...	75.4	22.6	11.1	-70.2	-21.8
Of which: net credit to the federal government	...	74.1	21.9	11.7	-70.0	-20.0
Other items (net)	...	1.9	6.2	-34.0	49.0	1.7
Other accounts 2/	...	-31.2	-9.0	-7.4	-4.7	-8.8

Sources: Central Bank of Nigeria; and staff estimates.

1/ Consolidated accounts of the Central Bank of Nigeria, commercial banks, and merchant banks.

2/ Capital accounts and bonds and money market instruments.

Table 40. Nigeria: Consolidated Accounts of Central Bank, 1992-97

(In millions of naira; end of period)

	1992	1993	1994	1995	1996	1997 Prov.
Net foreign assets	-15,445	-23,324	-26,598	-11,288	53,289	116,478
Foreign assets	43,357	32,240	33,820	42,338	93,830	179,201
Foreign liabilities	-58,802	-55,564	-60,419	-53,626	-40,541	-62,722
Domestic credit	102,116	166,035	201,651	272,039	76,038	21,130
Consolidated government (net)	94,191	152,306	184,505	242,947	41,841	-8,154
Claims	139,858	210,745	259,644	442,840	308,850	350,018
Deposits	-45,667	-58,440	-75,139	-199,893	-267,008	-358,172
Nonfinancial public enterprises (gross)	2,031	1,977	545	1,197	2,357	2,015
Private sector (gross)	570	850	763	604	966	777
Claims on banks (gross)	3,855	7,802	12,896	24,131	27,606	20,576
Other financial institutions (gross)	1,468	3,100	2,941	3,160	3,267	5,916
Liabilities to commercial banks	33,051	44,649	46,173	59,365	62,558	55,944
Currency in vault	2,946	4,713	5,547	7,053	9,884	14,121
Demand deposits	7,875	4,033	6,721	7,479	9,426	6,757
Special deposits	179	409	590	513	4	4
Required reserves	22,050	35,494	33,314	44,320	43,244	35,063
Liabilities to merchant banks	1,567	1,864	2,159	1,730	332	252
Currency in vault	23	13	18	45	36	90
Demand deposits 1/	893	544	476	281	288	153
Special deposits	44	35	62	155	9	9
Required reserves	607	1,272	1,603	1,249	0	0
Currency and deposit liabilities	39,222	64,642	101,981	115,321	133,504	139,064
Currency outside banks	36,756	57,847	93,802	106,851	116,122	124,354
Private sector demand deposits 2/	2,467	6,794	8,179	8,469	17,383	14,710
Other items (net)	21,757	34,693	54,243	-7,795	138,312	130,733
Capital accounts	34,589	66,251	78,985	76,542	71,247	73,083

Source: Central Bank of Nigeria.

1/ Includes both merchant and commercial bank deposits deposited at the central bank branches.

2/ Includes nonfinancial public sector, state and local governments, and other financial institutions.

Table 41. Nigeria: Consolidated Accounts of Commercial Banks, 1992-97

(In millions of naira; end of period)

	1992	1993	1994	1995	1996	1997 Prov.
Net foreign assets	18,134	24,256	17,254	56,634	47,262	52,887
Foreign assets	19,386	24,893	17,865	57,258	47,605	53,335
Foreign liabilities	-1,252	-636	-611	-624	-344	-448
Reserves	27,143	40,230	47,136	54,065	62,686	64,581
Currency	2,946	4,713	5,547	7,053	9,884	14,121
Deposits at central bank	24,196	35,517	41,589	47,012	52,802	50,460
Reserve requirements	3,350	6,744	8,413	10,864	16,946	22,740
Current accounts	6,129	3,457	11,456	6,836	9,883	15,314
Stabilization securities	14,718	25,315	21,720	29,312	25,974	12,406
Domestic credit	47,345	77,592	131,525	161,686	216,485	270,003
Federal government (net)	4,855	27,893	37,624	17,365	41,549	29,441
Claims	5,881	29,847	39,184	20,789	47,521	39,622
Deposits	-1,026	-1,954	-1,560	-3,424	-5,972	-10,182
State and local governments (gross)	1,253	1,499	1,884	2,650	3,293	2,374
Claims on private sector	41,236	48,200	92,017	141,671	171,642	238,188
Deposit liabilities 1/	75,048	110,454	142,538	178,962	214,360	269,847
Demand deposit	33,264	49,924	65,349	79,469	95,904	128,164
Quasi-monetary deposits	41,784	60,530	77,189	99,493	118,456	141,683
Other items (net)	9,298	-1,517	-18,257	-45,575	-50,818	-33,230
Bonds and money market instruments	381	519	2,976	4,667	5,618	10,512
Capital accounts	26,490	29,589	32,145	43,182	55,637	73,881

Source: Central Bank of Nigeria.

1/ Includes deposits of state and local governments.

Table 42. Consolidated Accounts of Merchant Banks, 1992-97

(In millions of naira; end of period)

	1992	1993	1994	1995	1996	1997 Prov.
Net foreign assets	7,441	8,015	5,335	16,768	12,949	14,685
Foreign assets	8,582	8,787	7,584	19,133	15,835	17,463
Foreign liabilities	-1,140	-772	-2,249	-2,365	-2,885	-2,778
Reserves	4,998	4,259	6,305	6,216	1,657	1,257
Currency	23	13	18	45	36	90
Deposits at central bank	4,975	4,246	6,287	6,171	1,622	1,167
Reserve requirements	711	1,158	1,398	1,306	185	141
Current accounts	1,292	-56	1,879	765	733	1,026
Stabilization securities	2,972	3,144	3,010	4,101	704	0
Domestic credit	14,376	25,309	30,552	32,368	49,961	61,154
Federal government (net)	693	9,344	8,371	1,756	8,822	6,663
Claims	1,027	9,445	8,645	2,105	8,948	6,663
Deposits	-334	-101	-274	-350	-126	0
State and local governments (gross)	166	33	234	259	235	211
Private sector (gross)	13,517	15,932	21,948	30,353	40,905	54,281
Deposit liabilities 1/	11,331	19,196	20,365	17,856	24,413	29,648
Demand deposits	3,303	5,668	9,049	6,094	8,113	8,639
Quasi-monetary deposits	8,028	13,528	11,316	11,762	16,300	21,009
Other items (net)	-4,778	-4,929	-9,427	-16,363	-12,867	-17,110
Bonds and money market instruments	398	436	383	4,618	4,973	5,983
Capital accounts	10,310	13,022	12,018	16,515	22,315	24,355

Source: Central Bank of Nigeria.

