

INTERNATIONAL MONETARY FUND



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## **Sudan: Recent Economic Developments**

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# INTERNATIONAL MONETARY FUND

## SUDAN

### Recent Economic Developments

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Approved by the Middle Eastern Department

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## Sudan: Basic Data

### I. Social and Demographic Indicators (1996)

Area (million sq. km)	2.5	Immunization rate	
Population	*	(percent under 12 months)	
Total (millions)	28	Measles	74
Growth (percent)	2.9	DPT	77
Health			
Life expectancy (years)		Education	
Female	48.7 (south) ***	Female literacy (percent)	53-54
Male	45.9 (South) ***	Male literacy (percent)	65-67
Infant mortality (per thousand)	152 (South) ***		
Access to safe water (percent of population)		Federal government expenditure	
Total	59	in social sector	
Urban	66	(percent of GDP)	1.2
Rural	45		
		GDP per capita	
		(in US dollars)	280.0

### II. Economic and Financial Indicators 1/

	1995	1996	1997	Est. 1998
	(Annual changes in percent)			
National income, prices and exchange rate				
Real GDP (at factor cost)	4.4	4.7	6.7	5.0
Consumer prices (month on year ago month)	71.0	114.0	32.0	8.0
Consumer prices (period average)	68.0	133.0	47.0	17.0
Official exchange rate end of period (LSd/US\$)	838.0	1,460.0	1,722.0	2,370.0
Real official exchange rate (period average: depreciation -)	-22.9	-0.4	3.4	-13.3
(end period: depreciation -)	-24.2	14.5	5.5	-23.9
Central government operations 2/				
Total revenue	75.5	72.3	70.7	46.2
Expenditure (excluding interest arrears)	87.7	94.6	23.8	43.5
External sector				
Exports, f.o.b.	31.8	11.6	-4.3	0.3
Imports, c.i.f.	19.1	26.9	2.1	21.8
Terms of Trade	0.7	-2.3	-4.4	3.1

## II. Economic and Financial Indicators 1/

	1995	1996	1997	Est. 1998
Changes as percent of beginning stock of broad money)				
Money and credit				
Net foreign assets	-326.3	-267.9	-40.7	-110.1
Net domestic assets	67.5	56.7	19.6	14.2
Net domestic credit	30.7	59.3	15.0	12.9
Net credit to the central government	20.0	31.7	9.3	6.7
Claims on nongovernment sector	10.7	27.5	6.7	3.9
Other items (net)	36.8	-2.6	4.5	1.3
Counterpart to valuation changes	333.0	276.2	58.1	125.5
Money and quasi-money	74.2	65.1	37.0	29.6
Reserve money (annual percentage change)	76.7	79.0	34.4	29.9
Velocity (GDP/average M2)	7.8	10.7	11.4	10.5
(As percent of total current account receipts, unless otherwise indicated)				
Total external debt service				
Commitment basis	115.9	103.0	97.3	93.0
Actual payments	7.0	4.7	4.7	4.6
Memorandum items:				
External debt (in billions of US\$)	19.8	20.5	21.3	22.4
Nominal GDP (annual; in billions of Sudanese pounds)	4,179	9,014	15,863	19,507

Sources: Fund staff estimates and projections based on information provided by the Sudanese authorities.

1/ Starting in 1996, all official accounts moved from a fiscal year (July-June) to a calendar year basis.

2/ Revenue and expenditure data for 1996 and 1997 exclude taxes collected on behalf of and transferred to the States



## I. INTRODUCTION

1. Sudan is the largest country in Africa (2.5 million square miles and 28 million people) with considerable natural resources. It is also one of the poorest countries in the world, with low per capita income (US\$280 per year), weak social indicators, and persistent structural distortions and institutional weaknesses in the economy. Poverty and political instability have led to the emigration of a large number of skilled Sudanese over the years, seriously weakening the administrative capacity of the government. Sudan is heavily indebted to external creditors with a debt of US\$22.4 billion as of end-1998 (of which US\$19.3 billion was in arrears), equivalent to 253 percent of GDP and more than 3,655 percent of export of goods and nonfactor services.<sup>1</sup> The high level of arrears and the poor political relations with many creditors and donors have resulted in a near drying up of international aid and credit, further exacerbating the domestic economic difficulties.

2. Sudan initiated economic reforms in the early 1990s aimed at liberalizing the economy. Progress has been made in deregulating and opening of the economy to private sector participation, and an average annual growth rate of about 5 percent was maintained during 1992–96. However, macroeconomic policies up to 1997 were characterized by: (i) high fiscal deficits that were driven by large subsidies and financial support for inefficient public enterprises, the secular decline in the revenue ratio, and lax controls on spending, the granting of guarantees, and the contracting of debt; (ii) an inappropriate monetary policy, characterized by high central bank liquidity emissions, (owing to the automatic monetization of the deficits of the government, and financing the agricultural schemes and public enterprises), direct credit controls, and negative real rates of financing and deposit, resulting in financial disintermediation; and (iii) a distorted exchange rate policy which relied heavily on direct exchange controls and a multiple exchange rates regime. Attempts to reduce macroeconomic imbalances were undermined by the highly distorted tax system that was characterized by widespread exemptions and weak tax administration, weak expenditure controls and debt management, the absence of non-inflationary debt instruments, and inadequate monetary policy instruments.

3. To address these deficiencies, Sudan initiated reforms under the 1997 and 1998 staff-monitored programs (SMP). The realignment of macroeconomic policies included: (i) reducing the fiscal deficits to less than 1 percent of GDP by eliminating subsidies, increasing revenue buoyancy (through improved tax administration and initiating tax reform), and improving budget management and monitoring; (ii) tightening and re-orienting monetary policy to achieve a significant reduction in inflation, eliminating most credit controls, and introducing new monetary instruments suitable for effective indirect monetary control; and

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<sup>1</sup>About US\$2.5 billion in obligations to the multilateral creditors is overdue, most of it to the Fund (US\$1.6 billion). Arrears to the World Bank (primarily IDA) amounted to US\$122 million.

(iii) reforming the exchange rate system, which led to the unification of exchange rates in October 1998.

4. The economy has responded positively to these reforms. Real GDP growth accelerated modestly to an annual average of about 6 percent during 1997–98. Inflation declined from an average of 133 percent in 1996 to 17 percent in 1998. Fiscal revenue buoyancy has increased markedly after years of stagnation at low levels and, coupled with an improvement in budget control, has succeeded in sharply reducing the overall budget deficit. Aided by positive real rates of returns, financial disintermediation has been halted. For the first time in many years, in 1998 the velocity and cash-to-deposits and foreign currency deposits ratios declined and the ratio of quasi-money deposits to current deposits increased. The current account deficit<sup>2</sup> has also declined from 7.6 percent of GDP in 1996 to 4.1 percent in 1998, mainly as a result of increased private transfers and improved export performance.

5. Notwithstanding these achievements, the macroeconomic situation remains fragile and many weaknesses remain in the economy. In particular, a largely inefficient public sector continues to play an important role in the economy. The infrastructure, especially in the irrigated sector, energy, and transportation sectors has deteriorated to the extent that it is becoming a major impediment to growth. Public investment and social spending are constrained by the still limited revenue mobilization effort, as well as the burden of the war in the south. Financial and foreign exchange intermediation by commercial banks is still very weak, while the indirect monetary policy tools and bank supervision are at a fairly early stage of development. High tariff protection and some complex trade procedures still hinder foreign trade.

6. This paper provides background information to the 1999 Article IV staff report. In addition, this paper will elaborate on the economic and reform developments that took place in 1997 and 1998. The remainder of the paper is organized as follows: real sector developments are described in Section II; fiscal sector developments in Section III; monetary sector developments in Section IV; and finally, external sector and exchange system developments are discussed in Sections V and VI, respectively.

## **II. REAL SECTOR**

### **A. Overall GDP Developments**

7. Since the early 1990s, real GDP has grown at an annual average rate of about 5 percent, and the growth has been relatively stable compared to the sharp output swings experienced during the 1980s. This stability is attributable in part to relatively favorable weather conditions and to the economic liberalization policies that have sustained growth and fostered greater economic diversification.

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<sup>2</sup>Excluding public transfers and pipeline related imports.

8. Real GDP growth averaged about 4.6 percent during the period from 1992/93 to 1996, with agriculture and industry each contributing about 1.1 percentage points to average GDP growth, while trade and other services together contributed another 2 percentage points (see Tables 1 and 2). The GDP growth rate accelerated to an estimated average of about 6 percent during 1997–98, led by the growth in agriculture which contributed about 3.5 percentage points (about 45 percent of which was generated by the growth in non-traditional crops). Other notable developments during 1997–98 were the rapid growth of construction activities (triggered in part by the construction of the oil pipeline), which contributed an estimated 2 percentage points to the average GDP growth, and the diminishing contribution to GDP growth of trade and other services which barely grew during the period (in part because of the decline of government services).

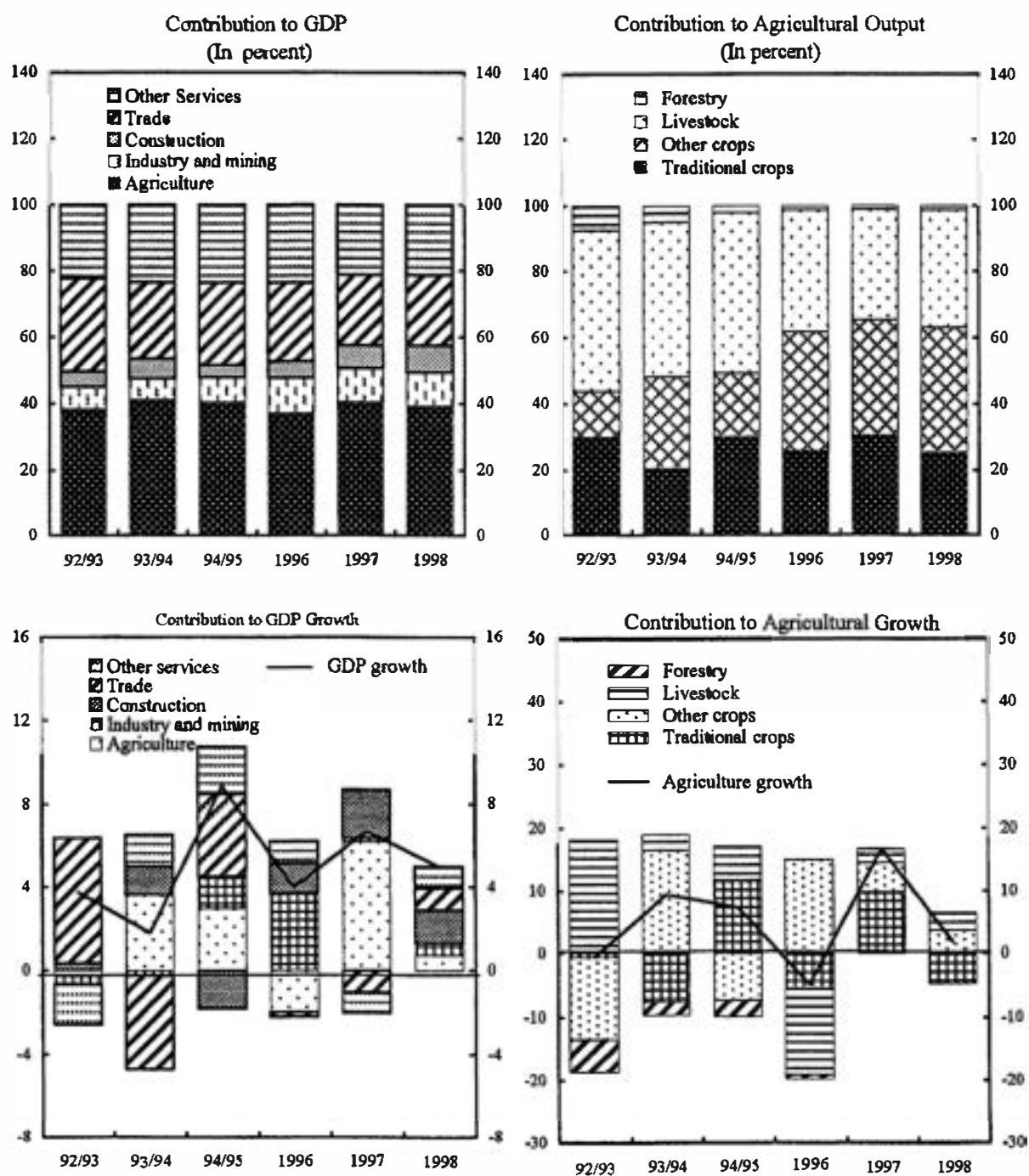
### **B. Sectoral Developments**

9. Sudan's economy is based largely on agriculture which accounted for about 40 percent of GDP on average during 1992/93–98, while trade and other services (a significant part of which are agriculture related) averaged about 46 percent of GDP. Nevertheless, developments in 1997 and 1998, point to the growing pace of economic diversification. While the share of agriculture in GDP has remained broadly the same over 1992/93–98 (see Chart 1), industry and construction have increased their contribution to GDP from an average of 7.6 percent and 4.9 percent, respectively in 1992/93–96, to an average of 10 percent and 7.5 percent, respectively, in 1997–98. This transformation occurred at the expense of trade and other services with their share in GDP declining from an average of 48 percent during 1992/93–96 to an average of 42 percent in 1997–98. This outcome could be attributed, at least in part, to the financial stabilization programs of 1997–98. The rapid decline in inflation rates, the return to positive real rates of returns on bank deposits and finance, and the relative stability of the exchange market have crowded out many trade and services activities and attracted private investment and transfers to industry and construction. There were also notable changes within the agricultural sector. The share of non-traditional crops in agriculture output has risen steadily from about 14 percent in 1992–93 to an estimated 36 percent in 1998, reflecting the liberalization policies, including eliminating price controls and cropping restrictions.

#### **Agriculture**

10. Agriculture is the dominant sector in the Sudanese economy. In addition to generating directly about two-fifths of GDP, agriculture also drives activity in service sectors such as transportation, agro-industries, and commerce, that account for a large part of the rest of the economy. Even more importantly, 80 percent of the labor force is employed in agricultural and related activities, and the performance of agriculture is the main determinant of year-to-year changes in poverty levels and the food security of the population. Finally, agriculture is the source of virtually all of Sudan's exports, and therefore the key determinant of balance of payments developments.

Chart 1. Sudan: Selected Real Sector Indicators, 1992/93 - 98  
(Fiscal years ending June 30)



Source: Sudanese authorities; and Fund staff estimates.

11. Sudan has huge agricultural potential in terms of the amount of arable land and pasture, as well as plentiful water resources. Arable land area is estimated at 200 million feddans,<sup>3</sup> of which 40 million feddans are cultivated (forests, pastures, and deserts make-up the rest). About 4 million feddans are irrigated, mostly by Nile waters. Rainfall in Sudan varies from very little in the north to tropical amounts in the south. Even in areas with moderate rainfall, there is enormous year-to-year variability.

12. In recent years, agriculture has begun to live-up more to its potential, in response to stabilization and structural reform measures. Agricultural GDP has increased at a rate of about 5 percent between 1993/94 and 1998, and has pulled the economy along at about that rate, as noted above. The growth has been export-led, with export volume growing at well over 7 percent a year. Nevertheless, performance within the agricultural sector has been mixed, with the irrigated sector still encumbered by the inheritance of past policies and the lack of investment.

### *The macroeconomic policy environment*

13. One of the main causes of the improved performance of the agricultural sector during 1997–98 has been the enhanced incentives resulting from the exchange and trade reforms. Traditionally, macroeconomic policy in Sudan has been biased against exportables; official exchange rates at which exporters had to surrender foreign exchange have in most periods been overvalued in comparison with the parallel market exchange rate. This resulted in implicit taxation of the agricultural sector and lower producer prices, which discouraged production. With the exchange market reforms implemented since 1997, the divergence between the official and parallel market exchange rates was gradually reduced and surrender requirements have been largely eliminated (see Section VI). As a result, despite the declines in most international prices over the last several years, production incentives have been strengthened and there has been a strong export response. Nevertheless, the sharp further decline in commodity prices in the second half of 1998 has made some exports, including groundnuts, and sesame uncompetitive.

14. The authorities have also made efforts to reduce explicit taxation of the agricultural sector. The federal government has taken a decision under which total taxation of agricultural products (including federal, state, and local taxes) is to be limited to 20 percent in the rainfed sector and 15 percent in the irrigated sector, which would entail a considerable reduction from estimated earlier taxation levels of 30–40 percent. However, compliance with the decision is difficult to ascertain, and state and local governments are dependent on agricultural taxes to maintain their operations. In addition, some states levy taxes on goods crossing state borders, which particularly affects traded goods. The federal government has gradually been reducing export taxes (only cotton and gum arabic are now taxed).

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<sup>3</sup>A feddan is equal to 1.04 acres.

15. The improved supply of inputs has been another cause of the stronger performance of the agricultural sector. Traditionally, agricultural inputs were supplied exclusively by public sector entities such as the Agricultural Bank, the Mechanized Rainfed Corporation, or the larger agricultural corporations, and their supply was coordinated by a Government High Committee. However, the import of agricultural inputs has been liberalized and is currently dominated by the private sector. With foreign exchange now freely available to importers, the supply of agricultural inputs is no longer considered a major constraint on production.

16. In the past several years, progress has also been made in liberalizing agricultural marketing and pricing. With the privatization of the Sudan Cotton Company (a farmer's cooperative that buys about 60 percent of cotton production), all crops are now marketed by the private sector with the exception of gum arabic where there is a monopoly with minority government participation, and the Sudan Sugar Corporation, which competes with a private sector company. The government occasionally buys and sells sorghum, as it manages the country's strategic reserve with a view to reducing food insecurity.

17. Agricultural prices now largely reflect international prices. In the past, the prices of many products were set by the Government bearing in mind the need to contain implicit subsidies—in an environment of overvalued official exchange rates—which placed downward pressure on prices. Currently, most producer prices, including the prices of sorghum, groundnuts, sesame, sunflower, and millet are determined at auctions in producing areas around the country, while procurement prices of cotton, wheat, and gum arabic are set on the basis of international prices and transportation and processing costs (see Table 15).<sup>4</sup> In the case of wheat, the marketing board announces two months in advance of the planting season a “generous” minimum price, which is sufficiently high to ensure adequate incentives for planting. Any excess profits arising from higher actual market prices are jointly shared at the rate of 30 percent to the government and 70 percent to the farmer. In the event of a loss, the marketing board absorbs all of the losses. The purchase prices of the Gum Arabic Corporation are also set to reflect international prices, minus taxes and various transportation costs. This effectively sets the ceiling on prices, although there is considerable competition among merchants who collect the gum arabic from farmers and hold auctions in the producing areas

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<sup>4</sup>For cotton, procurement prices of the cotton company are calculated according to the following formula, which results in the pass-through of the benefits of favorable export price to the farmer: f.o.b. export price in US dollars less 11.5 percent (comprising 10 percent export tax; 0.5 percent for “quay” marketing dues; and 1 percent for the exporter) less LSd 700 per bale (preparation fees) equals the “ex-store” price, which is then converted to local currency at the official exchange rate. The “ex-store” price less 4 percent (comprising 2 percent marketing fee for the Sudan Cotton Company, and 2 percent dues for a Reserve fund) equals the net price paid to the farmer (procurement price). The total deductions from the original f.o.b. price amount to about 16 percent.

18. While exchange and trade system liberalization has clearly improved the policy environment, weaknesses in the budget and the banking system have resulted in the inability of the government to maintain the infrastructure and provide support services. These are major constraints to agricultural development, and have affected the irrigated schemes in particular, as discussed below.

### ***Irrigated agriculture***

19. The irrigated sector covers about 4 million feddans. This is equivalent to about 10 percent of agricultural land but it contributes nearly one-half of the value of agricultural output (excluding livestock and forestry). It has the greatest potential, as high value crops such as cotton and wheat will mostly be produced in this sector, and yields for other crops are potentially far higher than in the rainfed sector. However, the performance of the irrigated sector has been below expectations, with slower growth being recorded than in the rest of agricultural sectors.