1/ Includes deposits of state and local governments.

Table 43. Nigeria: Liquidity of Commercial Banks, 1992-97

	1992	1993	1994	1995	1996	1997
(In millions of naira; end of period)						
Total specified liquid assets	40,734	48,208	71,558	61,973	97,492	118,141
Cash-related items	6,653	7,769	16,304	12,589	19,544	29,323
Currency	2,946	4,713	5,547	7,053	9,884	14,121
Deposits at central bank 1/ <i>Less</i>	24,197	33,950	41,589	47,012	52,802	50,460
Penalty deposits	351	401	699	1,300	224	111
Stabilization securities	14,718	23,749	21,720	29,312	25,974	12,406
Cash reserve requirements	5,421	6,744	8,413	10,864	16,946	22,740
Liquid assets	5,506	29,525	38,901	17,993	46,771	37,888
Treasury bills	5,181	28,852	38,287	17,712	46,771	37,882
Treasury certificates	325	674	614	281	0	6
Other specified liquid assets	28,575	10,913	16,352	31,391	31,177	50,930
Balances with other banks (net)	22,231	5,607	7,666	20,156	16,216	23,173
Placements with other banks (net)	0	2,690	2,680	4,602	2,738	8,174
Placement with discount houses (net)	0	0	4,401	3,384	10,012	10,896
Money at call (net)	6,073	2,566	1,605	702	1,710	8,682
Certificates of deposit held (net)	242	50	0	0	45	0
Development stocks (less than three years)	29	0	0	2,547	457	5
Total current liabilities	80,928	117,186	147,500	187,442	226,935	293,630
Deposit liabilities	76,074	112,407	142,399	174,993	214,653	274,521
Demand deposits	33,640	51,512	66,271	81,666	99,301	133,336
Savings deposits	26,232	37,078	49,911	62,687	69,309	85,264
Time deposits	16,202	23,818	26,217	30,641	46,044	55,921
Other deposits	2,541	2,996	4,337	11,266	10,326	15,192
Domiciliary deposits	1,019	1,213	1,698	7,392	5,679	5,508
Other deposit certificates and notes	1,522	1,783	2,639	3,873	4,647	9,685
Other current liabilities	2,314	1,783	764	1,183	1,956	3,916
Excess balance held for other banks	524	1,415	719	218	170	491
Excess money at call takings	1,539	13	0	399	707	491
Excess interbank takings	42	51	20	457	794	2,711
Excess takings from discount houses	0	0	0	107	285	223
Excess certificates of deposit issued	209	304	25	2	1	0
(In percent)						
Liquidity ratio 2/	50.3	41.1	48.5	33.1	43.0	40.2
Liquid asset structure ratio 3/	6.8	25.2	26.4	9.6	20.6	12.9
Cash reserve ratio 4/	6.7	5.8	5.7	5.8	7.5	7.7
Loans-to-deposits ratio 5/	53.1	41.6	60.9	73.3	72.8	76.6
(In millions of naira; end of period)						
Memorandum item:						
Loans and advances (net)	42,935	48,768	89,756	137,384	165,150	225,057

Source: Central Bank of Nigeria.

1/ As reported by commercial banks.

2/ Liquidity ratio is defined as total specified liquid assets divided by total current liabilities.

3/ Liquid asset structure ratio is defined as liquid assets divided by total current liabilities.

4/ Cash reserve ratio is defined as cash-related items divided by deposit liabilities.

5/ Loans-to-deposits ratio is defined as loans and advances (net) divided by total current liabilities.

Table 44. Nigeria: Liquidity of Merchant Banks, 1992-97

	1992	1993	1994	1995	1996	1997
(In millions of naira; end of period)						
Total specified liquid assets	7,538	13,762	13,481	7,264	15,545	17,341
Cash-related items	2,017	1,114	1,416	639	719	434
Currency	24	13	45	45	36	90
Deposits at central bank 1/	7,596	5,736	6,654	6,171	1,622	1,167
Less						
Penalty deposits	270	91	699	171	50	823
Stabilization securities	2,972	3,144	3,010	4,101	704	0
Cash reserve requirements	2,361	1,399	1,574	1,306	185	0
Liquid assets	1,005	9,528	8,637	2,105	8,948	6,663
Treasury bills	1,005	9,528	8,637	2,105	8,948	6,663
Treasury certificates	0	0	0	0	0	0
Other specified liquid assets	4,516	3,120	3,428	4,520	5,879	10,245
Balances with other banks (net)	1,528	1,188	1,588	2,635	3,521	5,240
Placements with other banks (net)	0	1,555	680	595	645	825
Placements with discount houses (net)	0	0	840	943	418	3,673
Money at call (net)	2,988	364	320	348	1,295	507
Certificates of deposit held (net)	0	13	0	0	0	0
Development stocks (less than three years)	0	0	0	0	0	0
Total current liabilities	22,002	27,471	25,740	26,992	33,465	43,451
Deposit liabilities	11,645	19,296	20,639	17,501	23,630	28,941
Demand deposits	3,303	5,668	9,049	6,400	8,124	8,639
Savings deposits	0	0	0	0	0	0
Time deposits	8,343	13,628	11,590	11,101	15,506	20,301
Other deposits	4,781	4,021	4,337	4,970	5,591	6,527
Domiciliary deposits	780	1,001	1,698	705	909	708
Other deposit certificates and notes	4,001	3,020	2,639	4,265	4,682	5,819
Other current liabilities	5,576	4,154	764	4,522	4,244	7,983
Excess balance held for other banks	0	1,661	719	1,430	466	1,806
Excess money at call takings	2,988	536	0	1,746	655	725
Excess interbank takings	2,393	1,637	20	1,116	2,519	3,927
Excess takings from discount houses	0	0	0	6	473	1,470
Excess certificates of deposit issued	195	320	25	223	131	55
(In percent)						
Liquidity ratio 2/	34.3	50.1	52.4	26.9	46.5	39.9
Liquid asset structure ratio 3/	4.6	34.7	33.6	7.8	26.7	15.3
Cash reserve ratio 4/	10.7	5.1	6.1	4.8	0.6	0.0
Loans-to-deposits ratio 5/	48.9	48.8	76.8	103.5	111.7	115.6
(In millions of naira; end of period)						
Memorandum item:						
Loans & advances (net)	10,749	13,393	19,779	27,946	37,374	50,216

Source: Central Bank of Nigeria.