20. Large agricultural schemes dominate the irrigated sector. These schemes are government-owned but farmers are allocated (based on long-term leases) plots of land. Traditionally, the government controlled all aspects of economic life in the schemes, including: determining the cropping pattern; providing inputs and credit to farmers; organizing the ginning of cotton; and marketing and pricing of output. However, the government has greatly reduced its role in the irrigated sector in recent years. In particular, the agricultural corporations—such as the Sudan Gezira Board (SGB)<sup>5</sup>—are no longer fully controlled by the government, and farmers associations play a more active role in management. Moreover, the management of the schemes has been decentralized (there are 16 sub-units at Gezira) so that many more decisions are taken locally in consultation with farmers, including those related to cropping patterns. Moreover, within a certain rotation determined at the sub-unit level, farmers can choose, for example, between wheat and sorghum as the cereal in the rotation.

21. Another recent development has been that many of the services that the schemes or individual farmers need can now be provided by the private sector, instead of public entities. Such services include agricultural engineering, canal maintenance, storage, transportation and telecommunications. For example, the Earth Moving Corporation is now competing against private contractors in clearing the canals of silt.

22. Another key change is that the Ministry of Irrigation and Water Resources no longer provide free maintenance of the canals, but charges the schemes for its services. However, as the schemes have difficulties collecting land and water charges from the farmers, there are often difficulties in paying the Ministry and services are not provided on time. This has resulted in the complete blockage of many of the outer canals (and even main canals are silted) and a contraction in the areas under cultivation at the main schemes. At the Gezira scheme,

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<sup>5</sup>The Gezira scheme is by far the largest of the irrigated schemes.

the total area under cultivation was roughly unchanged between the early 1980s and the 1996/97 season. However, the area under cultivation dropped sharply in 1997/98 due to the clogging of the canals and another substantial drop is expected in 1998/99 due to additional silting of the canals caused by the floods of August–September 1998.

23. Given its high water requirement, cotton has been the most affected by the deterioration in the irrigation systems (see Tables 10 and 11). Following a further one-third decline in 1997/98, the area under cotton cultivation in all the schemes was no more than one-third of the level in the early 1980s, and cotton yields have not shown an appreciable increase in the same period (Table 12). Compared with the early 1980s, cotton cultivation has to a large extent been replaced by wheat, reflecting earlier government policies to increase food security and reduce imports. However, areas under wheat, another water-intensive crop, also decreased in 1997/98 due to irrigation difficulties, as there was a shift to less water-intensive crops such as groundnuts and sorghum.

24. The authorities have also pulled back from the financing of the public sector irrigated schemes. In earlier years, the schemes' working capital requirements were financed directly by the Bank of Sudan (BOS). These loans were at times not fully repaid, especially when crops failed or international prices fell, which resulted in sharp expansion of the monetary base and contributed substantially to the build-up of inflationary pressures. With this type of direct financing no longer available, the schemes are having increasing difficulty in financing the purchase of sufficient inputs, as the banks are reluctant to accept the large risks related to agricultural production at a time when the schemes are generally considered to be in a weak financial position. The inability to finance the purchase of sufficient inputs may also have contributed to the decline in area under cultivation and yield.

25. While the government has made efforts to direct over one-half of capital spending to agriculture, its difficult budgetary position has placed a limit on these efforts (research services and pest control have suffered especially). The network of roads that connects farming areas with the commercial centers has also deteriorated.

26. Because of the above difficulties, yields of cotton and wheat have been stagnant in recent years. However, yields of sorghum, groundnut and other crops which need less of water, other inputs, and agricultural support services, have continued to increase steadily. This substitution away from high-value crops has constrained the growth of value-added in the agricultural sector. However, farmers have reacted to these difficulties by turning to nontraditional crops, including fruits and vegetables, as well as the rearing of livestock which in turn compensated for the weak growth performance of the irrigated sector.



### ***The rainfed sector***

27. In rainfed areas, mechanized farming developed rapidly in the 1960s and 1970s, although traditional methods are also still used extensively. The sector is dominated by private producers. The average farm size in the mechanized areas is about 1,000 feddans, although some are as large as 200,000–300,000 feddans. Sesame, sorghum, sunflower, and some short-staple cotton are the main crops produced on the mechanized farms, while smaller farmers focus on raising sorghum, groundnuts, and karkadeh, and collect gum arabic.

28. There has been considerable investment in the rainfed sector over the past decade, and areas under cultivation have expanded sharply. With large areas of land available for the expansion, there has been little incentive for farmers to invest in increasing yields and preserving the productivity of the land, especially in view of the limited extension and research services. In fact, with yields in the past few years have not been much higher than in the 1980s, the decline in international prices has eroded farmers' income. Moreover, the rapid extension of rainfed agriculture has raised concerns about environmental degradation, as mechanized production moves on rapidly to new areas once existing land becomes less productive.

29. The development of rainfed agriculture is also constrained by the lack of financing and of research and extension services. Only a few of the largest farmers have access to commercial bank financing. The Agricultural Bank is the main source of financing for smaller farmers in more remote parts of the country, but its resources are inadequate to meet all needs.

30. In the absence of virtually any stabilization mechanisms, the pronounced variability of rainfall results in sharp fluctuations in the outputs and producer prices of sorghum and millet (exports of these products are limited compared with production). This has had an important impact on the income of some of the poorest areas of the country and on food security. For example, in 1997/98 areas under sesame and sorghum cultivation declined, in response to lower prices resulting from a large crop in the previous season. However, there was a shift in cultivation towards millet and groundnuts, and the production of these crops increased significantly.

### ***Livestock***

31. The livestock sector accounts for about 13–14 percent of GDP, or about one-third of agricultural production. It is a very labor-intensive sector, providing income for a large semi-nomadic population of herdsman who raise cattle, camels, sheep, and goats. The livestock sector also provides supplementary income to many small farmers whose principal activity is the cultivation of crops, including increasingly in the irrigated schemes.

32. The livestock sector has been a principal beneficiary of the exchange reforms. Livestock exports have more than doubled since 1994/95, with annual growth rates (excluding

1996) exceeding the average GDP growth.<sup>6</sup> Moreover, in 1999 output is expected to record a further sharp jump due to the increasing availability of forage following the very heavy rains in August–September 1998. The sector has also benefitted from: (i) the privatization of certain support facilities; (ii) efforts to incorporate livestock into the irrigated schemes; and (iii) the increasing adoption of rotational grazing by the smaller producers.

### ***Forestry***

33. Sudan has large forest resources. There are rainforests in the south, covering about 10 percent of the country's land area, which have so far not been exploited. In other parts of the country, forests are less prevalent and were being steadily depleted because of their use for firewood, although recent government efforts to halt the gathering of firewood resulted in a sharp contraction in the share of forestry output in GDP in the mid-1990s. Efforts at reforestation are still at an early stage, but have been intensified in recent years.

34. An important product that originates in the forestry sector is gum arabic which is grown from acacia trees and is a traditional source of cash income in the western parts of the country. Gum arabic cultivation is seen as having important beneficial externalities, being a source of income to some of the poorest segments of the community, and gum arabic trees are useful in slowing desertification.

35. Sudan used to be the dominant world exporter of gum arabic, but its share of the market has declined to well below one-third of world demand of 40–45,000 tons in the mid-1990s. With the development of industrial substitutes and increasing competition from Senegal and Nigeria, international prices of gum arabic has fallen from around US\$5,000 per ton in the early 1990s to under US\$1,000 per ton currently. Nevertheless, Sudan's exports have rebounded in recent years from an average of about 16,000 tons in 1994/95–96 to almost 30,000 tons in 1997–98, partly reflecting improved competitiveness due to exchange market reforms. This may have reduced smuggling through neighboring countries (Chad, Eritrea). These illegal channels had developed in response to high taxation and transportation and processing costs in Sudan, as well as historically an overvalued exchange rate.

### **Economic Activity in the Secondary Sector:<sup>7</sup> 1992/93–98**

36. Over the period 1992/93–98, the combined output of the secondary sector grew at an average annual rate of about 13 percent with its share in GDP rising from 11 percent at the beginning of the period to 18 percent in 1998. This performance was led by a rapid pace of activity in the construction sector, associated with the ongoing oil pipeline project, and was

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<sup>6</sup>The sharp drop in 1996 may be explained by methodological problems in compiling GDP accounts.

<sup>7</sup>Covering industry, mining, energy and construction.

supported by manufacturing (including mining), both of which offset the weaker performance of the electricity and water sectors.

### *Manufacturing and mining*

37. The performance of the manufacturing sector has been constrained over an extended period by the limited electricity generation capacity of the country and other factors that the government has started to address in the context of ongoing structural reforms. These reforms focused on the creation of an enabling environment for private sector activities with a view to eliciting increased investment. To this end, the government started in the mid-1990's a process of price liberalization and introduced further investment incentives through the Investment Encouragement Act. This was followed by the liberalization of the exchange system during 1997–98. While the situation in the manufacturing sector remains difficult, with capacity utilization ratios of about 50–60 percent, there has been a positive supply response to the reforms. In particular, the tax incentives and the liberalization of the exchange system, have contributed to increased investment particularly in agro-industry, notably in tanneries. There has also been increased foreign investment, most notably in the petroleum sector.

38. Manufacturing (including mining) output grew at an average annual rate of 14 percent during 1992/93–98 and saw a rise in its contribution to GDP from 5.5 percent to 9.2 percent over the same period (Table 43).<sup>8</sup> This performance was largely influenced by developments in the manufacturing sector. Mining activities, which accounted for about 10 percent of the value added of manufacturing (at constant prices) in 1998, experienced a one-time sharp increase in 1996 followed by a more moderate rise in 1997. This evolution reflected the coming on stream of gold mining exploited through joint ventures with foreign companies. Also evident have been the recovery and sustained gains in: (i) foods and beverages, on account of sugar, vegetable oils and soft drinks, (ii) shoe manufacturing, particularly in 1997–98, in line with higher output of the tanneries, (iii) petroleum refining, except in 1997 and 1998 because of the relatively more attractively priced imports, and (iv) cement, particularly in 1998, reflecting the dynamic pace of activity of the construction sector. By contrast, production of flour and textiles have grown increasingly weak reflecting their lack of competitiveness.

### *Electricity*

39. The electricity supply in Sudan has been constrained for a number of years by the unavailability of domestic and external financing required for an adequate expansion of

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<sup>8</sup>A fully analysis of the manufacturing sector is not possible because the estimates of the value added of the sector are based on a long-standing survey, which only covers 10 industries and must therefore be interpreted with caution. Capacity utilization ratios have the same coverage. The Ministry of Industry is currently conducting a survey of about 25–30 industries, which are believed to represent the bulk of manufacturing in the country. The data will be used to estimate the value added of the sector.

generation capacity. Since 1995 the installed capacity of the National Electricity Corporation (NEC) (National Grid) has remained at about 630 Mw, of which 308 Mw is hydroelectric and the remainder thermal. In addition, fourteen isolated centers are served by thermal generating plants and local distribution networks. As a result, the NEC serves only about 20 percent of the population

40. Following a sharp increase in 1996, reflecting an expansion in installed capacity in 1995, electricity generation grew again in 1997, albeit at a slower pace, before contracting in 1998 (Table 44). However, as losses were reduced, the level of energy sold remained broadly unchanged in relation to 1997. Most of the demand for electricity centers around the Khartoum area and comes from the residential sector, which represents more than 40 percent of total consumption. Industry and agriculture account for about 36 percent, and the remainder is consumed by the government (12 percent) and commercial establishments (9 percent). Power use in industry has been restrained mainly by supply constraints and, to a lesser extent, by its unreliability which has compelled all major firms to purchase backup power supply units. Overall, the NEC estimates that it only meets the demand of about 20 percent of the population.

41. The financial situation of the NEC has been adversely affected over an extended period by administratively set tariffs, which failed to cover costs, and difficulties in collecting tariff payments from the general public as well as from the government. Since 1997, however, the NEC has been taking a number of measures aimed at addressing this situation in the context of the government policy of eliminating subsidies on oil products and energy services, and reforming the public enterprise sector. Tariffs are being increased periodically (Table 45) to gradually reflect costs with a view to eliminating subsidies by end-2000. These costs have been rising rapidly in line with the liberalization of domestic prices of oil products (see below), which represent over 50 percent of the total cost, as well as by the impact of the exchange rate depreciation on imported materials. The computerization of the billing system and opening of new offices have been instrumental in significantly strengthening the monitoring and collection of customers' payments, which reached 90 percent of the payable amount in the last months of 1998. Timely payments by the government also contributed to this improvement. Finally, a review of the Electricity Act is being conducted in the context of the ongoing privatization/restructuring program of the government, with a view to encouraging private sector investment in the generation and distribution of electricity. One electricity generating plant is already being operated by the private sector (under a leasing arrangement).

### ***The oil sector***

42. The oil consumption needs of the country, currently estimated at 1.5 million tons (Table 38), are projected at the beginning of every year as a basis for a monthly tender, by the former Government Petroleum Corporation (GPC), now the Sudan Petroleum Corporation (SPC). Throughout the year, the SPC monitors closely the stocks of oil products to ensure that no shortages arise. Sudan imports finished products and crude oil that is locally refined. Lower world market prices in 1997-98 have made it more attractive to import finished

products than crude, with the result that the volume of locally refined products decreased from 694,000 metric tons in 1996 to 411,000 metric tons in 1998 (Table 37). Of the three refineries in Sudan as of end-1998, the Port Sudan and the Obied refineries are the largest with the former absorbing about 80 percent of total production and the latter close to 20 percent. In all, the existing refining capacity is 8,000 barrels per day (bpd).

43. A major shift in government policy regarding the oil sector occurred in 1997, as noted above, with the gradual opening of the importation and distribution of oil products to private sector participation. These activities had been until 1996 the domain of the government through the SPC. As a result, the number of players involved in the sector has increased considerably and there were some small imports of crude and diesel carried out by the private sector in 1998. Nevertheless, the SPC still remains involved to an important degree in the importation and distribution of diesel and gasoline, either on its own or in conjunction with other with private enterprises, reflecting the difficulties of the private sector to secure foreign financing and/or local financing, as well as storage facilities. Overall, however, the private sector is involved in the various activities of the sector in varying degrees and its role is expected to be facilitated with the coming on stream of oil production.

44. In 1998, out of total imports amounting to US\$256 million (customs data), the SPC imported on its own or jointly with other enterprises close to 40 percent. The decreasing role of the SPC in the imports of the sector has translated into lower foreign exchange payments by the BOS, thus sustaining the reduced export surrender requirements called for by the liberalization of the exchange system. Thus, BOS payments for oil products decreased from US\$234 million in 1996 to an average of about US\$80 million in 1997–98. This has been accompanied by the emergence of a new modality of financing by private traders, through the purchase of export crops to generate the foreign exchange for the payment of imports of oil products that are subsequently sold to the SPC for distribution.

45. In parallel with the above change in policy, the government has also eliminated subsidies on domestic oil products through pricing measures. At the beginning of 1997, prices were increased to both eliminate subsidies and generate revenues to the budget through an implicit tax in the form of a price differential. In August 1997, prices were again increased and have been maintained unchanged since then (Table 40) even though international oil prices declined. As a result, the government's revenue share in the price structure (over/under recovery) has absorbed the difference between the unchanged domestic price and the landed/ex-refinery cost, net of distribution costs. While part of the decrease in international prices has been offset by the depreciation in the exchange rate, additional revenues have, nevertheless, been generated for the budget. Under the current system, retail prices are adjusted by the Ministry of Finance on the basis of information provided by the Ministry of Energy regarding the likely impact on the price structure of oil products, of changes arising, for example, from increases in international prices, depreciation of the currency, or increases in the commercial margin requested by the distributor.

46. Under the tariff and excise reform effective since October 1998, the above-mentioned price differential was replaced by specific excises. Taxation of oil products is currently as follows: (i) imports of crude and all refined products are subject to customs duty of 6 percent on the c&f value (insurance is acquired locally); (ii) the refined products either locally produced or imported are subject to an excise tax on the ex-refinery cost or c&f value of 80 percent for gasoline, 12 percent for gas oil and 6 percent for kerosene/jet.

47. Sudan's proven oil reserves are currently estimated at 450 million barrels, while probable reserves amount to an additional 350 million barrels. Oil production is expected to start coming on stream in the last quarter of 1999, a few months earlier than anticipated following the completion of the pipeline. The pipeline is being constructed by an international consortium consisting of companies from China, Malaysia, Canada, Italy, Germany, Britain and Argentina at an estimated cost of US\$1 billion. It will have a capacity of 250,000 bpd and is expected to become operational in the last quarter of 1999. Production is estimated initially at 150,000 bpd, but could grow up to 400,000 bpd over the medium-term. Taking into account domestic consumption of 50,000 bpd, the value of exports could reach 100,000 bpd. A new refinery with a capacity of 50,000 bpd is currently being built in Khartoum at a cost of US\$600 million and is expected to begin operations in 2000, when Sudan would become self-sufficient in petroleum products.

### *The investment encouragement act*

48. The government enacted an Investment Encouragement Act (IEA) in 1990, which was amended in May 1996, to encourage investment activities. Key measures under the Act are: guaranteeing investment against expropriation and nationalization, providing equally treatment to foreign and domestic investors, guaranteeing foreign investors the right to repatriate profits and providing several tax and tariff incentives. Although there are no separate data on investment undertaken under the IEA or on foreign investment, indications are that foreign investment in certain activities has increased in recent years and official estimates point to an encouraging overall investment response. These estimates, only available through 1997, indicate a very rapid increase in investment not only in construction but also in machinery and transport equipment (Table 42). This response notwithstanding, the application of the Act has led to significant problems, including notably the proliferation of tax and tariff exemptions, which has resulted in a high fiscal cost; the dispersion of power to grant the exemptions among various line ministries; and reduced transparency, particularly at the state level. Moreover, loopholes in the Act may have resulted in abuse, which have been compounded by the lack of a database on the beneficiaries' actual investment and other commitments underlying the concessions.

49. The tax exemptions granted under the Act cover the business profit tax as well as customs duties for a period not to exceed 5 years. However, renewal of exemptions may be possible for enterprises that have entered into a restructuring process entailing a new line of production, or when there is a change in ownership. Moreover, the exemption of customs duties applies not only to capital goods but also to intermediate goods, and the exemptions or

reduced statutory tariff rates are applied differently to the same goods depending on the recipient sector. It is estimated that close to 25 percent of total imports in 1998 (US\$1.9 million) were subject to reduced rates.

50. The Act is undergoing a review by the government with a view to its adoption by year-end. The modified Act will seek, *inter alia*, to reduce the cost and coverage of exemptions, centralize the authority to grant exemptions at one ministry, and ensure the simplification and acceleration of the investment application process as well as more effective monitoring of investors' commitments.

### **C. Price Developments**

51. Consumer and producer prices have been liberalized gradually since 1992 with only petroleum and electricity prices still set administratively. With the re-alignment of domestic petroleum prices with international prices in early 1997, all prices of traded goods reflect international prices. However, electricity tariffs to households are cross-subsidized through higher rates on non-household consumers and, to a lesser extent, by a small budgetary subsidy.

52. Official price data are based on a consumer price index (CPI) that is calculated on a monthly basis for the greater Khartoum area and is produced by the end of the month (see Table 4). A recently instituted reporting system allows the collection of price data from 13 other cities, albeit with a substantial lag. Inflation rates, based on the CPI, have declined substantially in 1997 and 1998 owing to the stabilization programs that were implemented in these two years. Average annual inflation rate declined from an average of 107 percent during the period from 1992 to 1996, to a historical low of 17 percent in 1998. This achievement is especially impressive taking into consideration that the unification of exchange rates resulted in a 70 percent nominal depreciation of the official exchange rate during 1997–98.

## **III. FISCAL SECTOR DEVELOPMENTS**

### **A. Overview**

53. Sudan has undergone a major transformation of its fiscal operations since 1992/93, and especially in 1997 and 1998. This included a strong fiscal adjustment and the initiation of major structural reforms. Significant steps were taken in the early 1990s to reduce the budget deficit (on a cash basis) from 11.2 percent of GDP in 1991/92 to 4.0 percent in 1993/94. However, these efforts were not sustained and the deficit remained at around 3–4 percent during 1993/94–96.<sup>9</sup> With the adoption of a new stabilization program starting in 1997, the domestic fiscal deficit was reduced substantially from 3.6 percent of GDP in 1996 to under 1 percent of GDP in 1997 and 1998 (see Table 5). The deficit reduction was achieved through

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<sup>9</sup>The budget cycle was changed in mid-1995 from fiscal year to calendar year.

the compression of expenditure (recurrent and development) and improved revenue efforts, both tax and nontax. This performance was supported by a number of important structural reforms that the Ministry of Finance (MOF) implemented or initiated during 1997–98, both on the revenue and expenditure sides. These reforms aimed at rationalizing the tax system (including the introduction of the value added tax (VAT) and further curtailment of exemptions), improving tax administration, improving expenditure control and monitoring, reforming fiscal accounting, and enhancing the efficiency of the budget process.