1/ As reported by merchant banks.

2/ Liquidity ratio is defined as total specified liquid assets divided by total current liabilities.

3/ Liquid asset structure ratio is defined as liquid assets divided by total current liabilities.

4/ Cash reserve ratio is defined as cash-related items divided by deposit liabilities.

5/ Loans-to-deposits ratio is defined as loans and advances (net) divided by total current liabilities.

Table 45. Nigeria: Sectoral Distribution of Bank Credit, 1992-97

(In percent of total)

	1992	1993	1994	1995	1996	1997
Commercial banks						
Agriculture	15.3	15.3	15.9	15.7	14.9	16.4
Manufacturing	30.1	30.7	30.3	32.9	32.5	36.8
Other	54.6	54.0	53.8	51.4	52.6	46.8
Merchant banks						
Agriculture	11.5	14.2	14.5	14.7	15.1	14.7
Manufacturing	46.3	40.5	42.8	43.4	46.2	45.0
Other	42.2	45.3	42.7	41.9	38.7	40.3

Source: Central Bank of Nigeria.

Table 46. Nigeria: Selected Interest Rates, 1992-97
(In percent; end of period)

	1992	1993	1994	1995	1996	1997
Rediscount rate (minimum)	17.5	26.0	13.5	13.5	13.5	13.5
Treasury bill rate	21.0	20.0	12.5	12.5	12.0	12.0
Treasury certificate rate (two-year maturity)	22.5	28.3	13.5	13.5	...	...
Savings deposit rate 1/	16.1	16.7	12.3	12.6	10.1	5.4
Prime lending rate 1/	29.8	36.1	20.2	20.2	20.8	28.0

Source: Central Bank of Nigeria.

1/ At commercial banks.

Table 47. Nigeria: Financial Institutions and Branches, 1992-97
(In number)

	1992	1993	1994	1995	1996	1997
Total deposit banks	521	999	1,087	1,471	1,484	1,131
Commercial deposit banks	65	65	65	64	64	64
Merchant banks	54	54	51	51	51	51
Community banks	401	879	970	1,355	1,368	1,015
People's Bank of Nigeria	1	1	1	1	1	1
Total other financial institutions	481	862	908	961	890	802
Foreign exchange bureaus	132	144	183	223	240	250
Finance companies	48	310	290	279	279	279
Deposit insurance corporation	1	1	1	1	1	1
Unit trusts	11	11	11	11	11	11
Stock brokers	140	140	140	162	168	140
Federal mortgage bank	1	1	1	1	1	1
Primary mortgage institutions	145	252	279	280	186	115
Discount houses	3	3	3	4	4	5
Memorandum items:						
Total number of branches 1/	2,751	2,926	3,003	2,968	2,968	2,477
Commercial bank branches	2,275	2,397	2,397	2,362	2,362	2,330
Rural branches	774	763	763	701	701	615
Urban branches	1,501	1,634	1,634	1,661	1,661	1,715
Merchant bank branches 2/	116	126	144	144	144	147
People's Bank of Nigeria	228	271	275	275	275	275
Insurance companies	132	132	187	187	187	188

Source: Central Bank of Nigeria.

1/ Excluding community banks.

2/ All urban branches.

Table 48. Nigeria: Balance of Payments, 1992-97

	1992	1993	1994	1995	1996	1997 Est.
(In millions of U.S. dollars, unless otherwise specified)						
Trade balance	2,995	1,632	2,945	3,551	9,901	5,952
Exports	11,886	9,924	9,415	11,734	16,117	15,208
Petroleum	11,642	9,697	9,171	11,449	15,830	14,850
Other	244	228	244	286	287	358
Imports	-8,891	-8,293	-6,470	-8,183	-6,216	-9,256
Oil related	-1,925	-1,819	-1,793	-1,886	-1,775	-1,770
Other	-6,966	-6,474	-4,678	-6,298	-4,441	-7,486
Public	-974	-756	-1,042	-1,597	-2,055	-1,836
Private	-5,992	-5,718	-3,635	-4,701	-2,386	-5,650
Services (net)	-5,069	-4,635	-5,063	-5,180	-4,825	-5,584
Factor services	-2,569	-2,346	-2,353	-2,221	-2,231	-2,209
Oil related	-512	-457	-644	-681	-753	-789
Non-oil related	-2,057	-1,890	-1,709	-1,540	-1,478	-1,420
<i>Of which: interest due on public debt</i>	-2,134	-1,888	-1,661	-1,510	-1,539	-1,636
Nonfactor services	-2,500	-2,289	-2,710	-2,960	-2,594	-3,375
Oil related	-1,504	-1,365	-1,195	-1,257	-1,183	-1,180
Non-oil related	-996	-924	-1,514	-1,703	-1,411	-2,195
Private transfers (net)	784	792	549	799	945	1,537
Official transfers (net)	-9	54	-49	-66	-68	-49
Current account balance	-1,298	-2,157	-1,618	-897	5,953	1,856
Official capital (net)	-5,835	-2,064	-1,738	-2,401	-3,101	-3,181
Disbursements	528	543	608	274	631	376
Amortization due	-6,363	-2,607	-2,346	-2,675	-3,732	-3,556
Private capital (net)	776	608	588	677	760	1,145
Direct investment	714	581	588	677	760	1,145
Oil sector	337	260	417	437	478	498
Non-oil sector	377	321	171	240	282	647
Private borrowing (net)	62	27	0	0	0	0
Short-term capital (net)	-1,935	-492	1,403	492	-2,537	464
Capital account balance	-6,994	-1,948	252	-1,232	-4,878	-1,572
Errors and omissions	617	312	-1,389	-126	-1,878	-160
Overall balance	-7,676	-3,794	-2,754	-2,255	-803	124
Financing	7,676	3,794	2,754	2,255	803	-124
Net reserves (increase -)	2,015	725	1	-399	-2,353	-3,379
Exceptional financing	5,661	3,069	2,753	2,654	3,156	3,255
Memorandum items:						
Current account/non-oil GDP (in percent) 1/	-9.8	-21.9	-12.4	-5.4	30.8	8.3
Gross official reserves	2,135	1,410	1,409	1,808	4,161	7,540
(in months of imports of goods and nonfactor services)	2.2	1.6	1.8	1.9	5.6	7.1
Debt-service ratio (before rescheduling) 2/	70.6	44.7	40.6	33.6	31.0	32.3
Debt/GDP (in percent)	98.3	135.6	125.8	105.6	82.0	75.2
Price of Nigerian oil (U.S. dollar per barrel)	19.6	17.4	15.8	17.2	20.8	19.7

Sources: Central Bank of Nigeria; and staff estimates.

1/ Non-oil GDP in U.S. dollars is calculated from revised naira GDP, based on representative exchange rate.

2/ In percent of exports of goods and nonfactor services.

Table 49. Nigeria: Foreign Trade Indices, 1992-97 1/
(Index, 1985=100)

	1991	1992	1993	1994	1995	1996	1997 Est.
Import value index	95.2	105.4	98.0	80.4	105.1	78.7	107.0
Import unit value index	148.1	152.9	147.2	151.0	157.8	139.0	126.5
Import volume index	64.3	69.0	66.6	53.3	66.6	56.6	84.9
Export value index	96.3	97.7	89.7	75.7	84.8	102.2	95.9
Oil	95.3	98.4	90.2	76.1	84.9	126.1	118.3
Non-oil	130.2	77.6	75.9	64.2	78.8	79.1	99.7
Export unit value index	75.0	73.2	65.4	59.6	62.5	71.6	67.7
Oil	75.6	73.1	65.0	58.8	62.1	76.7	72.5
Non-oil	87.3	86.3	89.3	103.5	108.7	109.1	112.9
Export volume index	128.4	133.5	137.2	127.1	135.7	142.7	147.5
Oil	126.2	134.7	138.9	129.4	146.8	164.4	169.9
Non-oil	149.2	89.8	84.9	62.0	72.5	72.5	89.0
Terms of trade 2/	50.6	47.9	44.4	39.4	39.6	51.5	53.5

Sources: Central Bank of Nigeria; and staff estimates.

1/ Value and price indices measured in U.S. dollars.

2/ Central bank of Nigeria estimates.

Table 50. Nigeria: Composition of Exports, 1992-97
(Value in millions of U.S. dollars; index, 1985=100)

	1992	1993	1994	1995	1996	1997 Est.
Oil						
Value	11,642	9,697	9,171	11,449	15,830	14,850
Value index	95	79	75	94	130	122
Volume index	135	139	129	147	164	170
Unit value index	73	65	59	62	77	70
Cocoa						
Value	81	76	83	77	149	96
Value index	32	29	32	30	58	37
Volume index	72	67	58	50	79	52
Unit value index	44	44	56	76	93	90
Cocoa butter						
Value	5	6	5	5	9	9
Value index	10	12	10	9	17	18
Volume index	22	26	17	12	30	32
Unit value index	45	45	57	76	56	55
Rubber						
Value	59	40	32	58	37	50
Value index	255	174	139	253	160	217
Volume index	258	182	108	196	124	219
Unit value index	98	94	128	128	128	98
Palm kernels						
Value	10	6	6	7	7	8
Value index	113	67	67	72	78	83
Volume index	147	90	64	70	75	99
Unit value index	78	75	105	105	105	85
Other non-oil						
Value	126	174	120	140	86	185
Value index	598	829	571	664	410	880

Sources: Central Bank of Nigeria; and staff estimates.

Table 51. Nigeria: Composition of Imports, 1992-97
(In percent of total)

	1992	1993	1994	1995	1996	1997 Est.
Import group (by end use)						
Consumer goods	33.8	34.9	35.8	33.1	38.7	37.5
Durable	3.2	4.2	3.5	3.1	2.8	3.0
Nondurable	30.6	30.7	32.3	30.0	35.9	34.5
Capital goods	31.7	26.4	24.8	21.5	19.2	20.4
Raw materials	33.9	38.6	39.1	45.3	42.0	41.8
Miscellaneous	0.6	0.1	0.3	0.1	0.1	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Import group (by SITC groups) 1/						
Food and live animals	8.2	8.4	10.3	11.7	13.5	11.9
Beverages and tobacco	0.2	0.3	0.5	0.4	0.4	0.6
Crude material	2.5	2.6	3.5	4.2	4.7	4.5
Mineral fuels	0.5	0.5	1.2	1.3	1.5	1.3
Animal and vegetable oils and fats	0.7	0.8	1.0	1.1	1.3	1.4
Chemicals	18.1	17.1	25.2	26.3	23.8	22.7
Manufactured goods	23.0	24.0	22.3	23.2	28.1	29.2
Machinery and transport equipment	41.8	42.4	31.2	27.5	23.4	24.0
Miscellaneous manufactured goods	4.9	3.8	4.5	4.1	3.1	4.2
Other						
Total	100.0	100.0	100.0	100.0	100.0	100.0
Memorandum item:						
Imports of goods, f.o.b. (in millions of U.S. dollars)	8,891	8,293	6,470	8,183	6,216	9,256

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

1/ SITC stands for Standard International Trade Classification.

Table 52. Nigeria: Direction of Exports, 1992-97
(In percent)

	1992	1993	1994	1995	1996	1997 Est.
Exports	100.0	100.0	100.0	100.0	100.0	100.0
European Community	46.9	32.7	35.1	30.5	36.8	27.6
Belgium-Luxembourg	0.0	0.0	0.6	0.3	0.0	0.0
Denmark	0.0	0.0	0.0	0.0	0.0	0.0
France	3.9	6.4	12.8	8.5	9.5	5.9
Germany, Federal Republic	19.8	1.9	0.6	0.0	0.3	1.6
Italy	6.1	2.3	2.1	4.6	7.2	6.1
Netherlands	6.0	5.6	6.1	4.3	3.4	2.3
United Kingdom	0.4	0.4	0.6	0.6	1.4	0.5
Others	10.7	16.1	12.3	12.2	15.0	11.2
United States	39.0	46.4	45.7	40.8	34.3	34.6
Other	14.1	20.9	19.2	28.7	28.9	37.8

Source: Central Bank of Nigeria.