## **B. Revenue Developments and Reforms**

54. Fiscal revenue in Sudan experienced a steady decline relative to GDP during 1991/92–95 (see Chart 2 and Table 18). Total revenue in percent of GDP declined from over 8 percent in 1991/92 to 6.4 percent in 1995. The deterioration in revenue was mostly the result of a decline in nontax revenue, reflecting a sharp drop in profit transfers from public enterprises and weak collection of fees. The decline in tax revenue was much smaller, and was entirely the result of the weak performance of taxes on international trade. These taxes declined from 2.7 percent of GDP in 1991/92 to 1.9 percent in 1995, while its share in total tax revenue declined from 51 percent to 37 percent over the same period. The weak performance of taxes on international trade was partially offset by a somewhat better performance of direct taxes and taxes on domestic goods. The overall buoyancy of revenue during 1991/92–95 was slightly negative.<sup>10</sup> The tax revenue buoyancy was marginally positive, reflecting the buoyancy of the direct taxes. Nontax revenue, however, had high negative buoyancy.

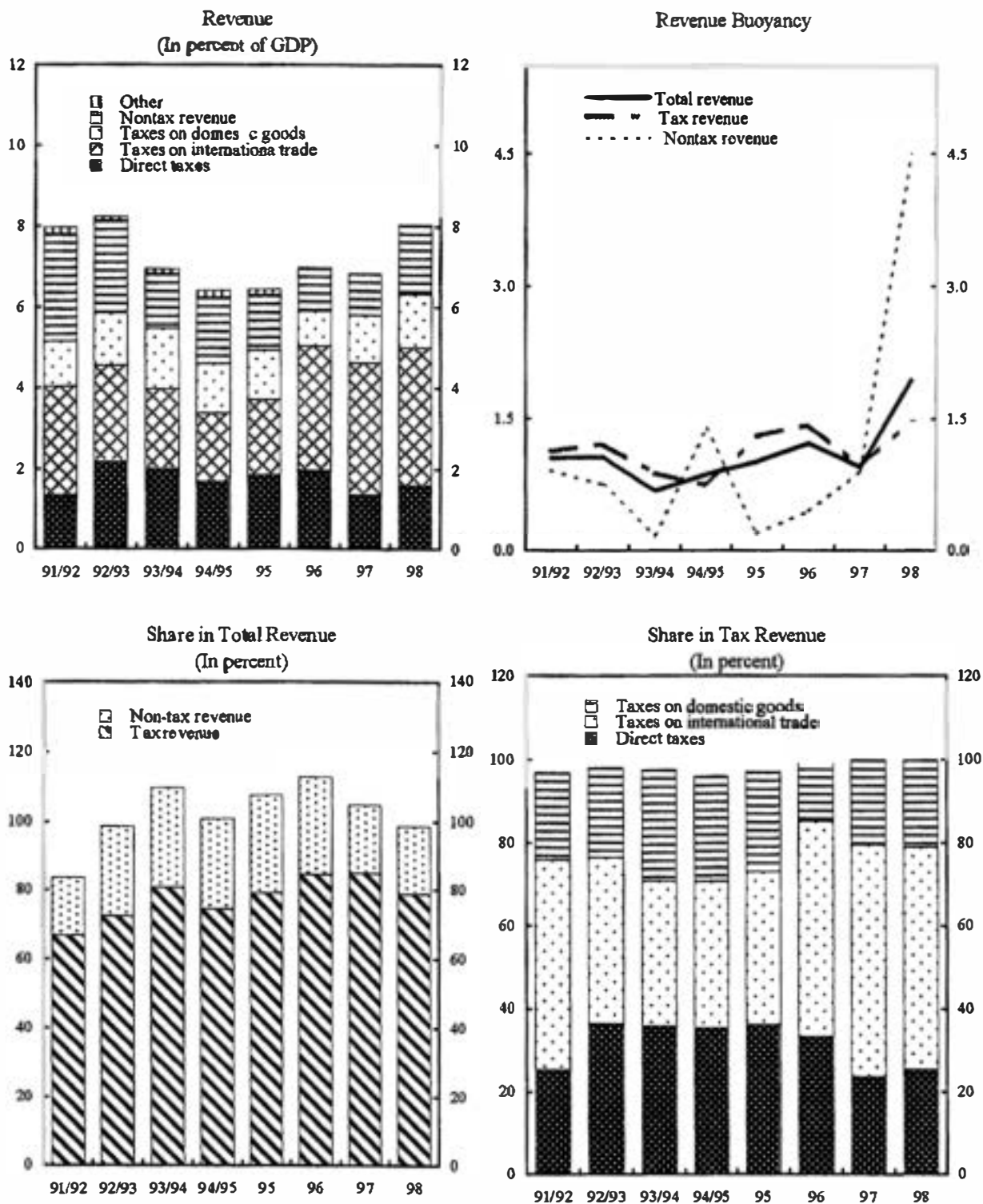
55. Several factors contributed to the weak revenue performance during the period of 1991/92–95. First, GDP growth was mostly driven by agriculture which is taxed mostly at the local levels. Second, some taxes were defined in specific terms, thus reducing their responsiveness to changes in national income. Third, the wide application of presumptive taxation and slow adjustments of tax brackets (in response to inflation) depressed the responsiveness of direct taxes to changes in national income. Fourth, the proliferation of tax exemptions weakened the taxbase. Fifth, the use of an exchange rate for customs valuation, that was even more appreciated than the official exchange rate, adversely affected revenue from taxes on imports. Sixth, the weakening of the public enterprises financial position limited and/or reversed their contribution to the budget. Finally, the general weakness of tax and customs administration contributed to the low levels of tax collection.

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<sup>10</sup>The buoyancy is measured as the relation between the percentage change of revenue and the percentage change of GDP. This measure is different from revenue elasticity, since the latter would require the elimination of the effect of discretionary tax measures, which could not be calculated in this case because of data limitations.



Chart 2. Sudan: Selected Revenue Indicators, 1991/92 - 98



Source: Sudanese authorities; and Fund staff estimates.

56. Revenue performance in 1996 improved markedly with collection rising to about 7 percent of GDP. Almost all the revenue improvement in 1996 was due to revenue from taxes on international trade, which in turn reflected the extension of consumption tax to most imports at a rate of 10 percent (effective January 1, 1996), the significant reduction in the spread between the exchange rate used for customs valuation and the official rate, and the initiation of major reforms of the customs administration.

57. The drive for tax and tax-administration reform accelerated during 1997 and 1998. Revenue performance improved only slightly in 1997,<sup>11</sup> as many of the measures implemented during the year only took effect later in the year. The measures adopted in early 1997, included the full application of the official exchange rate for customs valuation (starting in May 1997), the imposition of taxes on petroleum products<sup>12</sup> and improved tax and customs administration.<sup>13</sup> In October 1998 the price differential was transformed into an ad valorem tax. Internal controls were also strengthened, including curbing the power of ministries to retain internally generated revenues (e.g., fees and charges).

58. The full-year impact of revenue measures that were implemented during 1997 as well as additional measures that were adopted in 1998 (see below), boosted revenue in 1998 to 8 percent of GDP (a 1.2 percentage point of GDP increase from 1997), the highest revenue level achieved since 1988/89.<sup>14</sup> Moreover, revenue buoyancy reached an unprecedented level in 1998. Although the improvement in buoyancy was led by a sharp increase in the buoyancy of nontax revenue, revenue from all tax categories showed marked improvements, particularly revenue from direct taxes. Non-tax revenues rose from 0.9 percent of GDP in 1996 to 1.6 percent in 1997–98, reflecting an improvement in the administration of fees and charges, and the increase in profit transfers from the public enterprises (reflecting the continued reforms of public enterprises) and from joint ventures. Collection of direct taxes started to show an upward trend in response to the reforms initiated in 1996 and 1997, including

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<sup>11</sup>The revenue data in 1997 and 1998 reflect only those of the central government. The revenues that are collected on behalf of the states (estimated at about 0.5 percent of GDP) are no longer reported in the central government budget.

<sup>12</sup>Taxes on petroleum products took the form of a price differential between the cost of the products and prices to consumers.

<sup>13</sup>Among the measures introduced in 1997, was the establishment of bonded warehouses for imports prior to shipping inland. This gave customs officials better monitoring of the traffic of imported goods subject to customs.

<sup>14</sup>After factoring in the revenue from taxes that were transferred to the states.

reductions in tax rates and adjustments in tax brackets to offset inflation.<sup>15</sup> However, despite the full year effect of using the more depreciated official exchange rate for customs valuation, revenue from taxes on international trade increased only marginally. This is partly because of a shift in imports towards goods in lower tariff bands, and partly because of privileges granted under the Investment Encouragement Act and flood rehabilitation related imports during September–December 1998.

59. In October 1998, a major indirect tax and tariff reform was enacted. The reforms involved the rationalization of consumption and excise taxes, which resulted in the elimination of several distortionary consumption taxes and the streamlining of excises to only seven goods, while applying the excises uniformly on domestic and imported goods (see Appendix I). The tariff reform also involved the reduction in the maximum tariff and the number of tariff bands. These reforms represented an important step towards the application of the VAT and the tariff reform (as part of the trade reform) expected over the next three years.

60. Preparations for the introduction of the VAT, that started in March 1997, have been to a large extent completed (see Box 1). While the VAT was planned to be introduced in mid-1999, the need to amend the constitution to effect the VAT necessitated the delay of its introduction until the year 2000 to allow adequate time for parliamentary debate. In April 1999, the states and the federal government reached a preliminary agreement on introducing the VAT as a federally administered tax with the proceeds to be shared between the federal government and the states in a 65 percent to 35 percent ratio. The other reforms included strengthening the large taxpayer unit and introducing unified taxpayer identification number, initially for large taxpayers in 1999 and extending it to other taxpayers a year later.

### **C. Expenditure Developments**

61. The fiscal adjustment during 1991/92–96 relied fully on reductions in domestically financed expenditures, which declined by 6 percentage points of GDP during this period (see Chart 3 and Table 19). This outcome was achieved through cuts in development expenditures, which contributed about 40 percent to the reduction in expenditures during 1991/92–96. As a result, the share of the domestically financed development expenditures in total domestic expenditures declined from 16.4 percent in 1991/92 to 3.6 percent in 1996, and in percent of GDP from 2.7 percent to a mere 0.4 percent, respectively. The reduction in current expenditures was mostly on account of the curtailment of extrabudgetary spending and the sharp reduction in consumer subsidies. Despite these efforts, further reductions in current expenditures were not possible due to budgetary overruns, resulting mainly from lax controls over the issuance of government guarantees and the continued support for domestic petroleum prices.

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<sup>15</sup>The effect of changes in direct taxes takes place in the following year.

## **Box 1. Sudan: Main Features of the Value Added Tax (VAT)**

### **I. Outline of the VAT**

The draft VAT law provides for the usual policy and administration measures found in contemporary VAT legislation. These include equal treatment of domestic production and imports. Both goods and services are equally taxed and the input tax credit is extended to both. The law provides for one positive rate which is 10 percent on all goods and services unless explicitly exempted; and zero-rating for exports. A positive list of exemptions that are limited mainly to agricultural products, medicine, financial services, educational services, and medical services is incorporated in the law. Finally, a tax credit on inputs (including capital goods) for all VAT-registered taxpayers is allowed for to avoid cascading effects. The VAT complements the reforms of the tariff, excises and price differentials which came into effect in August 1998.

### **II. Revenue effects**

Estimates based on 1997 data suggest that replacing the consumption/sales taxes with the VAT would potentially increase revenue by about 1 percent of GDP. In assessing this probable revenue effect, the following factors have been taken into account. First, the VAT, at a uniform rate of 10 percent, will replace the consumption/sales tax, which presently has two rates (10 and 2 percent). Second, some investment goods that are exempted from the consumption tax will be taxed under the VAT. Third, sales following importing and production which are presently exempted from the consumption/sales taxes will be subject to the VAT if taxpayers' turnover exceeds the VAT threshold. Fourth, the VAT is excise-inclusive while the consumption/sales is not. Fifth, revenue loss due to the reduction in cascading that presently originates from the consumption/sales tax is expected to be much smaller compared with the revenue gains noted above.

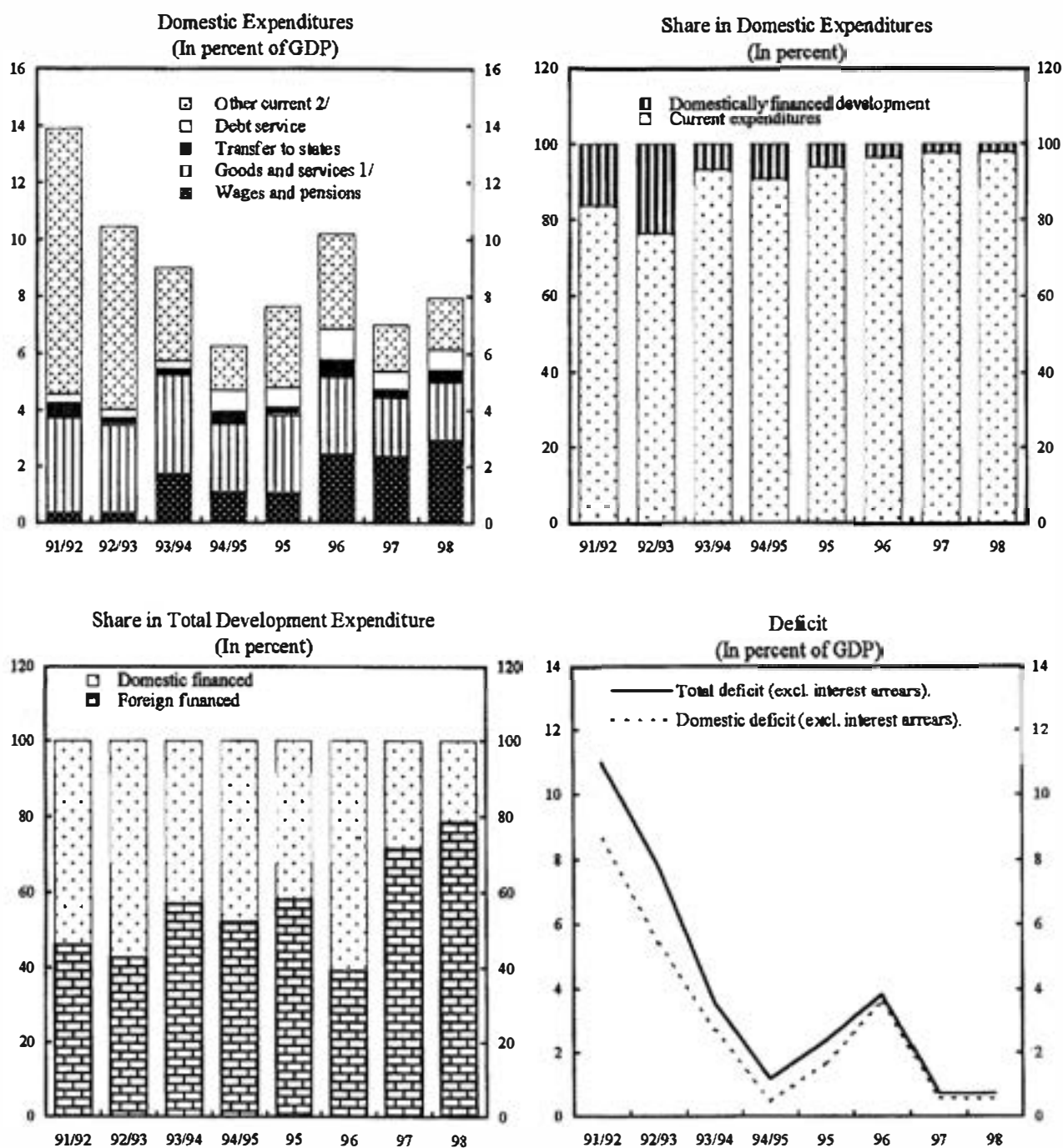
### **III. VAT administration**

Under the draft VAT law, the Customs Department will be responsible for collecting the VAT on imports and the Chamber of Taxation will be responsible for collecting the VAT on domestic transactions. The Chamber of Taxation will be charged with the policy and administration issues of the VAT. Such responsibility division, which is widely practiced, has been agreed by the Customs Department and the Chamber of Taxation. Coordination between the two departments has improved with the Customs Department sharing all of its taxpayers data with the Tax Department, as a basis for introducing in the near future a unified Tax Identification Number (TIN) to be used by all revenue departments. The VAT will be strictly administrated by the federal government with no role for the states in connection with taxes on goods and services. The states will share in the revenue of the VAT with 35 percent. This will eliminate the current overlapping, duplication, and double taxation which impair the free flow

### **IV. Preparatory work during the second half of 1998**

The VAT law has already been submitted to the Sudanese Association of Chartered Accountants and the Chamber of Commerce and Industry. Following the consultation with the executive and legislative branches, the VAT will be enacted in the second half of 1999 and will replace all existing consumption/sales taxes levied at the federal and states level. The design of VAT forms and internal procedures, and taxpayer education programs have already started and will continue until the introduction of the VAT. Training of the core staff responsible for the VAT has been performed by Fund technical assistance which conducted ten sessions and arranged field visits to countries with experience with VAT (Morocco and South Africa). The registration of taxpayers will start soon after the approval of the law. Training for the operational staff responsible for administering the VAT will be offered on a regular basis. In December the government will issue circulars announcing the implementation of VAT effective January 1, 2000, as well as detailed explanation for taxpayers.

Chart 3. Sudan: Selected Expenditures, and Deficit Indicators 1991/92 - 98



Source: Sudanese authorities; and Fund staff estimates.

62. During 1997–98, new measures were implemented that successfully reduced domestic expenditures by 2.5 percentage points, which accounted for about 70 percent of the fiscal adjustment during this period. Although part of this adjustment was achieved through cuts in development expenditures (which declined from 0.4 percent of GDP in 1996 to 0.2 percent in 1998), the very low level of these expenditures forced most of the adjustment (over 90 percent) to be carried through cuts in current expenditures. Reductions in spending on goods and services (0.7 percent of GDP), mostly on maintenance, and the elimination of the petroleum price subsidy (0.3 percent of GDP), accounted for about 45 percent of the reduction in current expenditures.

63. This outcome was facilitated by the significant improvement in budgetary controls implemented at the beginning of 1997. These measures included the amalgamation of all extrabudgetary funds into the budget and the implementation of strict controls with respect to the issuance of government guarantees. Further reforms were implemented during 1997–98 (as described below) that helped in sustaining the containment of expenditures.

64. The compression of spending over the years left very little scope for discretionary spending. The main fixed components in the 1998 budget were wages (35 percent of the total expenditure), debt service (9 percent), general reserves (11 percent), transfers (5 percent), and other obligations (9 percent), leaving around 18 percent for goods and services and 7 percent for domestically financed development spending. The 1998 budget also had to accommodate unforeseen pressures on account of the floods.

#### **D. Institutional Aspects and Reforms of Expenditure Management**

65. The scope of the budget is clearly defined and the process is governed by the budget law. The annual budget is debated publicly in the parliament and the MOF presents to the parliament quarterly public reports on the budget execution. The MOF is committed to introduce the full GFS based budget classification system which would, however, need legislative approval. The MOF formulates both the development and the recurrent budget. While administratively under the budget directorate, the recurrent and development budgets are formulated and consolidated separately, a program was initiated in 1998 aimed at integrating the two budgets into a single format (which will require integration of both the process and of resource allocation priorities).

66. The MOF adopted in 1998 a new budgetary process that, for the first time, harmonized the budget formulation with the macroeconomic framework. This process involved the early preparation of the budget macroeconomic framework and the setting of indicative spending ceilings to guide the ministries in their preparation of their individual budgets. The new budget process was applied in the formulation of the 1999 budget, greatly improving the efficiency of the process and aligning the budget with the macroeconomic objectives of the government.