Table 53. Nigeria: External Public Debt, 1992-97 1/

	1992	1993	1994	1995	1996	1997 2/	
						Reported	Adjusted
(In millions of U.S. dollars)							
Multilateral	4,518	3,695	4,402	4,462	4,563	4,373	4,373
<i>Of which: arrears 3/</i>	...	...	...	42	54	11	11
Paris Club	16,434	18,161	18,334	18,700	19,197	18,980	20,553
<i>Of which: arrears 3/</i>	...	...	...	10,288	12,713	14,169	14,986
Other bilateral	1,226	1,647	1,456	1,077	137	79	79
<i>Of which: arrears 3/</i>	...	...	...	988	70	10	10
Par Bonds	2,120	2,056	2,058	2,045	2,043	2,043	2,043
Promissory Notes	3,246	3,160	3,178	3,148	2,140	1,613	1,613
Total	27,544	28,718	29,429	29,432	28,080	27,088	28,660
<i>Of which: arrears 3/</i>	...	...	...	11,318	12,837	14,189	15,006
(In percent of total debt)							
Multilateral	16.4	12.9	15.0	15.2	16.2	16.1	15.3
<i>Of which: arrears</i>	...	...	...	0.1	0.2	0.0	0.0
Paris Club	59.7	63.2	62.3	63.5	68.4	70.1	71.7
<i>Of which: arrears</i>	...	...	...	35.0	45.3	52.3	52.3
Other bilateral	4.5	5.7	4.9	3.7	0.5	0.3	0.3
<i>Of which: arrears</i>	...	...	...	3.4	0.2	0.0	0.0
Par Bonds	7.7	7.2	7.0	6.9	7.3	7.5	7.1
Promissory Notes	11.8	11.0	10.8	10.7	7.6	6.0	5.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<i>Of which: arrears</i>	...	...	...	38.5	45.7	52.4	52.4

Sources: Federal Ministry of Finance (FMF); Central Bank of Nigeria (CBN); Paris Club secretariat; and staff estimates.

1/ In addition to transactions and exchange rate changes, differences over time may reflect some changes in coverage.

2/ "Reported" column shows data reported in 1998 Budget Briefing; "Adjusted" reflects creditor data for Paris Club.

3/ Changes shown in balance of payments (from CBN) not yet reconciled with stocks (from FMF) shown here.

Table 54. Nigeria: Intervention in the Autonomous Foreign Exchange Market (AFEM), January 1995 - December 1997
(In millions of U.S. dollars, unless otherwise specified)

	Total AFEM Intervention	Sources of Foreign Exchange 1/		Exchange rate (naira/ U.S. dollar)	Number of Participating Banks 2/
		Federal govt. of Nigeria account	AFEM purchase account		
1995	1,319.4	998.8	320.6	82.3	65 2/
January	0.0	0.0	0.0	...	...
February	392.3	392.3	0.0	82.0	62
March	0.0	0.0	0.0	...	...
April	268.0	268.0	0.0	80.0	69
May	0.0	0.0	0.0	...	...
June	379.9	379.9	0.0	80.0	72
July	0.0	0.0	0.0	...	...
August	0.0	0.0	0.0	...	...
September	436.5	215.0	221.5	82.0	74
October	0.0	0.0	0.0	...	...
November	199.1	100.0	99.1	85.0	62
December	35.9	35.9	0.0	85.0	49
1996	1,847.1	895.7	951.4	81.5	54 2/
January	42.3	42.3	0.0	85.0	53
February	169.7	0.0	169.7	82.5	66
March	204.0	0.0	204.0	82.5	69
April	187.2	55.7	131.6	82.5	66
May	149.7	0.0	149.7	82.5	62
June	161.0	0.0	161.0	81.8	52
July	241.2	105.8	135.4	81.0	51
August	196.3	196.3	0.0	80.0	56
September	149.7	149.7	0.0	80.0	51
October	188.4	188.4	0.0	80.0	48
November	110.0	110.0	0.0	80.0	45
December	47.6	47.6	0.0	80.0	34
1997	2,939.3	1,538.7	1,400.7	82.0	50 2/
January	137.4	0.0	137.4	80.0	29
February	328.7	0.0	328.7	80.0	66
March	285.0	0.0	285.0	83.8	59
April	337.8	0.0	337.8	85.0	52
May	311.8	0.0	311.8	85.0	58
June	171.8	171.8	0.0	85.0	49
July	168.7	168.7	0.0	83.6	44
August	231.0	231.0	0.0	82.3	53
September	267.3	267.3	0.0	81.8	56
October	307.7	307.7	0.0	82.0	50
November	193.4	193.4	0.0	79.5	46
December	198.7	198.7	0.0	76.5	43

Source: Central Bank of Nigeria.

1/ The Central Bank of Nigeria purchases foreign exchange from (a) federal government at the official exchange rate; and (b) oil companies, commercial banks and others at the prevailing AFEM exchange rate.
2/ Average number of participating banks in months when intervention took place.

Table 55. Nigeria: Commercial and Merchant Banks' Sources of Foreign Exchange, 1994-97
(In millions of U.S. dollars, unless otherwise specified)