67. One of the main problems in expenditure management has been the weak accounting system which contributed to past budgetary overruns. While the accounts are prepared to fulfill the compliance function and audit requirement, the government does not track the actual spending at the line ministry level on a monthly basis, and the management role of accounting has not yet developed. To address these problems, the MOF initiated a program in 1998 to reform the accounting setup. This included a change in the top management of the accounts department and establishing a committee to oversee the reforms. One of the main objectives of the reforms will be the enabling of the preparation of monthly reports on actual receipts and expenditures. The Auditor General Office (AG) is an effective unit that is moving in the direction of value or money audit while maintaining its compliance role. The full introduction of the GFS budget classification and the reform of the accounting system will greatly enhance the transparency of the budget and complement the efforts that have been instituted thus far.

68. Budgetary spending is currently tightly controlled by the MOF. This control has been greatly enhanced by the introduction in May 1997 of a much improved monitoring and reporting system, which tracked, inter alia, the daily cash position of the MOF. The MOF follows a system of monthly release of funds to the line ministries. Most of the discretionary expenditures are centralized and funds are released to the line ministries based on the current priorities. Given the centralized expenditure controls, the ministries cannot make any prior commitments. The line ministries thus have little freedom to plan expenditures. In addition, the MOF does not follow financial or cash planning except on a monthly basis when a decision on cash release for the month has to be made. The MOF has, however, decided to introduce a system of rolling quarterly cash planning which will be shared with the line ministries.

69. The government's financial relationship with the public enterprises is transparent in the budget. The government's equity participation in the public enterprises is shown under "transfers" in the recurrent budget. Repatriation of government's share of profits from the enterprises is shown under nontax revenues. In 1998, the revenues from profits repatriation were significantly higher (LSd 210 billion) than projected (LSd 192 billion). This reflects, to a large extent, the performance of the joint ventures.

70. The BOS acts as the banker to the government, providing it with retail banking services. The structure of government accounts was streamlined in 1998 and the number of government accounts were reduced to around 127 from more than 1,000. Ministries are not allowed to maintain accounts in the commercial banks. The BOS provides, since last year, a daily flash report to the MOF on the status of government balances. Until 1998, the government accounts in the BOS included the accounts of the agencies which were separate entities (such as universities) but were funded by the budget. Since 1998, however, with the revision in the structure of these accounts, this distinction has become clearer.

## **E. Fiscal Federalism**

71. The federal system was introduced in Sudan in 1995, which involved three levels of government: federal, states and the local councils. The constitution provides clear revenue and

expenditure assignments. The main revenue sources of the states are a share in the federal personal income tax, the land sales tax, excises on state industries, and licence fees. Most of the basic services such primary health care, basic education and the provision of safe drinking water are state responsibilities. With the exception of the larger states, most of the expenditure of the states on essential social spending is met through the federal transfers. However, due to the weak revenue base, to finance even the modest social spending the states have, in some cases, resorted to distortionary taxes, such as tax on movement of goods and agricultural production.

72. There have been certain significant developments in the state finances in the last year.<sup>16</sup> The states have agreed to share the VAT revenue with the center in a 65 to 35 ratio. The federal government has increased the budget allocation for the states following a parliamentary directive to transfer 10 percent of federal revenues to the states, a significant part of it being earmarked for social spending. The government has decided, as the revenue capacity of the states improves, to gradually shift from financing recurrent expenditures to financing development expenditure. As a result, in 1999 three more states have been targeted for graduation, over a two year period, from recurrent to only development support. Thus, currently only 16 states (out of 26) receive support for recurrent expenditure. The federal budget has also earmarked, in 1999, funds to liquidate arrears on account of teacher's salaries at the state level.

73. The government is keen to review the federal-state relationship and a commission is currently undertaking this review. The government is also strengthening its capacity to monitor the use of the funds at the state level by establishing a monitoring and evaluation unit in the National State Support Fund.

74. The MOF prepares a consolidated budget of the states by major categories of classification. However, the latest consolidated budget available is for 1998, and reports on actual budget execution are not available. Hence, the actual level of spending at the state level is hard to verify on a timely basis, though certain agencies such as the AG and the State Support Fund receive some accounts for their specific needs. The AG eventually audits and certifies the state accounts.

## **F. Social Spending**

75. The government is committed to universal basic education and to extend primary health care to 100 percent of the population. Achieving these goals, however, is complicated by the ongoing conflict and the recent floods and famine. The conflict has also resulted in sharply increased medical needs and problems associated with displacement. At the same time, both the recent floods and famine (in Bahr El Ghazal) have further eroded rural incomes and have resulted in higher incidence of many diseases, thereby stretching the already inadequate

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<sup>16</sup>See Box 2 for a brief description of the Khartoum State fiscal operations in 1998.



### **Box 2. Sudan: Khartoum State Fiscal Operations**

- Khartoum State (KS) is the most developed state with total revenue of about LSd 182 billion in 1998 (0.8 percent of GDP). The main sources of its revenue are the business profit taxes on industries on the state list and a 4 percent excise on local goods. Following the formula for devolution of revenues, KS does not receive any general transfer from the NSSF, though it contributes 15 percent of its revenues to the NSSF. However, KS can and does compete with other states for development funds from the NSSF. KS itself is not allowed to borrow, though the local councils can borrow from the Cooperative Bank on the basis of a guarantee given by the KS.
- KS has 36 local councils. Primary health care and basic education are the responsibility of the local councils. But since the resources of the councils are limited, KS pays the salaries of council employees at the council level. This is, however, not a norm followed by most of the states. On a rough basis, nearly 80 percent of the total expenditure at the council level is spent on health, education, safe drinking water and basic infrastructure.

social and health infrastructure. The federal budget also has a small budget provision for subsidies to the poor.

76. As a first step towards improving health and education services, the government has decided to consider the current level of transfers to the states as a priority area and to protect these in the event of a resource shortfall. It also plans to monitor the transfer to the states to ensure that the money is spent on social sectors, as well as to develop an information system and social indicators in key areas, including primary health coverage, to monitor progress. As a first step, the government has decided to monitor school enrollment as a part of the national plan for universal primary education.

77. The government has also started a national poverty alleviation program. The main objectives of the program is to reach out to all the families below the poverty line, estimated at 25 percent of the population or 1.3 million families. The program strategy targets family as the basic unit and seeks to identify and meet the minimum needs in the critical areas of health, education, shelter, provision of safe drinking water, and nutrition to maintain sustainable development. The program has already started and a survey for basic data has been initiated.

## **IV. MONETARY SECTOR DEVELOPMENTS**

### **A. Monetary and Credit Developments**

78. Monetary and credit policies have undergone an important transformation during 1997 and 1998, that resulted in substantial reduction in the growth of monetary aggregates. These developments were facilitated by the sharp drop in the BOS lending to government and to public enterprises (see Table 6). The more stable monetary conditions and more attractive real

rates of return on deposits (mostly on account of lower inflation) led to some re-intermediation by the financial sector and a reversal of the trend of rising velocity over the past several years. These developments were supported by reforms in the institutional framework for monetary policy at the BOS and the proactive monetary policy.

79. The expansion of broad money decelerated from an average of 85 percent during 1992–96 to 37 percent and 30 percent in 1997 and 1998, respectively (see Chart 4). The freeing of substantial resources from fiscal and quasi-fiscal financing requirements, allowed BOS to reduce the growth of reserve money from an average of 79 percent during 1992–96 to 34 percent in 1997 and further to 29 percent in 1998. The pace of the fiscal adjustment was also evident from the decline in the share of the BOS lending to government in reserve money growth from an average of 74 percent during 1992–96 to 66 percent and 40 percent in 1997 and 1998, respectively. Consequently, the BOS increased its lending to banks (within the tighter reserve money growth objectives that were consistent with the inflation targets) and the share of BOS gross credit to banks in reserve money growth rose from an average of 1 percent during 1992–96 to 17 percent and 15 percent in 1997 and 1998, respectively.

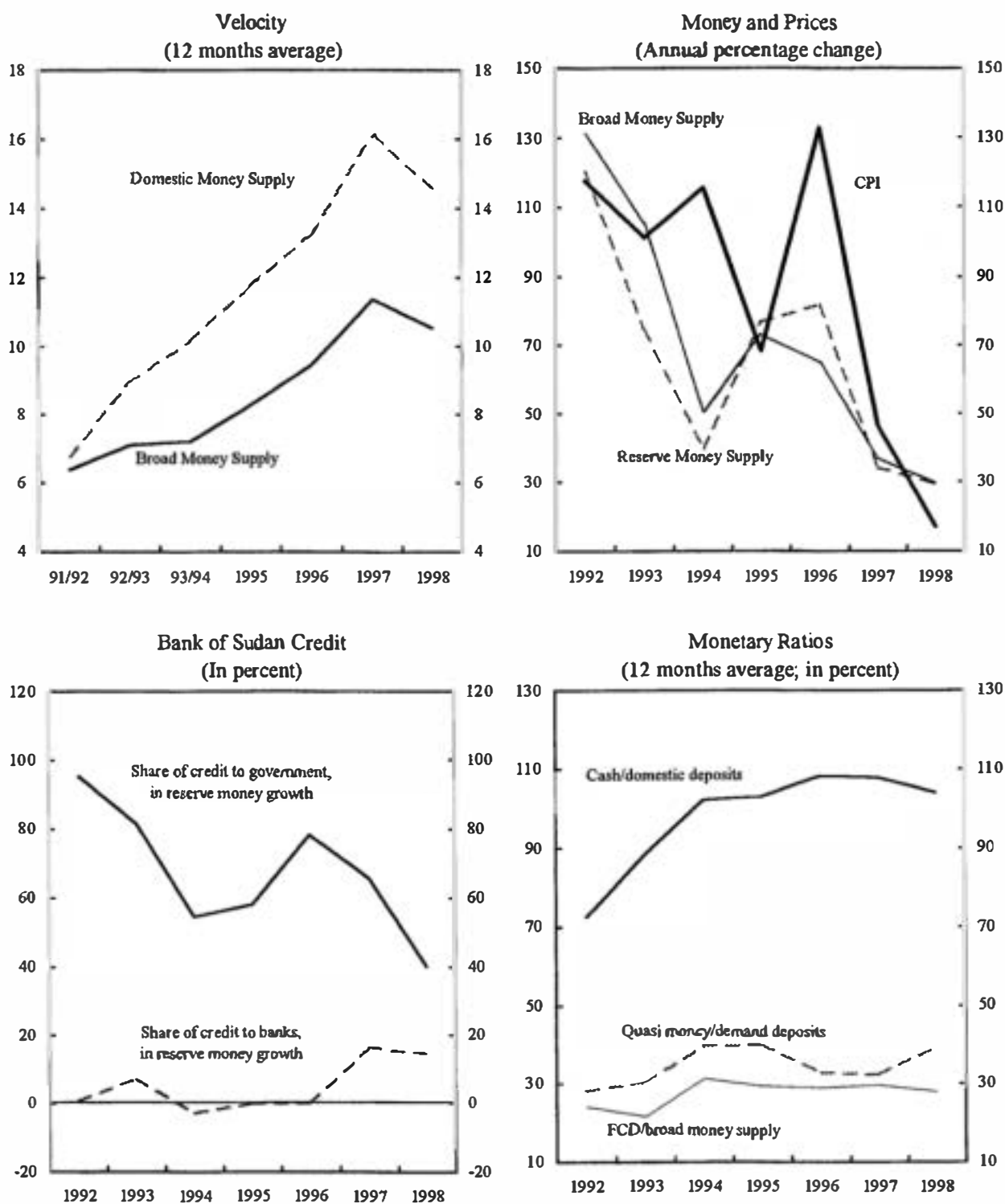
80. After years of increasing money velocity that resulted in significant demonetization of the economy, the monetary reforms started to take hold in 1998. Velocity declined to 10.5, after rising continuously from 6.4 in 1991/92 to 11.4 in 1997 (see Chart 4). Furthermore, the rapid decline in inflation rates allowed rates of returns on bank investment deposits to become positive in 1997 with further increase in real terms in 1998. These developments have resulted in increased commercial bank intermediation. Several important monetary ratios (cash-to-deposits (C/D), quasi money deposits-to-current deposits (QD/CD), and foreign currency-to-domestic currency deposits (FCD/DCD)) started to improve in 1997, with further gains in 1998 (see Chart 4). The C/D ratio declined to 107.9 percent in 1997 and further to 104 percent in 1998, after rising from 72.6 percent in 1992 to 108.3 percent in 1996. Similarly the QD/CD ratio increased noticeably in 1998. After years at a relatively high level, the FCD/DCD ratio also declined in 1998.

81. These achievements were in part due to the proactive stance of the BOS in countering unfavorable exogenous shocks and shifts in money demand. In addition to tightening credit ceiling to the private and public sectors during the first half of 1997, the BOS took further steps, including raising the banks' minimum profit margins under Murabaha<sup>17</sup> by 5 percentage points for all sectors (in March 1997), raising the customer share of financing under Musharaka by 5 percentage points (in May 1997), and introducing reserve requirements on foreign currency deposits (in July 1997) at a rate of 4 percent. Following significant gains in slowing monetary expansion in the first half of 1997 through these measures, monetary policy was further tightened after August 1997 by reducing the overall target for banking system credit expansion.

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<sup>17</sup>See Box 3 for an explanation of the Islamic financial instruments.

Chart 4. Sudan: Selected Monetary, Credit and Price Indicators



Source: Sudanese authorities; and Fund staff estimates.

82. The loosening of monetary policy in January 1998,<sup>18</sup> exacerbated by the lowering of the minimum Murabaha rate at the beginning of January (from a range of 35 to 45 percent to a unified 30 percent)<sup>19</sup> and the strong seasonal demand for credit (in an environment of excess liquidity), fueled an overexpansion of private sector credit, which in turn destabilized the foreign exchange market and increased inflationary pressures. The BOS reacted by implementing a package of measures in late March and early April 1998 that were designed to absorb banks' excess liquidity and contain credit expansion. These measures included instructing banks not to extend new credit until further notice and to redeem all overdue loans,<sup>20</sup> and eliminating (at end-March) the policy of granting financing to public enterprises at no cost. In addition, the BOS introduced a weekly credit reporting system and initiated an internal review of banks accounting practices.

83. During 1998, the BOS began (for the first time) to actively intervene to smooth the large seasonal swings in the demand and supply of credit that characterize the Sudanese economy. This intervention was facilitated by the introduction of the Central Bank Musharaka Certificate (CMC) in June 1998 (see discussion below). To ensure orderly financing of the summer harvest season, which peaks in August–September, the BOS accelerated the pace of open market sales of CMCs during July 1998 absorbing, by the beginning of August, 1998, some LSd 7.4 billion of banks' excess liquidity (representing about 14 percent of end-June 1998 banks' excess liquidity balances). During August–September, BOS open market operations (OMO) in CMC aimed at releasing some of this

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<sup>18</sup>Mostly on account of the BOS contribution to bank consortiums that provided financing to large agricultural schemes (cotton, in particular) and to exports.

<sup>19</sup>The credit statement of the BOS and changes to key variables (Murabaha and Musharaka rates, in particular) are usually announced at the beginning of January of each year to coincide with the new fiscal budget. This practice stems from the institutional arrangement where the BOS is under the influence of the MOF and its primary function is defined to finance the budget. These arrangement are being gradually altered to reflect the shift toward market oriented fiscal and monetary policies, which would require greater independence for the BOS.

<sup>20</sup>The BOS was forced to take these direct actions because of the absence of flexible monetary instruments suitable for indirect monetary intervention.

### **Box 3. Sudan: Islamic Financial Instruments**

Islamic financial instruments fall into three broad categories: profit-and-loss sharing, debt, quasi-debt instruments. While each category covers a wide variety of instruments, this box gives a brief description of the contracts that are most frequently used by Islamic banks.

#### **I. Profit-and-Loss Sharing Instruments**

1. **Musharaka.** Is an equity participation contract with the bank and the client contributing jointly to finance a project. Ownership is distributed according to each party's share in the financing. The main features of this contract are: (i) profits are shared according to an agreed ratio but losses are born in proportion to contribution; (ii) the contract can be open ended or to term; and (iii) each party has the option of participating in the project's management.

2. **Mudharaba.** Is a trustee type finance contract where one party provides the capital and the other party provides the labor. The main features of this contract are: (i) profits are distributed according to an agreed ratio; (ii) in the case of a loss, the provider of labor will not be compensated for labor while the provider of capital bears the entire financial loss, provided that there was no violation of contract, mismanagement or criminal conduct on the part of the working partner; (iii) the Mudharaba could be restricted (e.g., to a specific transaction) or unrestricted, and (iv) the restricted Mudharaba cannot be terminated until its conditions are fulfilled.

#### **II. Debt Instruments**

1. **Murabaha.** Is a purchase and resale contracts with the resale price determined based on cost plus profit mark up. The bank purchases the goods ordered by the client and resell them to him at a higher price, usually on deferred payments basis. The main features of this contract are: (i) the cost and the mark up must be known for the bank and the client; (ii) the bank must assume the ownership of the goods prior to reselling them to the client (bearing all the ownership risks in the interim); (iii) the client's promise to buy the goods purchased on his order by the bank may or may not be binding (in Sudan it is binding); (iv) no interest is levied for late payments but the bank could require collateral; and (v) the bank cannot sell the Murabaha contract to a third party except at par.

2. **Salam.** Is a purchase contract with deferred delivery of goods (opposite to Murabaha) and is mostly used in agriculture finance. The main features of this contract are: (i) the contract applies only to products whose availability on maturity date is normally assured and their quality and quantity can be specified; (ii) the bank pays the client the full negotiated price of the contracted goods (e.g., crops) when the contract is signed; (iii) the seller is only obliged to deliver the promised products or the price he received from the bank if the products could not be delivered; and (iv) the contract can be sold to a third party only at par.

3. **Qard al-Hasan.** (Good loan) is an interest-free loan contract (usually collateralized).

#### **III. Quasi-Debt Instruments**

1. **Ijara.** Is a leasing contract where a party leases an asset for a specified amount and term. The main features of this contract are: (i) the owner of the asset (the bank) bears all the risks associated with ownership; (ii) the asset can be sold at a negotiated market price, effectively resulting in the sale of the Ijara contract; (iii) the contract can be structured as a lease-purchase contract where each lease payment includes a portion of the agreed asset price; and (iv) the contract can be made for a term covering the asset's expected life.

liquidity, when credit demand conditions warranted it.<sup>21</sup> This operation contributed to stifling the exchange rate and price pressures that characterized this period in the past.

84. Similar operations were conducted towards the end of 1998 to counter the strong seasonal pressures that were expected in early 1999. The BOS absorbed by end-December 1998 about LSd 10.2 billion in banks' excess liquidity through open market sales of CMCs and reduced significantly (particularly during November–December, 1998) its lending to banks. While this operation was successful in containing banks' credit (banks lending to the private sector was within the intended target), currency leakages in December 1998 and January 1999 (stemming mostly from the withdrawal of deposits by farmers and autonomous government agencies) have partially undermined the success of the BOS operation. As a result, exchange rate and price pressures did emerge in the first quarter of 1999, albeit on a smaller scale than in previous years.

85. In addition to the monetary measures, efforts to improve the soundness of the banking system (see discussion below) inadvertently resulted in further tightening of the monetary policy. In particular, the growth of bank credit was further arrested by bank's efforts to comply with the Basle capital adequacy ratios during 1997, to provision, and reduce the level of bad loans in early 1998. The tightening of access rules to the BOS overdraft funds in mid-1998 also contributed to the tightening of monetary policy.

## **B. Monetary Management Reforms**

### **Overview**

86. Sudan introduced Islamic banking in 1984 and adopted it universally in 1992. The main feature of Islamic banking is the prohibition of the charging of interest on financial transactions. Deposit and financing operations are conducted under various purchase and sale agreements or on the basis of profit/loss sharing contracts that determine ex-post rates of return (see Box 4). In addition, only equity-based securities can be traded in the open market, with trading values reflecting market expectations of economic performance, and hence rates

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<sup>21</sup>The OMO in CMC was not one sided (i.e., open market sale only in July or open market purchase only in August–September). Rather the OMO was a combination of sale and buy auctions with the net effect targeted at the desired direction. This is necessary to ensure banks' participation, as they will make profit from their CMC holdings only through the buy auction (see discussion below).

### **Box 4. Sudan: Mobilizing Funds by Islamic Banks**

Islamic banks offer their depositors mainly four classes of accounts, which are described below in broad terms.