	Total	CBN AFEM Intervention 1/	Non-oil exports	Invisibles	Other	CBN Auction (in percent of total)
1994	2,369.9	1,653.7	111.8	230.1	374.3	69.8
January	191.8	0.7	15.6	107.4	68.1	0.4
February	297.2	194.5	8.1	46.6	48.0	65.4
March	365.2	326.3	5.4	14.3	19.2	89.3
April	330.9	292.9	0.7	8.0	29.3	88.5
May	204.5	161.7	5.7	8.8	28.3	79.1
June	131.3	86.5	8.0	11.0	25.8	65.9
July	119.2	75.9	2.6	7.0	33.7	63.7
August	107.8	82.0	2.6	6.6	16.6	76.1
September	132.3	96.4	8.1	5.5	22.3	72.9
October	122.2	91.6	6.4	7.7	16.5	75.0
November	139.9	90.2	20.9	3.3	25.5	64.5
December	227.6	155.0	27.7	3.9	41.0	68.1
1995	2,223.6	1,319.4	179.8	576.5	148.3	59.3
January	70.3	0.0	23.7	10.4	36.2	0.0
February	473.8	392.3	14.1	36.4	33.0	82.8
March	94.6	0.0	24.3	56.9	13.4	0.0
April	346.9	268.0	16.7	47.1	15.5	77.3
May	101.3	0.0	17.8	71.1	12.4	0.0
June	482.8	379.9	22.9	74.9	5.1	78.7
July	110.1	0.0	32.4	69.0	8.7	0.0
August	94.9	0.0	7.1	71.0	16.8	0.0
September	509.9	436.5	9.2	57.3	6.9	85.6
October	67.1	0.0	14.2	11.0	41.9	0.0
November	295.1	199.1	17.8	68.1	10.1	67.5
December	120.9	35.9	17.4	50.1	17.5	29.7
1996	3,038.1	1,847.1	250.5	851.9	88.6	349.1
January	122.5	42.3	36.7	41.6	1.9	34.5
February	278.3	169.7	28.2	73.2	7.2	61.0
March	298.3	204.0	10.4	77.3	6.6	68.4
April	289.9	187.2	6.2	88.0	8.5	64.6
May	285.4	149.7	38.4	91.0	6.3	52.5
June	236.2	161.0	17.2	53.0	5.0	68.2
July	306.7	241.2	16.5	40.5	8.5	78.6
August	286.3	196.3	18.9	61.8	9.3	68.6
September	241.8	149.7	14.8	68.5	8.8	61.9
October	308.3	188.4	18.5	91.6	9.8	61.1
November	231.2	110.0	24.5	86.5	10.2	47.6
December	153.2	47.6	20.2	78.9	6.5	31.1
1997	4,528.1	2,939.3	324.4	1,132.4	131.9	64.9
January	257.2	137.4	42.5	65.5	11.8	53.4
February	445.4	328.7	30.8	75.3	10.6	73.8
March	406.4	285.0	25.8	86.7	8.9	70.1
April	476.5	337.8	33.6	93.2	11.9	70.9
May	477.8	311.8	25.9	130.5	9.6	65.3
June	336.9	171.8	35.7	121.1	8.3	51.0
July	294.3	168.7	20.2	97.9	7.5	57.3
August	354.2	231.0	18.9	89.6	14.7	65.2
September	419.5	267.3	23.9	112.5	15.8	63.7
October	426.7	307.7	28.1	79.7	11.2	72.1
November	329.0	193.4	21.0	102.0	12.6	58.8
December	304.1	198.7	18.0	78.4	9.0	65.3

Source: Central Bank of Nigeria.

1/ CBN stands for Central Bank of Nigeria; AFEM stands for autonomous foreign exchange market.

Table 56 Nigeria: Exchange Rates, January 1994-December 1997
(In naira per U.S. dollar, unless otherwise specified)

	Period Average			End Period		
	Official rate	Parallel market rate 1/	Spread (percent)	Official rate	Parallel market rate 1/	Spread (percent)
1994						
January	21.886	43.665	99.5	21.886	58.500	167.3
February	21.886	47.880	118.8	21.886	50.275	129.7
March	21.886	60.990	178.7	21.886	48.300	120.7
April	21.886	48.665	122.4	21.886	48.665	122.4
May	21.886	49.510	126.2	21.886	49.450	125.9
June	21.886	50.210	129.4	21.886	50.750	131.9
July	21.886	52.700	140.8	21.886	52.750	141.0
August	21.886	54.065	147.0	21.886	57.000	160.4
September	21.886	66.560	204.1	21.886	70.000	219.8
October	21.886	81.605	272.9	21.886	89.750	310.1
November	21.886	93.205	325.9	21.886	88.500	304.4
December	21.886	80.075	265.9	21.886	83.750	282.7
1995						
January	21.886	80.360	267.2	21.886	78.000	256.4
February	21.886	80.640	268.5	21.886	85.000	288.4
March	21.886	83.470	281.4	21.886	81.500	272.4
April	21.886	82.240	275.8	21.886	82.500	277.0
May	21.886	82.588	277.4	21.886	83.000	279.2
June	21.886	82.892	278.7	21.886	83.350	280.8
July	21.886	82.905	278.8	21.886	83.500	281.5
August	21.886	83.568	281.8	21.886	84.850	287.7
September	21.886	86.205	293.9	21.886	87.500	299.8
October	21.886	86.275	294.2	21.886	86.650	295.9
November	21.886	88.525	304.5	21.886	90.000	311.2
December	21.886	86.574	295.6	21.886	86.000	292.9
1996						
January	21.886	85.000	288.4	21.886	85.000	288.4
February	21.886	82.500	277.0	21.886	82.500	277.0
March	21.886	82.500	277.0	21.886	82.500	277.0
April	21.886	82.500	277.0	21.886	82.500	277.0
May	21.886	82.500	277.0	21.886	82.500	277.0
June	21.886	81.750	273.5	21.886	81.000	270.1
July	21.886	81.000	270.1	21.886	81.000	270.1
August	21.886	80.000	265.5	21.886	80.000	265.5
September	21.886	80.000	265.5	21.886	80.000	265.5
October	21.886	80.000	265.5	21.886	80.000	265.5
November	21.886	80.000	265.5	21.886	80.000	265.5
December	21.886	80.000	265.5	21.886	80.000	265.5
1997						
January	21.886	80.000	265.5	21.886	80.000	265.5
February	21.886	80.000	265.5	21.886	80.000	265.5
March	21.886	83.750	282.7	21.886	85.000	288.4
April	21.886	85.000	288.4	21.886	85.000	288.4
May	21.886	85.000	288.4	21.886	85.000	288.4
June	21.886	85.000	288.4	21.886	85.000	288.4
July	21.886	83.640	282.2	21.886	83.000	279.2
August	21.886	82.250	275.8	21.886	82.000	274.7
September	21.886	81.750	273.5	21.886	82.000	274.7
October	21.886	82.000	274.7	21.886	82.000	274.7
November	21.886	79.500	263.2	21.886	79.000	261.0
December	21.886	76.500	249.5	21.886	75.000	242.7

Source: Central Bank of Nigeria.

1/ From 1996 onward, the rate refers to the autonomous foreign exchange market (AFEM) rate.