#### **1. Current accounts**

Current accounts (CA) are similar to non-interest paying call or demand deposits. The bank provides the safe custody for the deposits, checking and other payment services. The bank guarantees that depositors can withdraw their deposits on demand. In return for the guarantee, depositors are not entitled to any share in the bank's profits. If the bank utilizes the deposits it will be at its own risk; all profits and losses will be borne by the bank. Because of the guarantee, banks are usually required by central banks to keep legal reserves on these account.

#### **2. Savings accounts**

Savings accounts (SA) are similar to current accounts in the right of customers to withdraw their deposits on demand. However, savings accounts can be classified into two categories, each with some special features that distinguish them from CA. Under the first type, the bank continues to provide the depositors with the guarantee to refund the deposits in full. The bank, however, may, at its sole discretion, reward depositors by sharing part of its profits with them from time to time. Under the second type of SA, depositors can benefit from the conveniences of CA but they share in the bank's profits on the basis of a minimum balance that is maintained within a period of time (e.g., a month). Legal reserves are sometimes applied to SA.

#### **3. Investment accounts**

Investment accounts (IA) are based on an unrestricted Mudharaba/Musharaka contract between the depositors and the bank, where depositors provide the funds and the bank provides labor (and funds in lieu of its capital). The deposits are kept for a term and cannot be withdrawn until maturity. Profits (and losses) from the bank's general operations are shared between the bank and depositors according to a negotiated ratio. Profits are distributed either when profits are realized or, alternatively, advances are paid to depositors in regular intervals with adjustments made, at maturity, for actual profits. Legal reserves are not kept against IA since the bank does not guarantee them.

#### **4. Special purpose investment accounts**

Special purpose investment accounts (SPIA) operate on the basis of restricted Mudharaba (i.e., restricted to a specific investment operation like financing a trade in a particular product). The bank manages the investment and depositors provide the funds. Profits and losses are distributed according to the principles of unrestricted Mudharaba. Depositors in SPIA are entitled to a share in the profits generated from the specified operations, but have no claim on the bank's general profits. The SPIA is terminated only when the specified investment operation is completed. Similar to IA, no legal reserves are kept on SPIA.

of return. Financial debt instruments, on the other hand, cannot earn a positive rate of return (through interest, fixed or variable) and cannot be discounted in a secondary market, i.e., can be traded only at par and under strict transfer limitations.

87. This institutional arrangement presented a unique challenge in developing market-based instruments for monetary control and government financing. For effective indirect and market-based monetary control, the BOS needed to have discretionary control over its balance sheets, and hence over the growth of reserve money. Invariably, this would be facilitated through the existence of independent funding markets for the budget and the availability of flexible instruments with which to offset and regulate the flow of liquidity created by autonomous items on the central bank's balance sheet. It was also important to develop money markets and payments systems, through which banks manage their own liquidity positions and through which policy intentions are transmitted.

88. The absence of monetary and general government funding instruments had perpetuated the reliance on direct controls on credit and high unremunerated reserve requirements in Sudan. The absence of money markets has also led to large swings in banks' excess reserves and a loss of monetary control by the BOS. The overall consequence of these inefficiencies had been progressive disintermediation and persistent inflationary pressures.

89. Under the 1997 and 1998 SMPs, the BOS embarked on ambitious and wide-ranging reforms aimed at addressing these shortcomings. The BOS adopted a gradual approach to reorienting its monetary management framework and sought to improve its existing arrangements and instruments, while developing the capacity to introduce and manage the new instruments (including improving its monetary management information system). This gradual approach was consistent with the need to build-up the administrative capacity and experience at market-based intervention. In addition, the objective of the BOS has been gradually and informally changed from the task of financing the deficit and credit allocation to that of inflation control.

### **Monetary management information system**

90. Until 1997, BOS monetary management was based on periodic reviews of money and credit conditions against the targets of the annual programs, with action following these reviews to adjust the monetary stance, if necessary. The weakness of this approach emanates primarily from the significant lags in data availability (six weeks in receiving commercial bank balance sheets and five weeks in producing the BOS balance sheet). The BOS could therefore only react to changed monetary conditions with a substantial lag, rendering the policy response in many instances ineffective. This situation was highly undesirable, especially as Sudan was in the process of adopting a more liberal exchange market environment. In response to these shortcomings, the BOS implemented two important reforms: developing a flash reporting system and establishing a Monetary Policy Committee (MPC).



91. A flash reporting system was developed during the second half of 1997. The reporting system, which the BOS continues to improve, involved preparing on a weekly basis, a **summary** of the BOS balance sheet (including estimates of reserve money and bank reserve balances), key information from banks on their lending activities, a set of short-term indicators, and a short analysis of the information. When comprehensive information is not available on a timely basis, the data are were based only on indicators from banks in Khartoum—which account for 60–70 percent of banking activity.

92. The MPC was established at the BOS in early 1998, and is chaired by the Governor of the BOS, and membership comprises the Deputy and sub-Governors, with representation from the Research, Foreign Exchange, Banking Supervision and other operational departments, as needed. The MPC also includes high level representation from the MOF. The MPC meets almost weekly and functions as a policy making group which monitors financial developments and indicators, assesses short-term prospects in the money and exchange markets, and decides on the deployment of monetary instruments, and ensures their coordination.

### **Improving existing arrangements and instruments**

93. As of mid-1997, the tools available to the BOS for managing liquidity included, (i) setting the minimum Murabaha rate (which sets the minimum cost of funds) and the minimum share of customer financing under Musharaka contracts (which will limit the size of available “loanable” funds); (ii) adjusting the reserve requirements (which were imposed only on domestic currency deposits); (iii) establishing subsidiary targets for the allocation of credit to various economic sectors; (iv) issuing a guideline to banks advising on the level of “internal liquidity” that banks should hold to meet the demands of their liability portfolio, and, as a measure of last resort; and (v) establishing credit ceilings (usually applied on bank-by-bank basis).

94. These tools, however, had significant shortcomings and were only partially effective in achieving the monetary policy objectives. Banks’ lending rates (under Murabaha contracts) were kept markedly higher than the BOS’s minimum Murabaha rate, suggesting that the floor rate was not effective in restricting bank lending. The effectiveness of changes in reserve requirements was undermined by several factors: (i) the ability of banks to access (relatively easily) an overdraft facility, on which penalties were assessed on a case by case basis and were invariably only “notional”; (ii) given the lag in compiling banks’ data, changes in reserve requirements became effective only after 6 to 8 weeks;<sup>22</sup> and (iii) the absence of legal reserve

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<sup>22</sup> Legal reserves are applied on demand and saving deposits and margins on Letters of Credit and Letters of Guarantee in Sudanese pounds. Until early 1999, the reserve base was assessed on the liabilities of the commercial banks on the last business day of each month. Within two weeks from the date of assessment, commercial banks had to provide the BOS with their financial statements and adjust their reserve requirements according to the evolution of their  
(continued...)

requirements on foreign currency deposits. With respect to credit allocation, penalties were only enforced vis-à-vis the stipulation that banks restrict their loans to “local trade” to 10 percent of their portfolios. Compliance with other credit targets was only expected on an average basis and even then, there was no penalty for noncompliance. The prudential guideline on internal liquidity, which could also serve a control purpose, was not enforced, and banks held more or less liquidity than the guideline, depending on their portfolio needs. Credit ceilings, while effective in controlling bank credit, had their own inherent distortionary effects.

95. The reforms concentrated on improving the effectiveness of reserve requirements and modifying existing rules on overdraft access, as well as rationalizing the BOS credit facilities. To improve the effectiveness of reserve requirements, the BOS introduced in June 1997 legal reserve requirements on foreign currency deposits (at 4 percent)<sup>23</sup> and in September 1998 made changes in reserve requirements effective without waiting for the new assessment of the reserve base. Under the new system, the BOS assumes that the reservable liabilities of each commercial bank have not changed since the last assessment day and when the new figures become available, the banks adjust their reserve requirements in accordance with their effective reservable liabilities.

96. One of the most important reforms of the reserve requirements was to move from the calculation of reserve requirements based on the liabilities of banks on the last business day of each month<sup>24</sup> to a system of calculation based on the average of weekly deposit balances for the measurement period. However, the inability of most banks to compile and report to the BOS the balance of their reservable base on a weekly basis proved to be a significant impediment. The BOS developed, in cooperation with banks, a new reporting system in September 1998 to facilitate the application of new the reserve calculation system. After

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<sup>22</sup>(...continued)

reservable liabilities. Commercial banks had to keep their legal reserves continuously over the maintenance period on a frozen statutory account at the BOS.

<sup>23</sup>To alleviate fears by banks and the public that the reserve requirements on FCD was not a step to confiscate the foreign exchange, BOS gave banks the option of maintaining the reserves in either foreign or domestic currency counterpart. Banks kept on average about 30 percent of the legal reserves on FCD in foreign currency and the rest in domestic currency.

<sup>24</sup>This method of calculation is undesirable as it may punish (or favor) banks who, for some reason (e.g., movements in tax deposits which are collected through banks) have high (low) deposit balances on that day, and could lead banks finding creative methods of circumventing the reserve requirement.

several months of trials, the new system was formally introduced in February 1999 and by end March the reservable base was being calculated on the basis of a 4 weeks rolling average.<sup>25</sup>

97. Access to overdraft funds has been tightened significantly since May 1998, with the aim of preventing banks from obtaining long-term BOS financing under the guise of legitimate overdraft needs and forcing banks to improve their internal liquidity management. The new access rules imposed stiff penalties (including administrative ones like reporting the incidence of access to the boards of directors) and required banks to prove that the financing was to support overdraft needs that could not be foreseen. By end-June 1998, the BOS established a standing credit facility which dispensed credit to banks for overdraft and lender of last resort purposes, as well as general financing needs. The facility was based on time-bound (mostly 14 days to one month) unrestricted Mudharaba contracts.

98. The new standing credit facility has greatly assisted in rationalizing BOS credit operations. Until the establishment of this new facility, BOS financing had been largely project specific (i.e., based on restricted Mudharaba), which meant that the credit was practically open ended, as the BOS could not retrieve it until the project was completed; this process lacked transparency and was prone to abuse by banks. The new facility did not link the financing to particular projects, but to the bank's general performance over the duration of the financing contract.

### **Introducing new instruments**

99. Before 1997, efforts in developing government funding and money market instruments concentrated on designing project-specific funding instruments where the return to investors was tied to the return on the underlying project, typically a government development project (e.g., refinery, factory, etc.). These efforts, however, did not succeed because these instruments were not suitable for the BOS OMO or for providing general purpose funding to the government.

100. A new approach was pursued during the second half of 1997, culminating in the approval, in November 1997, by the BOS High Shariaa Supervisory Council (HSSC),<sup>26</sup> of the principles that would later lead to the development of the CMC and the Government Musharaka Certificate (GMC). The two instruments were based on Musharaka contracts between the BOS (in case of CMC), the MOF (in the case of GMC) and investors in a pool of assets. The CMC asset pool consists of the share ownership of the BOS in commercial banks, while the GMC asset pool consists of the share ownership of the MOF in profitable state

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<sup>25</sup>The reserve base for banks who fail to report is estimated on the higher side to encourage compliance.

<sup>26</sup>The HSSC is the agency responsible for monitoring the compliance of the financial system with Islamic finance regulations.

owned enterprises. There were, however, major differences in the designs of the CMC and GMC reflecting the different purposes for their issuance (see Box 5). The CMC was launched on June 3, 1998, but the launching of the GMC (the modality of which was approved by the HSSC in May 1998) has been delayed, however, for technical reasons.<sup>27</sup>

101. The second challenge beside introducing new monetary instruments was developing a framework for the interbank market. In early 1997, the BOS allowed interbank placement of deposits, provided that the BOS was notified and approved of such transactions. However, the BOS did not allow banks to use the funds raised in the interbank market to fund their clearing balances (or alternately to avoid breaching reserve requirements). The rationale for this practice was that the interbank market is intended to help banks in their normal business and should not be used for overnight funding. In addition, one problem that inhibited interbank trading was the lack of familiarity with an appropriate mechanism to conduct trades.

102. By October 1997, the BOS approval requirement for interbank trades was removed and banks were informally encouraged to trade funds among each other. In April 1998, the BOS issued a new guideline for the interbank market, including trading modalities based on unrestricted Mudharaba deposit placements. Under the new guidelines, banks with surplus funds can place funds in unrestricted Mudharaba investment accounts in deficit banks for a finite period of time, with the rate of return being determined according to the profit sharing agreement between the two banks. However, despite the BOS efforts, the interbank money market has not developed in Sudan.

103. The major problem lies in the perception among many banks that interbank trading could reveal weaknesses, help competitors, or reveal financial secrets. Another problem arises from the adequacy and timeliness of information on debtor banks. While the former obstacle could ease with time and the increased sophistication of the financial system, the latter problem is more fundamental. The uncertainty could be reduced substantially by addressing the problem of common accounting standards and reporting.<sup>28</sup> To this end, BOS initiated in early 1998 a program to introduce a new accounting system (see Box 6). Banks are expected to fully adjust their accounting practices to the new system in 1999.

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<sup>27</sup>The valuation of the CMC fund was relatively straightforward given that banks' (including those in the CMC fund) balance sheets are available on a monthly basis, allowing the BOS to publish the fair value of the CMC fund on monthly basis. The valuation of the enterprises that were included in the GMC fund and establishing a quarterly reporting system proved to be more difficult.

<sup>28</sup>Certified statements with standard methods for calculating and reporting income, non-performing loans, rates of return which are subsequently adjusted at the conclusion of the contract, are crucial not only for central bank prudential supervision, but as a basis for banks to assess each other as potential clients.

## **Box 5. Sudan: Design Comparisons between the CMC and GMC**

In principle the CMC and GMC are similar in the sense that both instruments are based on the Musharaka principle. Investors share with the BOS and MOF the profits generated by the funds supporting the CMC and GMC. However, there are significant design differences between the two instruments, reflecting the different objectives that they intend to achieve.

### **I. Basic Function**

The CMC is intended to be used for managing banks' liquidity (by banks themselves and BOS). Therefore, liquidity becomes a prime design objective to allow the instrument to be traded at very short notices.

The GMC is intended to raise funds for the budget and to be a reliable investment instrument for holders. Therefore, the stability of the instrument, in terms of prices and maturity, becomes an important design objective.

### **II. Intended Market**

CMC is intended to be used by banks, and possibly other nonbank financial institution.

GMC is targeted for the public at large.

### **III. Supporting Funds**

The CMC fund consists of shares in commercial banks only. The availability of banks balance sheets on monthly basis would allow the monthly calculation of the fund's fair value (book value plus retained profits) which is an important reference for pricing the CMC (particularly for short-term trading).

The GMC fund consists of shares in profitable public and joint venture enterprises. Since the fund's fair value does not need to be published frequently, the constraints on compiling the accounts of the chosen public enterprises in less than on quarterly basis will not hinder the trading in GMCs.

### **IV. Maturity**

CMCs are issued without maturity. This would improve banks' ability to conduct secondary trading on short notice basis.

GMCs are issued with maturity. This would allow for a better public finance management and enhance the attractiveness of GMCs to longer term investors.

### **V. Dividends**

The CMC does not distribute dividends. Hence, banks can realize profits only from secondary trading or when BOS buys back the CMCs.

The GMC distributes dividends.

### **VI. On-Demand Repurchase Option**

The BOS stands ready to buy the CMCs on demand. This enhances the CMC liquidity.

There is on-demand repurchase option.

### **Box 6. Sudan: Bank Accounting Reform**

Until 1998, bank accounting rules were not uniform in Sudan, and accounting procedures varied from bank to bank. Every bank reported monthly financial statements to the Bank of Sudan, but the figures were not necessarily comparable from bank to bank, particularly with regard to the recognition of income. This is largely due to the fact that banks determine their own guidelines for interim recognition of rates of return which are subsequently adjusted at the conclusion of a contract. In 1998, a new set of accounting standards that is more suitable for Islamic banking was introduced. Banks were required to prepare their 1998 financial statements according to the new set of standards. However, full convergence to the new accounting system is expected only in 1999.

The new accounting framework was developed with technical assistance from the Bahrain-based Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI). The accounting standards that AAOIFI has published differ from international accounting standards in the sense that they address the specific characteristics of the contracts that govern the assets of an Islamic bank, and the financial instruments that they use to mobilize funds. In addition, Islamic finance rules have special provisions regarding how to contract financial obligations. These provisions call for greater disclosure of information and more emphasis on the rights of the parties under the contract to avoid potential future disputes. This issue is particularly important since collateral (or other grantees to investors) is not accepted (except under debt obligations which are not remunerated). The last feature, in addition to the prohibition of interest payments, gives rise to financial contracts and transactions that call for greater disclosure of information and specificity of obligations than normally required in conventional transactions.

104. The introduction of the CMCs could also increase the capacity of the interbank market.<sup>29</sup> This, however, would require a appropriate pricing policy for CMCs that would encourage interbank trading in CMCs.

### **C. The CMC Experience—The Early Results**

105. The BOS conducted the first CMC auction in June 3, 1998, and started using it as an instrument for liquidity management in late July (see Table 25).<sup>30</sup> Initially, the primary objective of CMC operations was to familiarize market participants with the instrument and to enhance its attractiveness. Nevertheless, BOS did use the CMC to manage liquidity during the

<sup>29</sup>The CMC would serve as a self-liquidating third party commercial paper, where the primary source of repayment is the payment by the issuer, and the endorsing bank (borrowing bank) is only the secondary source of repayment; the purchaser (surplus bank) of self-liquidating third party paper can assess risk as depending at least partly on the issuer of the underlying security and less on the holder of the security (borrowing bank).

<sup>30</sup>The second sale auction was held in July 22 and the first buy auction was held in July 29, 1998.

two periods of August–September 1998 and January 1999–February 1999, when much of the demand for credit emerges. The experience thus far is described below.

### **Pricing the CMCs**

106. The BOS maintained the on-demand repurchase price (ODRP) at a small premium over the clearing price of the most recent auction rather than at a discount, which meant that banks were assured of making profits when they liquidated their holdings of CMC (although the size of the premium was not known a priori to banks). The intention of the BOS was to build banks' confidence in the CMC, given its novelty. Although banks can make a profit almost overnight by presenting the CMCs to the BOS on-demand repurchase window, the experience during July–September 1998, (when the BOS conducted frequent buy auctions) indicates that almost all on-demand sales of CMCs to the BOS have been due to periodic liquidity problems in individual banks. This outcome was in line with one of the intended purposes of the CMC—to be used by banks to manage their own liquidity, and reflects the fact that the on-demand repurchase price, although higher than the sale auction price, was kept below the price established at the buy back auction. This provided banks with an incentive to hold the CMCs until the next buy auction in order to realize higher profits. As a result, the number of CMCs presented to the on-demand repurchase window (ODRW) declined steadily relative to the CMCs sold in the buy auction during August–September, 1998 (see Chart 5).<sup>31</sup>

107. The ODRP policy (i.e., setting the ODRP at a premium) has had three major drawbacks; arresting the development of an interbank market in CMCs, contributing to a higher price spread between the sale and buy auctions, and reducing the efficiency of the BOS OMO. Because of the BOS premium offer on the ODRP, banks have had little incentive to sell CMCs to each other. It has been easier and less costly<sup>32</sup> for banks to sell to the BOS through the ODRW, and as a result the interbank CMC market has remained largely undeveloped. In addition, banks which might have been interested in assuming a market maker role, quickly became disinterested, further hindering the development of the CMC interbank market.

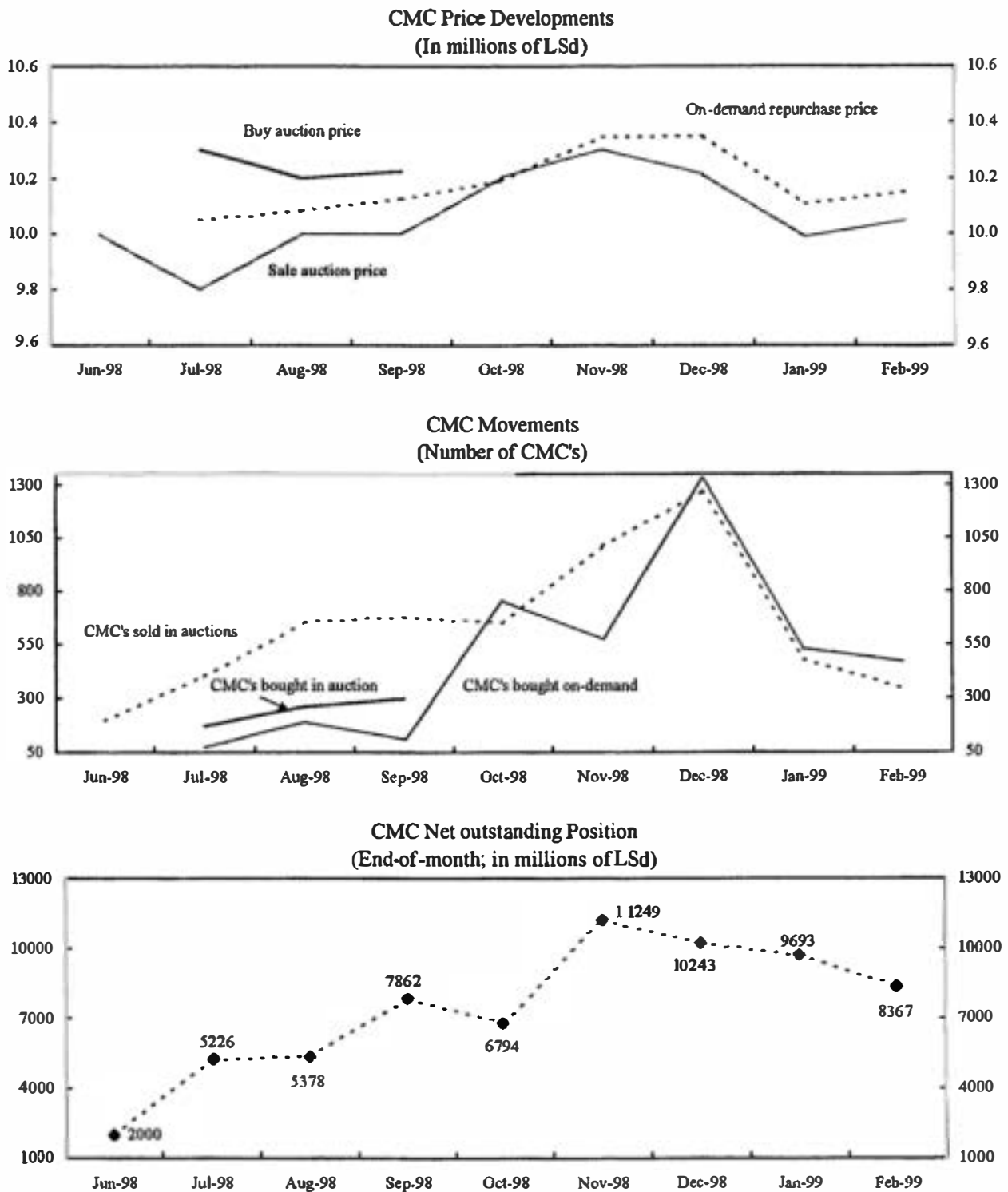
108. The price spread between the sale and buy CMC auctions has remained relatively high, which is a cause of concern to the BOS. This could normally be attributed to the novelty of the instrument. The spread, however, has narrowed gradually, as would be expected when the market settles on a price for a new financial instrument. Nevertheless, the ODRP policy may have contributed to the high spread, as banks demanded higher premiums to hold the CMCs until the next buy auction rather than selling them through the ODRW.

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<sup>31</sup>No buy-auction was conducted during October 1998–February 1999.

<sup>32</sup>In the sense of saving on efforts to market the CMCs to other banks and avoiding revealing the liquidity preference of the selling bank.

**Chart 5. Sudan: Central Bank Musharaka Certificate (CMC)**  
Selected Indicators, June 1998 - February 1999



Source: Sudanese authority; and Fund staff estimates.



109. The ODRP policy has also been detrimental to the effectiveness of the BOS OMO in CMCs. This was most visible when the BOS, concerned with rising bank liquidity in the last quarter of 1998, stopped the buy auctions, which meant that banks could make profits on their investments in CMC only through the ODRW. Consequently, when banks realized by November 1998 that the BOS had stopped conducting the buy auctions and at the same time accelerated the pace of sale auctions, the number of CMCs presented to the ODRW rose sharply, frustrating BOS's efforts at substantially increasing its net sale of CMCs (see Chart 5).

### **Managing banks' liquidity**

110. Banks have used the CMC primarily as a tool to manage liquidity, particularly after the BOS tightened access to overdraft funds and increased the penalty for overdrafts. In particular, banks liquidated a part of their CMC holdings when they expected to have an open position in their payments settlement account at the BOS. Despite the shortcomings of the ODRP policy, CMCs were perceived by banks as a useful tool to manage their internal liquidity, as reflected in their price bidding behavior. During the period from September to December (off season) when banks normally accumulate excess reserves, the CMC price established at the sale auction increased markedly, reflecting competition among banks and the availability of funds to invest in CMCs. With rising demand for bank credit during December-February, CMC prices plummeted.

### **D. Banking Soundness and Supervision**

111. Important measures have been taken in recent years to improve the quality of banking supervision, and the soundness of the banking system.<sup>33</sup> Since the beginning of 1997, commercial banks have been reporting more frequently (every month) and in greater detail key items of their balance sheets, including on the extension of new loans and on their capital base. This has helped to strengthen off-site analysis of banks and sharpen the focus of on-site supervision. In addition, since January 1997, banks were obliged to report all non-performing loans (i.e., loans that are more than one month overdue) to the banks' Board of Directors and the BOS, and subsequently the banks are required to inform the banking control department of the BOS about any measures taken to recover these loans. In order to expedite legal procedures to claim collateral, the BOS issued a circular in December 1997 relieving banks from the requirement to seek the BOS permission prior to the initiation of foreclosure proceedings.

112. Banks were instructed in 1996 to attain risk-weighted capital adequacy ratios of 8 percent by end-1997. Following up on this, all commercial banks' balance sheets for 1996 were reviewed in 1997 for compliance with the required capital adequacy norms. At end-

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<sup>33</sup>See Appendix II for a detailed description of the banking supervision framework in Sudan.

1997, about 7 out of 28 banks<sup>34</sup>—of which 3 state owned—had capital adequacy ratios of less than 8 percent (3–6 percent). Also, in early 1998 all external auditors of banks were required to compute the provisions needed for classified loans, in accordance with loan classification and provisioning regulations, and the BOS has begun to limit dividend distributions in order to enforce the provisioning rules.

113. The BOS has initiated important accounting reforms with a view to standardizing banks' financial statements and improving the monitoring of banks by its banking super-vision department. A comprehensive new accounting framework consistent with Islamic banking principles was introduced at the end of 1997 (see Box 5). Banks were expected to be in full compliance with the new accounting procedures by end-1998.

114. Prudential regulations for setting appropriate limits on commercial banks' foreign exchange exposure in accordance with international norms were introduced in January 1998.

## V. EXTERNAL SECTOR DEVELOPMENTS

### A. Overview<sup>35</sup>

115. Sudan's external current account deficit (excluding official transfers and interest payments due) narrowed from 8.6 percent of GDP in 1995 to 6.7 percent in 1997, mainly as a result of a significant increase in private transfers (see Chart 6). In 1998, however, the deficit widened sharply to 9.8 percent of GDP owing to increased imports related to the construction of an oil-pipeline. These external current account deficits were financed largely by unrecorded private inflows (including errors and omissions) and some trade-related (mainly short-term) private financing. On an accrual basis, the current account deficit was equivalent to 22.6 percent of GDP in 1998. With little foreign assistance, Sudan was unable to meet fully its debt service obligations falling due (about US\$1.2–1.3 billion per year), and external payments arrears are estimated to have reached US\$19.3 billion at end-1998 (equivalent to 86 percent of total debt outstanding).

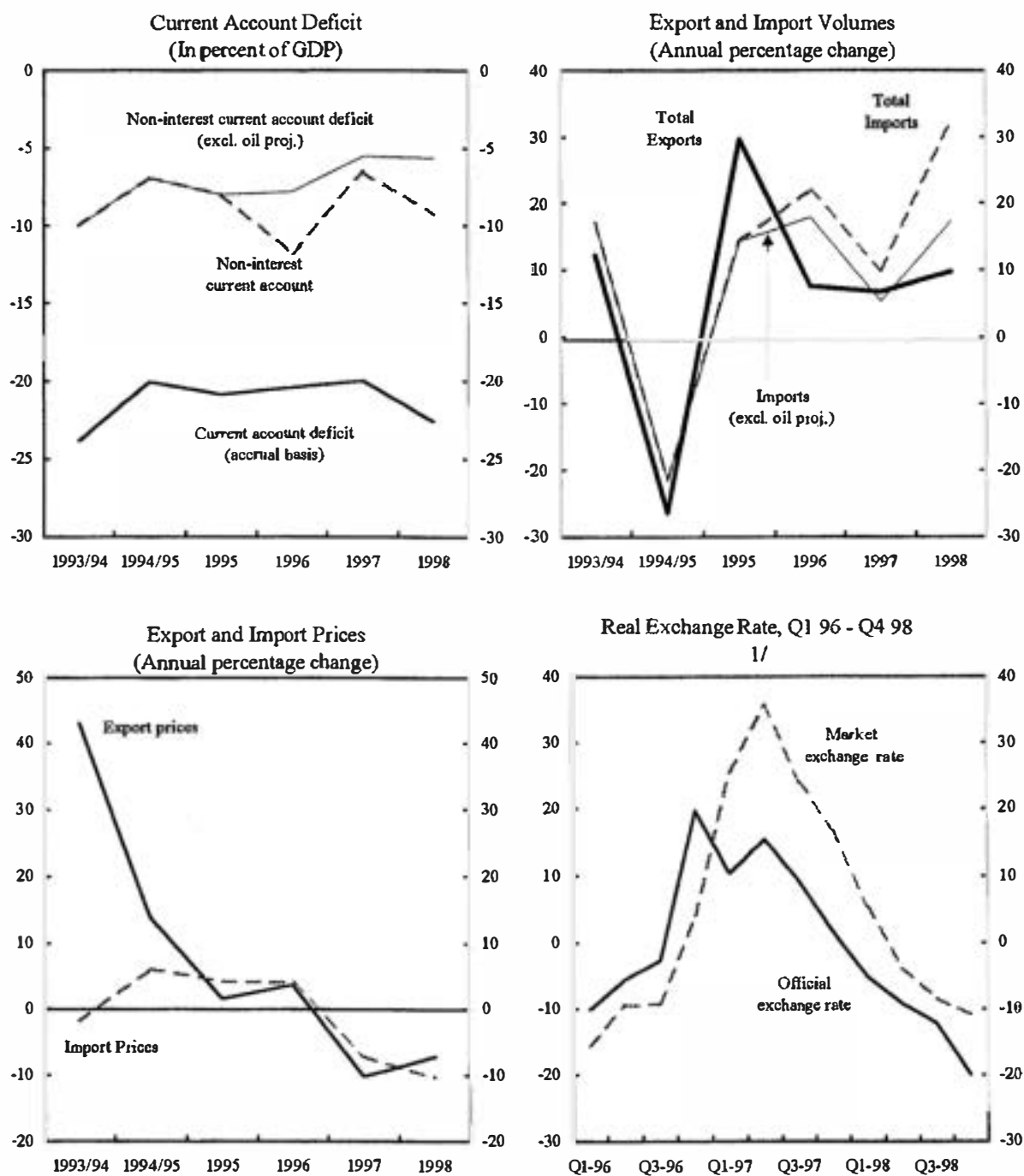
116. Sudan's external public sector debt burden remained heavy, with scheduled debt service averaging about 200 percent of exports of goods and non-factor services in 1995–98. However, actual debt service payments have been much lower, averaging about 10 percent of exports of goods and non-factor services over the same period, and most of these payments (about 85 percent) were made to the Fund, in order to effect a small reduction in arrears.

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<sup>34</sup>These seven banks are estimated to account for 45 percent of total banking sector assets as of end-1997.

<sup>35</sup>Data on Sudan's external transactions presented in this section suffers from some weakness, particularly in the areas of foreign direct investment and inflows of private sector remittances.

Chart 6. Sudan: Selected External Sector Indicators, 1993/94 - 98



Source: Sudanese authority; and Fund staff estimates.

1/ Exchange rates were unified in October 1998; (-) indicates depreciation.

## **B. Current Account Developments**

### **Exports**

117. After recovering in 1995–96, total exports (in U.S. dollar terms) declined in 1997 and remained at this same level in 1998, mainly owing to a sharp pull-back in export prices, and the adverse impact of floods on the output of the irrigated schemes during the second half of 1998 (see Table 7). Although export prices rose by some 11.5 percent in 1994/95 they have since trended downward and in 1997 and 1998 declined by 11 percent and 7.5 percent, respectively (see Chart 6). The decline in export prices, however, masks a broad-based robust performance in the growth of export volumes which after increasing by 25.6 percent in 1994/95 rose by an average annual rate of 7–8 percent during 1996–98.

118. The composition of Sudan's exports has diversified markedly over the past few years. The share in total export of traditional exports like cotton and gum arabic, which accounted for 37 percent of total exports in 1994/95, fell to only 20 percent of total exports in 1998, while non-traditional exports, particularly groundnuts, sesame, livestock, and gold, registered sharp increases in both volume and value terms, and accounted for almost 50 percent of total exports in 1998 compared to about 35 percent in 1994/95. By 1998, the most important export item was livestock (20 percent of exports) while cotton, which was the most important export item in 1994/95, was now the third most important, accounting for 16 percent of total exports. However, despite the diminished importance of traditional export items, Sudan's export sector continues to be dominated by a narrow range of products and is therefore susceptible to exogenous shocks such as terms of trade deterioration. Whereas the top three export items accounted for about 52 percent of total exports in 1994/95, by 1998, the ratio had increased to 54 percent.

119. The growth of export volumes since 1995 reflects relatively good weather conditions, more intensive use of fertilizers, improvement in control of pests and plant diseases, the liberalization of procurement prices. More recently, the liberalization of both the trade and the foreign exchange systems, including the elimination of surrender requirement<sup>36</sup> and the reduced divergence between official and market exchange rates, have been the key factor in stimulating agricultural production. Severe impediments to export growth include the poor infrastructure, and heavy regional taxation on agricultural production.

120. Sudan's exports continue to be concentrated in only a few markets. For example, in 1998, about 50 percent of total exports were destined to just four markets, Saudi Arabia (24.4 percent), Italy, and the United Kingdom (each about 10 percent), and Germany (5.4 percent) (see Table 29). In terms of regional distribution of exports, Sudan's major export market is now the Middle Eastern whose share of exports has risen from 35 percent in

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<sup>36</sup>As at end-1998, the only remaining surrender requirements to the BOS were on exports proceeds of cotton (30 percent), gum arabic (85 percent), and services receipts.

1994 to about 41 percent in 1998. This increase has been at the expense of exports destined to industrial countries which have fallen from 42.2 percent in 1994 to 38.6 percent in 1998. The share of exports destined for Africa and Asian countries also declined, with the latter owing to the virtual cessation of exports (mainly cotton) to China, as a result of the expansion of domestic cotton production in China.

## **Imports**

121. Since 1994/95, merchandise imports have increased at a faster pace (17.5 percent annually) than exports leading to a steady worsening of the trade deficit from 9.3 percent of GDP in 1995 to over 15 percent of GDP in 1998. The increase in imports, which rose from US\$1.0 billion in 1994/95 to US\$1.9 billion in 1998, reflected increases in volumes<sup>37</sup> as imports prices are estimated to have declined at annual average rate of 2.3 percent in 1995–98 (Chart 6). This decline in import prices, especially during 1997–98 (a cumulative decline of 17.5 percent), was due largely to lower oil prices, and it helped offset the decline in export prices (a cumulative decline of 18.6 percent). As a result, since 1995 Sudan's terms of trade have declined cumulatively by only about 2.7 percent (or by about 0.5 percentage point per year).

122. The composition of Sudan's imports has also changed markedly since 1994/95. Imports of foodstuffs, which accounted for about 18 percent of total imports in 1994/95, declined to 14 percent in 1998, mainly due to increased local production. On the other hand, imports of manufactured goods and of transport equipment rose substantially, from about 29 percent in 1994/98 to about 41 percent in 1998 mainly on account of imports related to the construction of the oil-pipeline (see Table 30).

123. As regards the sources of imports, in 1998 Saudi Arabia remained the most important trading partner, supplying about 15.5 percent of total imports, while China's share rose to 14 percent compared to 3 percent in 1994, primarily owing to its participation in the oil-pipeline project. From a wider regional perspective, the importance of industrial countries as sources of imports has diminished substantially with their share falling from 40.6 percent in 1994/94 to 35.4 percent in 1998. France, with a share of 6.7 percent in 1998, is the most important source of imports among the industrial countries. The main beneficiary of this decline has been Asia, whose share has increased from 17.7 percent to 26 percent in 1998.

## **C. Service and Income Accounts and Current Transfers**

### **Service and income accounts**

124. The deficit in the service account widened from US\$5 million in 1995 to an estimated US\$27 million in 1998, due primarily to a deterioration in net government receipts, and

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<sup>37</sup>Much of the increase in import volume was related to the construction of the oil pipeline.

despite a significant reduction in net service payments by the private sector. The imbalance in the net income account during the past several years is due mainly to the growing burden of external interest obligations (including late interest payments). As most (an average of 85 percent of outstanding debt) of Sudan's external debt was in arrears during the period 1995–98, an equally large proportion (averaging slightly less than 90 percent) of scheduled interest payments was in fact penalty interest.<sup>38</sup>

### **Current transfers**

125. Private remittances from the large number of Sudanese working abroad (which constitute an important source of foreign exchange) rose rapidly from about US\$60 million in 1995 to an estimated US\$490 million in 1998. However, a good part of this increase are transfers that would have been reflected in large errors and omissions in earlier years. In addition, a significant part of this increase reflects the increased use of official channels, as the exchange system became increasingly liberal over time the recent improvements in the functioning of the foreign exchange market. In contrast, recorded official public current transfers, comprising mainly humanitarian food relief and a small amount of cash aid, have declined from about US\$44 million in 1995 (compared to US\$150 million in the early 1990s) to US\$17 million in 1998 (see Table 31).

### **D. Official Borrowing and Capital Flows**

126. Official transfers and project aid to Sudan fell dramatically from close to US\$500 million in the early 1990s to US\$54 million in 1995, and to an estimated US\$17 million in 1998. This trend reflected, inter-alia, the build-up of external payments arrears to virtually all creditors, and adverse external political developments, all of which contributed to the reluctance to provide external financial assistance by some key bilateral donors, multilateral institutions such as the UNDP and the African Development Fund (AfDF), and regional donors. Similarly, the decline in official borrowing has also been striking, with loan disbursements falling from as much as US\$86 million in 1995 to around US\$13 million in 1998 (see Table 32). The International Fund for Agricultural Development (IFAD), and the Islamic Development Bank have recently become the main source of medium- and long-term project financing. Loan disbursements from bilateral creditors have practically ceased since 1994/95.

127. In contrast, net private capital inflows, including errors and omissions, have risen substantially during the 1990s, which has allowed Sudan to avoid a sharp compression in imports in the face of declining official financing. Although some decline in short-term trade credits is noticeable (from US\$331 million in 1995 to US\$84 million in 1998), this has been more than offset by inflows of other net private sector capital flows, and of errors and omissions, and as a result, total private sector inflows amounted to an estimated US\$446

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<sup>38</sup>Contractual interest obligations rose from US\$913 million in 1995 to US\$1.2 billion in 1998.

million in 1995, before rising to US\$925 million by 1998. The large “net errors and omissions” likely reflects unrecorded financing (principally workers remittances) of imports.

## **E. External Debt and Debt Service**

### **Recent developments<sup>39</sup>**

128. The total outstanding stock of external debt (including arrears) increased from an estimated US\$19.8 billion (about 280 percent of GDP) at end-1995 to an estimated US\$22.4 billion (about 255 percent of GDP) by end-1998. As at end-1998, around 57 percent of this debt was owed to bilateral creditors, 19 percent to multilateral creditors, and the rest to private creditors (commercial banks and suppliers' credits). Almost 65 percent of the non-Paris Club bilateral debt was owed to two countries, Saudi Arabia and Kuwait. Regarding Paris Club bilateral debt at end-1997,<sup>40</sup> the United States was the most important creditor, accounting for about a quarter of the debt, followed by the United Kingdom and France, with a share of 14 percent and 13 percent, respectively. About three-quarters of the debt owed to Paris Club bilateral creditors had been previously rescheduled on non-concessional terms (see Table 34). The stock of external payments arrears is also estimated to have increase from US\$16.3 billion at end-1995 to US\$19.3 billion at end-1998 (see Table 33).<sup>41</sup> Therefore, at end-1998, about 86 percent of total debt constituted arrears, compared to all of the debt owed to private creditors (including commercial banks and suppliers) and to the Fund, and about 33 percent to multilateral institutions other than the Fund. The IFAD and the IDB are the only international organization to which Sudan is current on it's external debt service payments obligations.