Summary of the Tax System as of January 1998
(All amounts in naira)

Tax	Nature of Tax	Exemption and Deductions	Rates
1. Tax on net income and profits			
1.1 Company income tax (Companies Income Tax Act of 1979, as amended to date).	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.	<p>Exempt are the following:</p> <ul style="list-style-type: none"> • nonprofit organizations, including religious and educational institutions; • companies with pioneer status which have a tax holiday of between three to five years; and • interest on public loans; and • dividends paid out by companies with pioneer status. <p>Deductions include expenditure incurred in the earning of income. Apart from the usual expenses, those include: contributions to pension funds, Industrial Training Fund contributions, royalty payments up to a maximum of 1 percent of sales, 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. Dividends received from investments in export-oriented companies are exempt. Dividends from small companies in the manufacturing sectors in the first five years of operation are exempt.</p> <p>Instead of a depreciation provision, there is a system of capital allowances for prescribed assets. These allowances consist of a straight-line method of 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) are limited to 62 2/3 percent of prescribed assets. An additional 5 percent initial allowance is granted for certain expenditure items. Agro-allied companies receive in addition an investment allowance of 10 percent.</p> <p>Export processing in a bonded export zone will be entitled to 100 percent first-year capital allowance on qualifying expenditure.</p>	<p>30 percent of taxable income; 20 percent if engaged in manufacturing and the turnover is ₦ 1 million or less for the first five years of operation. There is, however, a minimum tax base of</p> <ul style="list-style-type: none"> • 0.5 percent of gross profits, or • 0.5 percent of net assets, or • 0.25 percent of paidup capital, or • 0.25 percent of turnover, whichever is the highest, for turnover of ₦ 500,000 or less. For turnover of more than ₦ 500,000, the minimum tax on turnover up to ₦ 500,000 plus 0.125 percent of the turnover in excess of ₦ 500,000 is applied.

Summary of the Tax System as of January 1998
(All amounts in naira)

Tax	Nature of Tax	Exemption and Deductions	Rates	
1.2	<p>Petroleum profit tax (Petroleum Profit Tax Act of 1959, as amended in 1979 and 1986).</p>	<p>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.</p>	<p>All new industrial undertakings in any export processing zone in Nigeria are provided with full tax holidays for three consecutive assessment years, provided that exports of the company or person are not less than 75 percent of the total turnover.</p> <p>Deductions include any current expenditure incurred in the earning of income, and royalties and duties to the federal government or local authorities. All capital expenditure can be amortized in five equal annual installments; 1 percent of the initial cost of each asset has to be retained on the books.</p> <p>An investment tax credit in the year of such expenditure is provided in the following cases:</p> <ul style="list-style-type: none"> • Operations on land, 5 percent; • Operations on offshore areas of water depth up to 100 meters, 10 percent; • Operations on 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. 	<p>68.75 percent for the first five accounting years, and 85 percent thereafter. The rate is never less than 15 percent of profits before capital allowances. In practice, the posted price is adjusted to guarantee producers a profit margin ranging between US\$2 per barrel when oil prices are US\$23 per barrel and below, and US\$3 per barrel for oil priced at US\$30 per barrel or above.</p> <p>The royalty rate, which is levied only on exports, is graduated as follows:</p> <ul style="list-style-type: none"> • operations on land, 20 percent; • operations on offshore areas up to 100-meter water depth, 18 ½ percent; and • beyond 100 meters, 16 2/3 percent.

Summary of the Tax System as of January 1998
(All amounts in naira)

Tax	Nature of Tax	Exemption and Deductions	Rates
		<p>Profits in the form of dividends derived from manufacturing companies in petrochemical and liquefied natural gas subsection are tax exempt.</p>	
		<p>Following incentives are provided to gas industry:</p>	
		<ul style="list-style-type: none"> • All gas development projects, including those engaged in power generation, liquid plants, fertilizer plants, and gas transmission and distribution pipelines, are to be taxed under the company income tax and not the petroleum profit tax. • Initial tax holiday period of three years is to be extended to five years. • 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. 	

Summary of the Tax System as of January 1998
(All amounts in naira)

Tax	Nature of Tax	Exemption and Deductions	Rates	
1.3 Personal income tax (Decree 104 of 1994).	Progressive tax on chargeable 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 is the final tax.	<p>Exempted income comprises the following:</p> <ul style="list-style-type: none"> • investment income of any pension fund; • death gratuity and compensation for death, or injuries; • the value of transport and rent subsidy paid by an employer to an employee up to ₦ 2,436 and 28 percent of annual basic salary subject to a maximum of ₦10,000 per annum, respectively; • all retirement gratuities; • compensation for loss of office; • proceeds of foreign earnings that are repatriated into Nigeria in convertible currencies, to which concessional tax rates also apply, and • 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. <p>The following deductions and allowances are provided:</p> <ul style="list-style-type: none"> • personal allowance of ₦ 5,000, plus 20 percent of earned income; • child allowance of ₦ 2,500 per annum per unmarried child, subject to a maximum of four children; • dependent relative allowance of ₦ 2,000, subject to limit of two dependents; and • for disabled person, additional earned income of ₦ 3,000 or 20 percent of his/her earned income, whichever is lower. <p>The following are tax exempt:</p> <ul style="list-style-type: none"> • all life insurance premiums; • interest on loans for owner-occupied house; 	<i>Taxable income</i>	<i>Rate (percent)</i>
			First ₦ 20,000	5
			Next ₦ 20,000	10
			Next ₦ 40,000	15
			Next ₦ 40,000	20
			Next ₦ 120,000	25
			The tax-free worker's earned income is ₦ 30,000.	

Summary of the Tax System as of January 1998
(All amounts in naira)