129. Sudan's contractual debt service obligations (interest and principal) also increased from US\$1.2 billion in 1995 to about US\$1.4 billion in 1998, or from 175 percent of exports of goods and non-factor services to 224 percent. Excluding late interest payments, which were estimated to reach US\$1.0 billion in 1998, the debt service ratio would still amount to some 55 percent of exports of goods and nonfactor services. Sudan's actual debt service payments have remained relatively small compared to contractual obligations—total cash payments during 1995–98 (including payments to the Fund) averaged around US\$64 million (equivalent to over 10 percent exports of goods and non-factor services), of which an average of US\$55.6

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<sup>39</sup>For a discussion of the evolution of Sudan's external debt burden, see SM/97/15 (1/17/97).

<sup>40</sup>The most recent date for which disaggregated data are available.

<sup>41</sup>According to the authorities, all external payments arrears are considered to be public or publicly guaranteed debt.

million was paid to the Fund (i.e., over 86 percent of total payments). As a result, the bulk of Sudan's contractual principal and interest obligations falling due in 1995–98 accumulated as payments arrears. Since early 1995, Sudan has been making payments to the Fund, which has resulted in a decline in overdue obligations. Thus, overdue obligations to the Fund dropped from SDR 1,186.7 million at end-1995 to SDR 1,145 million at end-December 1998.

## **VI. THE EXCHANGE AND TRADE SYSTEM<sup>42</sup>**

### **A. Trade System**

130. Following the adoption of a tariff reform package in 1996 which lowered the number of tariff bands and the maximum tariff rate, the pace of trade liberalization slowed in 1997 as the authorities increased, on a temporary basis, the number of tariff rates for revenue reasons. The tariff increases applied to cement (30 percent to 50 percent), plastic raw materials (from 5 percent to 10 percent), packaging materials and plastic products (from 25 percent to 30 percent), and a 4 percent import surcharge (called defense tax) on about 40 percent of imports. On the positive side, in November 1997, export taxes on goods in the lowest bracket (0–3 percent) were eliminated, and were lowered by 3 percentage points for other exports in the other brackets (5–10 percent).

131. However, during 1998, the pace of trade liberalization picked up as emphasis shifted toward an outward-oriented development strategy. The reforms implemented in September 1998 involved the reduction of: (i) the number of tariff bands from 7 to 5;<sup>43</sup> (ii) the maximum rate from 250 percent to 80 percent, while the minimum rate was raised from 5 percent to 6 percent; and (iii) the average unweighted tariff rate from 26 percent to 25 percent. The defense tax (a de facto import surcharge) was also eliminated, as was the services tax which had been levied on imports previously subject to quantitative restrictions. Moreover, excise taxes were rationalized to ensure uniform treatment of domestically produced and imported goods. At end-1998, the only import non-tariff barriers that remained for protectionist reasons included a positive list of essential goods which can only be imported using bank credit facilities, and the stamping requirements for import contracts at the Ministry of Commerce. There are no other NTBs such as bans or quotas except for those prohibited for reasons of health, religion, and national security.

132. Substantial progress also took place on the export side. Following the lifting of the ban on the export of scrap iron and bars in October 1998, the only remaining export bans are

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<sup>42</sup>For a detailed description of developments in the exchange and trade systems prior to 1997, see SM/97/15.

<sup>43</sup>The remaining five tariff bands are 6, 15, 30, 50, 80 percent.



exports of raw hides and skins, charcoal and firewood, and female livestock.<sup>44</sup> However, export councils consisting of private representatives, remain in place for certain exports<sup>45</sup>, and are expected to, inter alia, advise the government authorities on indicative export prices. In several instances, however, the suggested minimum indicative price diverged from the international price, and in cases where it was lower, exporters had difficulties in proceeding without the committees' recommendations. Finally, in the context of the 1999 budget, export taxes were further reduced for cotton and gum arabic (from 7 percent to 5 percent), dura (from 2 percent to 0 percent), and all other exports, except meat, vegetables, fruits and livestock, all of which are exempted (from 2 percent to 1 percent—the remaining taxes are relatively insignificant and contribute to only about 0.1 percent of GDP to government revenues.

133. Export surrender requirements to the BOS were reduced substantially during 1997–98. In May 1997, the surrender requirements for all exports (other than cotton, gum arabic, and a list of 13 specific products) were reduced from 30 percent to 25 percent. At the same time, the requirement for cotton was reduced from 100 percent to 40 percent, while that of 13 specific products was reduced to 40 percent. By end 1998, surrender requirements on virtually all goods had been eliminated with the exception of cotton and gum arabic which were still subject to surrender of 30 percent and 85 percent, respectively. However, all receipts of invisibles continue to be subject to surrender requirements.

## **B. Developments in the Foreign Exchange Market**

134. During the period 1992–96, Sudan had undertaken several unsuccessful attempts at exchange market reform.<sup>46</sup> The lack of supporting financial policies, compounded by the limited effectiveness of monetary policy instruments and lack of foreign exchange reserves, undermined reform attempts. Thus, at the beginning of 1997, the exchange arrangement in Sudan consisted of two markets, a free accounts-to-accounts market (open only to individual accounts holders) and the official market comprising the BOS, the commercial banks, and the authorized non-bank dealers. The accounts-to-accounts market was free of restrictions on current and capital transactions and the exchange rate was freely determined by market forces, whereas the official market was limited to permissible current and capital transactions (for banks and nonbank authorized dealers (NBAD)) and the exchange rate was administratively set by a Joint Committee (JC) composed of representatives from the BOS, commercial banks, and NBAD.

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<sup>44</sup>The ban on dura exports usually depends on whether there is enough harvested to ensure domestic consumptions needs are met. In early 1999, the ban on dura exports was lifted.

<sup>45</sup>Dura, oil seeds, cotton, livestock and meat, karkadeh, vegetables and fruits, manufactured products, gum arabic, minerals, and wildlife.

<sup>46</sup>For a detailed description of previous efforts, see SM/97/15.

135. Starting 1997, the authorities' strategy (see Box 7) to ensure a successful and sustainable unification of foreign exchange markets involved: (i) a progressive narrowing of the spread between the two exchange rates; (ii) a reduction and elimination of export surrender requirements to the BOS accompanied by shifting official imports from the BOS to the private sector; (iii) the development of an indirect monetary instrument (the CMC) to manage liquidity and to assist BOS intervention to reduce excess volatility in the unified market; and (iv) the continuation of tight monetary and fiscal policies.

136. A wide range of structural reform measures were introduced during 1997. These measures included: restructuring the JC to include a representative from the BOS; widening the exchange rate band from  $(\pm) 0.3$  percent to  $(\pm) 2.0$  percent; abolishing the fixed margin between the buying and selling rates; abolishing the surrender requirements to the BOS of the 20 percent of NBAD daily transactions; unifying the appreciated customs exchange rate with the official rate; reducing the spread between the accounts-to-accounts and official rates (from 23 percent at end-1996 to 7.3 percent at end-1997); reducing, in steps, the surrender requirements to the BOS; and drafting regulations on foreign exchange exposure limits. At the same time, the pricing and importation of several petroleum products was liberalized and the financing of public sector imports through the BOS (other than petroleum products, life saving medicines, and spare parts for some strategic projects) was eliminated.

137. In early 1998, further steps were taken in preparation for the unification of exchange markets, including imposing a set of prudential regulations for banks' foreign exchange positions; and a review, with Fund technical assistance, of the numerous regulations governing the official exchange market and those governing the accounts-to-accounts market with a view to establishing a single regulatory framework for both markets. Also, the authorities began to draft a code-of-conduct for the market and prepare guidelines for market makers and trading procedures. In addition, the strategy of steadily narrowing the exchange rate spread was continued, while simultaneously reducing the remaining surrender requirements. The BOS also began to build-up some foreign exchange reserves and to develop procedures for operating in the foreign exchange markets and for the coordination of monetary and exchange market operations.

138. In October 1998, the exchange markets were unified. The Joint Committee was no longer in charge of setting the official exchange rate, and banks and NBADs were free to determine exchange rates and transact freely within the unified regulatory framework. The official exchange rate (which is used for government transactions and for customs valuation) was determined by taking a 14-day moving average of market determined rates in the banking system; this moving average was reduced to 10 days at end-December 1998, and 5 days at end-March 1998. The moving average rate diverges very little from the average daily market exchange rate, and the authorities have undertaken that, whatever the outcome of the calculation of the formula, the rate will not diverge by more than 2 percent. Under the new foreign exchange regulations, current account transactions were free of any restrictions.

### **Box 7. Sudan: Unification of the Foreign Exchange Market**

Following several years of unsuccessful efforts to unify the foreign exchange market on a sustainable basis, beginning in 1997, the authorities adopted a strategy which, inter-alia, involved the following:

#### **1997**

- Exchange rate policy involved a progressive depreciation of the official Joint Committee (JC) rate to reduce the spread between the official rate and the free market rate. This strategy was to be supported by appropriately tight monetary and fiscal policies
- The JC was restructured to include a representative from the BOS, and the JC exchange rate band was widened from  $(\pm) 0.3$  percent to  $(\pm) 2.0$  percent.
- The surrender requirements to the BOS of the 20 percent of non-bank authorized dealers (NBAD) daily transactions was abolished. In addition, surrender requirements on exported items were gradually reduced while at the same time, the pricing and importation of several petroleum products was liberalized and the financing of some public sector imports through the BOS were eliminated.
- As a result of this strategy, the spread between the free market exchange rate and the official JC rate was narrowed from 23 percent at end-1996 to 7.3 percent at end-1997.

#### **1998**

- In January, the government reduced the surrender requirements on certain specific products, and on a wide range of manufactured items, and other products. Subsequently, export surrender requirements were gradually removed and by year-end, only irrigated cotton and gum arabic were subject to surrender.
- The government imposed a new set of prudential regulations for banks' foreign exchange positions, and began to review, with Fund technical assistance, the numerous regulations governing the official exchange markets with a view to establishing a single regulatory framework for both markets.
- The strategy of steadily narrowing the exchange rate spread was continued, while simultaneously reducing the remaining surrender requirements. The BOS also began to build up some foreign exchange reserves and to develop operating procedures for intervention in the foreign exchange markets.
- By end-1998, the exchange markets had been substantially unified. The official exchange rate was no longer set by the JC, but was based on a 14-day moving average of market determined rates in the banking system. In addition, banks and NBADs were free to determine exchange rates and transact freely within the unified regulatory framework.
- Under the new foreign exchange regulations, current account transactions were free of any restrictions. However, capital account transactions that would involve using export proceeds or transactions from the export accounts were to be permitted only on a case-by-case basis. The authorities continued to permit without any restrictions the opening of individual unrestricted accounts with resources originating from abroad.

#### **1999**

- From March the official exchange rate was set on the basis of a five-day moving average, and in April the authorities undertook that on any day the diversion between this rate and the daily average market exchange rate would not exceed 2 percent.

However, capital account transactions that would involve using export proceeds or transactions from the export accounts were to be permitted only on a case-by-case basis. As initially envisaged, the authorities continued to permit the opening of individual unrestricted accounts with resources originating from abroad (such as remittances), and with no restrictions whatsoever. The exchange market regulations and the code of conduct were approved in February 1999.

Table 1. Sudan: Origin of Gross Domestic Product, 1992/93–1998 1/

	1992/93	1993/94	1994/95	1996	1997 Estimate	1998
(In billions of Sudanese pounds)						
Gross domestic product	948.4	1,881.3	4,440.6	9,015.8	15,865.4	19,507.3
Agriculture	363.0	774.1	1,799.2	3,341.5	6,431.9	7,664.7
Crops	159.0	373.3	884.7	2,065.4	4,204.3	4,837.1
Traditional crops	108.5	158.0	539.5	865.8	1,970.6	1,946.4
Irrigated	38.3	69.0	176.9	359.9	724.2	710.3
Rainfed	70.2	89.0	362.7	505.9	1,246.4	1,236.0
Other crops	50.5	215.3	345.2	1,199.7	2,233.6	2,890.7
Livestock	176.9	362.5	876.2	1,229.8	2,148.2	2,729.1
Forestry	27.1	38.3	38.3	46.3	79.4	98.6
Manufacturing and mining	52.0	98.9	287.8	867.8	1,447.6	1,796.8
Electricity and water	11.1	19.4	31.0	76.8	133.3	159.2
Construction	44.9	113.0	169.7	454.4	1,100.9	1,585.5
Trade	265.6	434.7	1,105.6	2,137.9	3,371.0	4,144.6
Transport and communications	53.7	129.0	316.8	612.5	965.9	1,187.5
Other services	158.2	312.1	730.6	1,525.0	2,414.9	2,969.0
(In percent of GDP)						
Agriculture	38.3	41.1	40.5	37.1	40.5	39.3
Crops	16.8	19.8	19.9	22.9	26.5	24.8
Traditional crops	11.4	8.4	12.2	9.6	12.4	10.0
Irrigated	4.0	3.7	4.0	4.0	4.6	3.6
Rainfed	7.4	4.7	8.2	5.6	7.9	6.3
Other crops	5.3	11.4	7.8	13.3	14.1	14.8
Livestock	18.7	19.3	19.7	13.6	13.5	14.0
Forestry	2.9	2.0	0.9	0.5	0.5	0.5
Industry and mining	5.5	5.3	6.5	9.6	9.1	9.2
Electricity and water	1.2	1.0	0.7	0.9	0.8	0.8
Construction	4.7	6.0	3.8	5.0	6.9	8.1
Trade	28.0	23.1	24.9	23.7	21.2	21.2
Transport and communications	5.7	6.9	7.1	6.8	6.1	6.1
Other Services	16.7	16.6	16.5	16.9	15.2	15.2

Sources: Department of Statistics; and Fund staff estimates.

1/ Data were reported on a fiscal year basis until 1995 and on a calendar year basis thereafter.

Table 2. Sudan: Sources of Gross Domestic Product Growth, 1992/93–1998 1/

	1992/93	1993/94	1994/95	1996	1997 Estimate	1998
(Annual percentage change)						
Gross Domestic Product	3.8	1.8	8.9	4.0	6.7	5.0
Agriculture	-0.6	9.4	7.2	-4.9	16.7	1.8
Crops	-23.6	20.4	9.3	19.6	23.4	-1.7
Traditional crops	-1.8	-25.3	57.5	-17.8	38.0	-15.7
Irrigated	-29.8	-7.6	18.2	4.2	22.0	-16.2
Rainfed	25.5	-35.0	88.0	-28.5	49.4	-15.3
Other crops	-48.3	118.8	-26.0	78.0	12.9	10.5
Livestock	59.9	5.2	11.5	-28.1	5.9	8.5
Forestry	-41.4	-27.4	-53.8	-38.2	4.0	6.0
Industry and mining	-9.7	-2.5	34.2	54.5	1.2	6.0
Electricity and water	15.8	-10.0	-26.4	27.1	5.3	2.0
Construction	6.9	29.1	-30.7	37.2	46.9	23.0
Trade	26.3	-16.0	17.3	-0.9	-4.4	5.0
Transport and communications	-15.0	23.3	13.3	-0.9	-4.4	5.0
Other services	-4.9	1.3	8.0	6.9	-4.0	5.0
(Contribution to GDP growth; in percentage points)						
Agriculture	-0.2	3.6	3.0	-2.0	6.2	0.7
Crops	-5.4	3.4	1.9	3.9	5.4	-0.5
Traditional crops	-0.2	-2.9	4.8	-2.2	3.7	-1.9
Irrigated	-1.8	-0.3	0.7	0.2	0.9	-0.7
Rainfed	1.6	-2.6	4.2	-2.3	2.8	-1.2
Other crops	-5.2	6.3	-3.0	6.1	1.7	1.5
Livestock	7.3	1.0	2.2	-5.5	0.8	1.2
Forestry	-2.1	-0.8	-1.1	-0.3	0.0	0.0
Industry and mining	-0.6	-0.1	1.8	3.5	0.1	0.5
Electricity and water	0.2	-0.1	-0.3	0.2	0.0	0.0
Construction	0.3	1.4	-1.8	1.4	2.4	1.6
Trade	6.0	-4.5	4.0	-0.2	-1.0	1.1
Transport and communications	-1.0	1.3	0.9	-0.1	-0.3	0.3
Other services	-0.9	0.2	1.3	1.1	-0.7	0.8

Sources: Department of Statistics; and Fund staff estimates.

1/ Real GDP and sectoral output data were calculated by deflating the nominal data with GDP deflator.

Table 3. Sudan: Indicators of Selected Agricultural Crops, 1994/95-98 1/

(Area in thousands of faddans; production in thousands of metric tons; and yield in kilograms per faddan)

	Irrigated			Rainfed			Total		
	Area	Production	Yield	Area	Production	Yield	Area	Production	Yield
<b>Cotton</b>									
1994/95	420	256	610	14	2	143	4	438	259
1995/96	534	300	562	46	6	130	9	589	307
1996/97	586	286	488	83	7	84	21	690	297
1997/98	386	234	606	22	2	91	13	421	237
<b>Dura (Sorghum)</b>									
1994/95	1,181	726	615	9,730	2,044	210	4,392	15,303	3,648
1995/96	737	513	696	7,573	1,395	184	3,697	12,007	2,450
1996/97	877	888	1,013	10,345	2,388	231	4,380	15,602	4,179
1997/98	836	730	873	8,138	1,477	181	3,672	12,646	2,922
<b>Groundnuts</b>									
1994/95	299	262	876	0	0	0	1,814	2,113	714
1995/96	350	326	931	0	0	0	2,230	2,580	738
1996/97	359	342	953	0	0	0	1,892	2,251	815
1997/98	326	310	951	0	0	0	3,321	3,647	1,104
<b>Wheat</b>									
1994/95	656	445	678	0	0	0	6	662	448
1995/96	691	520	753	0	0	0	18	709	527
1996/97	757	628	830	0	0	0	27	784	642
1997/98	599	532	888	0	0	0	8	607	535
<b>Millet</b>									
1994/95	10	2	200	76	10	132	7,621	7,707	973
1995/96	8	2	250	58	8	138	5,692	5,758	385
1996/97	10	2	200	168	27	161	3,711	3,889	440
1997/98	4	1	200	104	18	173	6,577	6,685	643
<b>Total 1/</b>									
1994/95	2,566	1,691	659	9,820	2,056	209	13,837	24,223	6,042
1995/96	2,320	1,661	716	7,677	1,409	184	11,646	21,643	4,407
1996/97	2,589	2,146	829	10,596	2,422	229	10,031	23,216	6,373
1997/98	2,151	1,807	840	8,264	1,497	181	13,591	24,006	5,441

Source: Ministry of Agriculture.

1/ Excludes fruits and vegetables that account for a large portion of agricultural output.

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Table 4. Sudan: Consumer Price Index, 1992–December 1998 1/

(Index, January 1990 = 100)

	Index	12-Month Percentage Change	Monthly Percentage Change
1992	863	150	***
1993	1,888	119	***
1994	3,881	106	***
1995	6,629	71	***
1996	14,203	114	***
1997	18,754	32	***
1998	19,445	17	***
1997			
January	14,215	101	0.1
February	14,730	92	3.6
March	15,450	90	4.9
April	15,330	75	-0.8
May	15,712	70	2.5
June	16,461	42	4.8
July	17,022	37	3.4
August	18,083	32	6.2
September	17,731	27	-1.9
October	17,350	19	-2.2
November	18,418	27	6.2
December	18,754	32	1.8
1998			
January	18,501	30.2	-1.3
February	18,085	22.8	-2.3
March	17,570	13.7	-2.8
April	17,329	13.0	-1.4
May	18,710	19.1	8.0
June	19,381	17.7	3.6
July	20,601	21.0	6.3
August	20,594	12.9	0.0
September	20,560	16.0	-0.2
October	20,626	18.9	0.3
November	21,124	14.7	2.3
December	20,242	7.9	-4.2

Source: Statistics Department of the Ministry of Finance.