Tax	Nature of Tax	Exemption and Deductions	Rates																
1.4	Capital gains tax (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 Nigeria. Capital losses cannot be offset against capital gains. Chargeable assets consist of loans, buildings, movable assets (such as motor vehicles), stocks, and shares in Nigerian companies.	<ul style="list-style-type: none"> • 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 the company is incorporated in Nigeria; equity participation was imported into country between January 1, 1987 and December 11, 1992; and recipient's equity in company constitutes at least 10 percent of the company's share capital. Tax exemption is extended to five years if company is engaged in agricultural production, petrochemical, or liquefied natural gas production. <p>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, gifts, Nigerian currency, and Nigerian stocks and shares of every description.</p>	10 percent.															
2.	Taxes on property																		
2.1	Capital transfer tax (Capital Transfer Tax Act of 1979).	A progressive inheritance tax, and tax on gifts during lifetime.	<p>Exemptions are granted for:</p> <ul style="list-style-type: none"> • the family house; • the first ₦ 100,000 of the transfer; • property outside Nigeria; • works of art donated to specified institutions; and • scientific collections bequeathed to a museum. <table border="0" data-bbox="1198 1481 1479 1781"> <thead> <tr> <th data-bbox="1198 1481 1325 1559"><i>Net value of the taxable property</i></th> <th data-bbox="1385 1502 1479 1559"><i>Rate (percent)</i></th> </tr> </thead> <tbody> <tr> <td data-bbox="1198 1587 1390 1608">First ₦ 100,000</td> <td data-bbox="1425 1587 1455 1608">0</td> </tr> <tr> <td data-bbox="1198 1613 1390 1634">Next ₦ 150,000</td> <td data-bbox="1425 1613 1455 1634">10</td> </tr> <tr> <td data-bbox="1198 1638 1390 1659">Next ₦ 150,000</td> <td data-bbox="1425 1638 1455 1659">20</td> </tr> <tr> <td data-bbox="1198 1664 1390 1685">Next ₦ 250,000</td> <td data-bbox="1425 1664 1455 1685">30</td> </tr> <tr> <td data-bbox="1198 1689 1390 1710">Next ₦ 500,000</td> <td data-bbox="1425 1689 1455 1710">40</td> </tr> <tr> <td data-bbox="1198 1715 1390 1736">Next ₦ 1,000,000</td> <td data-bbox="1425 1715 1455 1736">50</td> </tr> <tr> <td data-bbox="1198 1740 1308 1761">Thereafter,</td> <td data-bbox="1425 1740 1455 1761">60</td> </tr> </tbody> </table>	<i>Net value of the taxable property</i>	<i>Rate (percent)</i>	First ₦ 100,000	0	Next ₦ 150,000	10	Next ₦ 150,000	20	Next ₦ 250,000	30	Next ₦ 500,000	40	Next ₦ 1,000,000	50	Thereafter,	60
<i>Net value of the taxable property</i>	<i>Rate (percent)</i>																		
First ₦ 100,000	0																		
Next ₦ 150,000	10																		
Next ₦ 150,000	20																		
Next ₦ 250,000	30																		
Next ₦ 500,000	40																		
Next ₦ 1,000,000	50																		
Thereafter,	60																		

Summary of the Tax System as of January 1998
(All amounts in naira)

Tax	Nature of Tax	Exemption and Deductions	Rates
3.	Payroll tax		
3.1	Industrial Training Fund levy	An obligatory contribution to the Industrial Training Fund by employers in industry and commerce.	Exemptions: Employers with fewer than 25 employees are exempt.
3.2	National Provident Fund levy	An obligatory contribution to the National Provident Fund.	Exemptions: Employers with fewer than ten employees are exempt.
3.3	Education levy	An obligatory contribution for primary and secondary education.	Exemptions: Same exemptions apply as for company income tax.
4.	Taxes on goods and services		
4.1	Value-added tax (VAT) (Decree 102 of 1993).	VAT replaces the sales tax and covers all items not on the exclusion list. Effective January 1, 1994.	Exempted items include the following: Goods <ul style="list-style-type: none"> • medical and pharmaceutical products; • basic food items— beans, yam tubers, cassava, maize, millet, rice, milk, 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; • commercial vehicles and their spare parts; and • agricultural equipment and products, fertilizer, and veterinary medicine.

Summary of the Tax System as of January 1998
(All amounts in naira)

Tax	Nature of Tax	Exemption and Deductions	Rates																				
		Services																					
		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.																					
4.2	Excise tax	Excise duties are levied at ad valorem rates on selected goods manufactured or produced in Nigeria.	All excise taxes have been abolished with effect from January 1, 1998.																				
5.	Taxes on international transactions																						
5.1	Import duties (Customs Tariff Consolidation Act of 1973, as amended in 1984, 1989, 1993, 1994, and 1995).	A tax on merchandise imports.	<p>Exemptions include the following:</p> <ul style="list-style-type: none"> • 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. <p>A new tariff structure, which includes a narrower and lower range of customs duty rates, was effected in March 1995. The dispersion in import duty rates was reduced from 0-300 percent, to 5-100 percent, with most rates clustering between 10-40 percent, compared with the previous structure of 25-75 percent.</p> <table style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th></th> <th style="text-align: right;">Rate 1/ (percent)</th> </tr> </thead> <tbody> <tr> <td>Raw materials</td> <td style="text-align: right;">5-25</td> </tr> <tr> <td>Components</td> <td style="text-align: right;">5-50</td> </tr> <tr> <td>Clothing</td> <td style="text-align: right;">55</td> </tr> <tr> <td>Luxury consumer goods (except automobiles)</td> <td style="text-align: right;">30-50</td> </tr> <tr> <td>Paper products</td> <td style="text-align: right;">10-45</td> </tr> <tr> <td>Vehicles</td> <td style="text-align: right;">5-50</td> </tr> <tr> <td>Soya meal, soya cake and groundnut cake</td> <td style="text-align: right;">35</td> </tr> <tr> <td>Refined petroleum products</td> <td style="text-align: right;">10</td> </tr> <tr> <td>Wheat</td> <td style="text-align: right;">60</td> </tr> </tbody> </table> <p>With effect from January 1, 1987, an advanced payment of 25 percent of the assessed duty is required.</p>		Rate 1/ (percent)	Raw materials	5-25	Components	5-50	Clothing	55	Luxury consumer goods (except automobiles)	30-50	Paper products	10-45	Vehicles	5-50	Soya meal, soya cake and groundnut cake	35	Refined petroleum products	10	Wheat	60
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Summary of the Tax System as of January 1998
(All amounts in naira)

Tax	Nature of Tax	Exemption and Deductions	Rates
5.2	Import surcharges	A tax on merchandise imports.	Same as above.
			<p>Three import duty surcharges apply:</p> <ul style="list-style-type: none"> • a 5 percent port development surcharge; • a 1 percent Raw Materials and Development Council surcharge; and • a 0.02 percent freight rate stabilization surcharge earmarked for the Nigerian Shipper's Council.
6.	Other taxes		
6.1	Stamp duties	A tax imposed on most legal documents.	The rates vary with the type of document. The highest rates of duty relate to transfers of real Estate (0.75 percent), leases (4-6 percent), and share capital (1.25 percent).
6.2	Company pre-operation levy	A tax on registered companies that after six months of incorporation fail to commence business. The tax is imposed on an annual basis for as long as the company remains dormant, and before a tax clearance certificate is issued to such company.	₦ 500 for the first year of obtaining a tax clearance certificate; ₦ 400 in each of the subsequent years.

1/ These rates apply to the 1995 tariff regime.