1/ Middle income index covering greater Khartoum area.



Table 5. Sudan: Central Government Operations, 1994/95–98 1/

	1994/95	1995	1996	1997	1998
(In billions of Sudanese pounds)					
Total revenue	285	365	629	1,086	1,569
Tax revenue	212	289	533	922	1,264
Nontax revenue	73	76	97	164	305
Total expenditure (including interest arrears)	671	1,034	2,226	3,386	3,952
Expenditure excluding interest arrears	338	504	975	1,202	1,709
Current expenditure 2/	278	376	727	1,109	1,550
Wages and salaries	49	60	220	375	573
Goods and services	98	156	244	329	312
Transfers	80	38	56	48	89
Interest paid	25	40	100	100	147
Other 2/	26	82	107	257	432
Extrabudgetary	0	58	192	0	0
Capital expenditure and net lending	60	67	56	93	0
Interest arrears on external debt	333	530	1,251	2,184	2,240
Overall deficit (on an accrual basis)	-386	-669	-1,597	-2,300	-2,383
Overall deficit (on a cash basis)	-53	-135	-346	117	-140
Financing	53	131	346	117	140
External	33	42	22	26	34
Domestic bank borrowing (net) 3/	23	89	324	91	106
Exceptional domestic borrowing	-3	0	---	---	---
Float	---	4	---	---	---
(As percent of GDP)					
Total revenue	9.4	8.7	6.2	6.8	8.0
Total expenditure (including interest arrears)	22.0	24.0	26.7	18.1	22.0
Total expenditure (excluding interest arrears)	11.1	12.0	9.6	7.6	8.8
Total expenditure excluding interest payments and arrears	10.3	11.1	8.6	7.0	8.0
Development expenditure	2.0	1.6	0.5	0.6	0.8
Overall balance (on an accrual basis)	-12.7	-15.1	-17.7	-14.5	-12.2
Overall balance (on a cash basis)	-1.7	-3.2	-3.4	-0.8	-0.7
Primary balance	-0.9	-2.3	-2.4	-0.2	0.0

Sources: Ministry of Finance; Bank of Sudan; and Fund staff projections.

1/ Starting in 1996, all official accounting moved from a fiscal year (July–June) to a calendar year basis.

2/ Starting in 1995, includes expenditures on commodity aid.

3/ As reported in the monetary survey by the Bank of Sudan.

Table 6. Sudan: Monetary Survey and Factors Affecting Liquidity, 1994/95–98

(In billions of Sudanese pounds, unless otherwise stated)

	1994/95	1995	1996	1997	1998
Net foreign assets	-1,642	-2,572	-4,462	-4,936	-6,695
Bank of Sudan	-1,472	-2,712	-4,719	-5,337	-7,287
Commercial banks	100	141	257	401	592
Net domestic credit	272	399	817	992	1,198
Net claims on central government 1/	160	251	472	573	717
Claims on nongovernment sector	112	148	342	419	481
Other items (net)	113	205	187	240	260
Counterpart to valuation changes	1,745	2,674	4,624	5,301	7,306
Money and quasi-money	489	706	1,166	1,597	2,069
Currency	177	249	444	585	821
Demand deposits	129	168	328	432	1,052
Savings and investment deposits in LSd	41	62	87	132	487
Deposits in foreign currency	143	227	306	449	565
(Percentage change)					
Net domestic credit	27.1	46.7	104.8	21.4	20.8
Net claims on central government	11.9	56.9	88.0	21.4	25.1
Credit to nongovernment sectors 2/	57.7	32.1	131.1	22.5	14.8
(Change as percent of initial broad money)					
Net foreign assets	-328.5	-326.3	-267.9	-40.7	-110.1
Net domestic credit	18.6	30.7	59.3	15.0	12.9
Net claims on central government	5.5	20.0	31.7	8.4	9.0
Claims on non-government sectors 2/	13.1	10.7	27.5	6.7	3.9
Other items, net	24.3	36.8	-2.6	4.5	1.3
Valuation counterpart	339.9	333.0	276.3	58.1	125.5
Money and quasi-money	54.2	74.2	65.2	37.0	29.6
(In millions of U.S. dollars)					
Memorandum items:					
Net foreign assets of Bank of Sudan 3/	-3,324	-3,237	-3,232	-3,099	-3,075
Foreign currency deposits	272	271	210	261	238
Velocity of money 4/	7.0	8.3	9.4	11.4	10.5
Deposits in foreign currency (as percent of broad money)	29.2	32.2	26.2	28.1	27.3

Sources: Bank of Sudan; and Fund staff projections.

1/ Includes public enterprise deposits at the BOS.

2/ Private sector and nonfinancial public enterprises.

3/ Net reserve assets.

4/ Nominal GDP divided by the monthly average of money and quasi-money during the period.

Table 7. Sudan: Summary Balance of Payments, 1994/95-98

	1994/95	1995	1996	1997	1998 Est.
(In millions of U.S. dollars)					
Trade balance	-601.7	-663.2	-927.0	-985.5	-1,328.9
Exports, f.o.b.	421.7	555.6	620.3	594.2	595.7
Cotton	95.5	123.0	128.2	105.6	95.6
Gum arabic	44.7	51.4	29.2	27.0	23.7
Livestock	61.7	84.1	81.3	78.3	120.3
Sesame	60.6	80.6	141.1	118.3	105.1
Other	159.2	216.6	240.5	265.0	251.2
Imports, c.i.f.	-1,023.4	-1,218.8	-1,547.3	-1,579.7	-1,924.7
Foodstuffs	-181.4	-214.5	-232.2	-237.9	-263.7
Petroleum	-178.2	-194.2	-305.9	-292.7	-255.7
Other	-663.9	-810.1	-1,009.3	-1,049.0	-1,405.3
Of which: oil related	0.0	0.0	-52.5	-135.0	-502.5
Services (net)	-5.1	-5.5	-29.0	-10.4	-27.3
Receipts	74.7	131.6	52.0	29.9	15.8
Payments	-79.8	-137.0	-81.0	-40.4	-43.2
Income (net)	-936.3	-914.4	-952.7	-1,094.8	-1,146.4
Receipts	1.3	1.9	4.8	17.5	13.6
Payments	-937.6	-916.3	-957.6	-1,112.2	-1,160.0
Current transfers (net)	122.4	103.9	361.2	451.6	507.1
Private transfers	81.7	60.1	320.8	428.9	490.2
Public transfers	40.7	43.8	40.5	22.7	16.9
Current account balance	-1,420.7	-1,479.1	-1,547.6	-1,639.1	-1,995.5
Excluding public transfers	-1,461.4	-1,522.9	-1,588.1	-1,661.8	-2,012.4
Capital account	11.6	10.6	7.8	4.1	0.0
Project aid	11.6	10.6	7.8	4.1	0.0
Financial Account (net)	114.2	183.0	-136.9	-260.3	-141.9
Disbursements	76.7	86.0	28.6	18.6	12.7
Amortization	-311.8	-287.6	-279.6	-232.9	-219.3
Short-term capital flows (net) 2/	273.3	330.6	121.1	12.0	83.6
Commercial banks net reserve (increase -)	76.0	54.0	-7.0	-58.0	-19.0
Errors & omissions and other private capital	118.1	177.9	500.2	619.9	840.9
FDI--Oil related	0.0	0.0	70.0	180.0	670.0
Other investments and E&Os	118.1	177.9	430.2	439.9	170.9
Overall balance	-1,176.9	-1,107.5	-1,176.4	-1,275.4	-1,296.6
Change in official reserves (increase -)	-1.3	-22.5	-12.6	-22.6	-25.3
IMF (net)	-3.6	-2.5	-5.8	-23.4	-20.3
Change in arrears on repurchases	-32.4	-39.7	-35.6	-57.5	-60.2
Change in arrears on charges	28.8	37.2	29.7	34.1	39.9
Other	2.3	-20.0	-6.8	0.9	-5.0
Change in non-Fund arrears	1,149.2	1,101.0	1,189.0	1,297.9	1,321.9
<b>Memorandum items:</b>					
(In percent of GDP)					
Current account deficit (including public transfers)	-20.1	-20.8	-20.4	-19.9	-22.6
Excluding interest due and public transfers	-7.5	-8.6	-8.3	-6.7	-9.8
Total external debt service					
Debt service payments (in US dollars)	0.0	72.7	52.3	65.4	67.1
(In percent of total current receipts)					
Commitment basis	166.9	115.9	103.2	97.3	93.0
Actual payments	9.2	7.0	4.4	4.7	4.6
(In percent of total exports of goods and non-factor services)					
Commitment basis	250.4	174.6	183.8	214.7	223.8
Actual payments	13.8	10.6	7.8	10.5	11.0

Source: Staff estimates based on information provided by the Sudanese authorities.

1/ Includes estimates of late interest accrued during the year and Fund special charges.

2/ Net short-term trade and other credit facilities of the Bank of Sudan and commercial banks.

**Table 8. Sudan: Main Commodities Subject to Excise, Sales, and Consumption Taxes, and their Rates, 1998**

(In percent, unless otherwise stated)

Commodity	Excise Tax	Sales Tax	Consumption Tax
Tobacco (F)	150	--	10
Cement (F)	40	--	10
Soft drinks (F/S)	5	0	10
Biscuits and cakes (S)	6	0	--
Tomato paste (S)	0	0	--
Flour (S)	0	0	--
Edible oils (S)	2	0	--
Ready made clothes (S)	0	0	0
Shoes (S)	2	0	0
Sweets (S)	0	0	--
Soap—toilette (S)	10	10	--
Soap—regular (S)	0	10	--
Perfumes/cosmetics (S)	20	10	--
Toothpaste (S)	0	10	--
Tires (F)	0	0	10
Tubes and pipes (S)	5	10	--
Batteries/electric flashlights (F)	10	10	--
Household materials (S)	10	10	--
Paints and polishes (F)	10	--	10

Source: Data provided by the Sudanese authorities.

F: Revenues collected are transferred to the central government.

S: Revenues collected are transferred to the state governments.

F/S: Revenues collected are shared by the central and state governments.

**Table 9. Sudan: Selected Commodities Subject to Import Tariffs  
and Consumption Tax, 1998**

(In percent; unless otherwise stated)

	Consumption Tax	Import duty	Total Rate
Cycles and parts	10	6	16
Lead pencils	10	6	16
Trucks and lorries	10	6	16
Minibuses	10	6	16
Buses	10	6	16
Paper	0	6	6
Cinnamon	10	15	25
Cloves	10	15	25
Cement	10	15	65
Sliced wood	10	30	40
Cables	10	30	40
Polishing and crushing stones	10	6	16
Sheets and plates of iron	10	30	40
Iron and steel products	10	30	40
Iron and steel bars and rods	10	30	40
Tubes and pipe fittings	10	30	40
Needles	10	15	25
Razors and blades	10	15	25
Locks and padlocks	10	30	40
Lamps and lighting fittings	10	6	16
Electric parts	10	6	16
Televisions	10	30	40
Pharmaceutical glassware	10	50	60
Refined sugar	17	80	97
Other parts and paper boards	—	6	6
Tableware and other	10	15	25
Glassware	10	50	60
Nails, tacks, staples, etc.	10	15	25
Heavy duty pickups	10	30	40
Sauces and seasonings	10	80	110
Soups and broths	10	15	25
Perfumes and cosmetics	10	80	110
Rubber tires	10	50	60
Cotton fabrics	10	80	90
Other cotton fabrics	10	80	90
Air coolers	10	50	60
Primary cells and batteries	10	80	110
Cars	10	80	110
Pick-ups	10	80	110

Source: Data provided by the Sudanese Authorities.

Table 10. Sudan: Cotton Production, 1994/95–1997/98 1/

(In thousands of bales) 2/

	1994/95	1995/96	1996/97	1997/98
Total production	447	530	513	409
Extra Long - Long staple	115	114	107	86
Medium-staple (Acala)	327	404	387	318
Short-staple	5	12	19	5

Sources: Ministry of Agriculture; and Fund staff estimates.

1/ Based on crops cycle.

2/ One bale of lint weighs 420 pounds or approximately 0.191 metric tons.

Table 11. Sudan: Harvested Area, Production, and Yield of Cotton, Average 1995/96–1997/98  
(Area in thousands of feddans; production in thousands of metric tons; and yield in kilograms per feddan)

	1995/96			1996/97			1997/98		
	Area	Production	Average Yield	Area	Production	Average Yield	Area	Production	Average Yield
<b>Irrigated sector</b>									
Egyptian	134	66	493	148	62	419	93	50	538
Blue Nile	19	8	421	4	1	311	---	---	283
Gezira and Manegil	96	52	538	131	58	439	87	49	566
Tokar	9	1	134	4	1	212	6	1	170
Suki	0	0	0	0	0	0	0	0	0
White Nile	10	5	500	9	2	212	0	0	0
New Halfa	0	0	0	0	0	0	0	0	0
Rahad	0	0	0	0	0	0	0	0	0
<b>Rainfed sector</b>									
Acala	400	234	585	438	224	511	293	184	628
Rahad	68	48	708	58	43	739	51	36	710
Zeidab	0	0	0	0	0	0	0	0	0
Gezira	203	127	657	200	114	569	154	111	725
Blue Nile	13	5	385	18	17	354	14	3	212
New Halfa	60	28	460	58	26	442	45	25	566
Suki	16	7	442	12	5	396	11	4	385
White Nile	38	18	481	55	17	311	17	5	283
El Gash	2	1	425	3	1	354	1	---	---
Rank	0	0	0	4	1	354	---	---	---
<b>Rainfed sector</b>									
American	55	7	127	104	11	106	35	3	86
Blue Nile	32	5	165	53	4	81	8	1	389
Gedaref	13	1	112	23	2	90	14	1	212
Nuba mountains	5	1	150	17	3	150	10	1	105
Abu Habil	4	---	113	4	1	135	2	---	142
Equatoria	0	0	0	0	0	0	0	0	0
White Nile	1	---	141	2	---	125	---	---	---
Upper Nile	0	0	0	1	---	90	0	0	0
<b>Total</b>	<b>589</b>	<b>307</b>	<b>521</b>	<b>690</b>	<b>297</b>	<b>430</b>	<b>421</b>	<b>237</b>	<b>563</b>

Source: Ministry of Agriculture.

(...): Less than thousand

Table 12. Sudan: Cropped Area, Output, and Yield of Major Crops,  
1983/84–1997/98

	1983/84–1985/86	1987/88–1989/90	1992/93–1994/95	1995/96–1997/98
(In thousands of feddans)				
Area				
Sorghum	10,032	10,132	13,739	13,418
Irrigated	875	771	1,102	817
Rainfed	9,157	9,695	11,971	12,602
Millet	3,520	3,868	4,653	5,444
Groundnuts	1,514	1,516	1,756	2,826
Irrigated	240	209	297	345
Rainfed	1,274	1,307	1,460	2,481
Sesame	2,168	2,567	3,115	3,917
Wheat	287	450	763	700
Cotton				
Lon-staple (Egyptian)	411	289	101	125
Medium Staple (Acala)	389	142	211	377
(In thousands of metric tons )				
Output				
Sorghum	2,179	2,442	3,359	3,184
Irrigated	484	404	699	710
Rainfed	1,694	2,037	2,660	2,473
Millet	303	270	548	489
Groundnuts	358	412	507	886
Irrigated	177	169	250	326
Rainfed	181	244	257	560
Sesame	157	189	204	337
Wheat	145	279	456	573
Gum arabic	21	28	21	24
Cotton				
Lon-staple (Egyptian)	70	61	61	59
Medium Staple (Acala)	109	29	140	214
(In kilograms per feddan)				
Yields				
Sorghum	206	224	242	234
Irrigated	547	522	637	860
Rainfed	173	198	208	194
Millet	86	65	111	92
Groundnuts	244	265	287	317
Irrigated	720	803	847	945
Rainfed	154	180	168	224
Sesame	73	75	46	86
Wheat	547	607	709	823
Cotton				
Lon-staple (Egyptian)	162	224	406	483
Medium Staple (Acala)	230	179	493	575

Sources: Ministry of Agriculture; Ministry of Economics, Planning, and Investment; and Gum Arabic Corporation.



Table 13. Sudan: Cropped Area, Output, and Yield of  
Major Noncotton Crops, 1994/95–1997/98

	1994/95	1995/96	1996/97	1997/98
(In thousands of feddans)				
Area				
Sorghum	15,303	12,007	15,602	12,646
Irrigated	1,181	737	877	836
Rainfed	12,122	11,270	14,725	11,810
Millet	7,707	5,758	3,889	6,685
Groundnuts	2,113	2,580	2,251	3,647
Irrigated	299	350	359	326
Rainfed	1,814	2,230	1,892	3,321
Sesame	3,206	3,556	4,430	3,766
Wheat	662	709	784	607
(In thousands of metric tons)				
Output				
Sorghum	3,648	2,450	4,179	2,922
Irrigated	726	513	888	730
Rainfed	2,922	1,937	3,291	2,192
Millet	973	385	440	643
Groundnuts	714	738	815	1,104
Irrigated	262	326	342	310
Rainfed	452	412	473	794
Sesame	170	313	416	281
Wheat	448	527	642	550
Gum arabic	27	25	18	22
(In kilograms per feddan)				
Yields				
Sorghum	238	204	268	231
Irrigated	615	695	1,013	873
Rainfed	207	172	223	186
Millet	126	67	113	96
Groundnuts	338	286	362	303
Irrigated	876	931	953	951
Rainfed	249	185	249	239
Sesame	53	88	94	75
Wheat	677	743	819	906

Sources: Ministry of Agriculture; Ministry of Economics, Planning, and Investment; and Gum Arabic Corporation.

Table 14. Sudan: Land and Water Charges, 1994/95–1997/98

(In Sudanese pounds per feddan)

	Gezira Scheme				Other Schemes 1/			
	1994/95	1995/96	1996/97	1997/98	1994/95	1995/96	1996/97	1997/98
Cotton	2,350	17,281	25,000	n.a	2,500	20,710	30,000	n.a.
Wheat	1,800	12,961	21,000	n.a	2,200	15,532	20,500	n.a
Groundnuts	1,300	12,961	21,000	n.a	2,200	15,532	30,500	n.a
Sorghum	1,300	12,100	21,000	n.a	2,200	14,497	26,200	n.a
Vegetables	3,200	25,150	45,000	n.a	4,250	28,993	42,500	n.a.

Source: Ministry of Agriculture.

1/ Includes Rahad.

Table 15. Sudan: Procurement Prices, 1994/95–1997/98

(In Sudanese pounds per canter)

	1994/95	1995/96	1996/97	1997/98
Cotton 1/ Extra long-staple (Bracket) Grade 1	19,125 2/	49,699 2/	125,109	93,944
Long-staple (Chambers "B") Grade 1	27,340 2/	49,761 2/	...	...
Medium-staple (Acala) Grade 1	30,000 3/	38,520 3/	390,212	345,970
Wheat (LSd per ton)	143,000	220,000	471,470	511,000
Gum Arabic (ex El-Obeid)	25,000	25,000	25,000	25,000

Sources: Ministry of Agriculture; and Sudan Cotton Company.

1/ Prices are in Sudanese pounds per canter of seed cotton. One canter of seed cotton weighs 315 pounds and yields about 106 pounds of lint in the case of long-staple cotton, 95 pounds for Chambers "B", and about 116 pounds of lint in the case of medium-staple cotton. Procurement prices were abolished in 1996/97.

2/ Average prices according to formula: US\$ export (f.o.b.) price less 11.5 percent (1 percent for Sudan Cotton Co., 0.5 percent quay dues, and 10 percent for export tax) equals "ex-store" price; "ex-store" price converted at average official exchange rate less 4 percent (2 percent each for Sudan cotton Company and Reserve Fund) equals net procurement price for cotton.

3/ New Halfa Agricultural Scheme.

Table 16. Sudan: Cropping Patterns in the Gezira Scheme, 1994/95–1997/98

	1994/95	1995/96	1996/97	1997/98
(In thousands of feddans)				
Total area cultivated	1,373	1,377	1,419	1,173
Groundnuts	187	231	242	223
Wheat	384	391	385	301
Sorghum	495	400	405	353
Cotton	252	299	331	241
Other noncotton	55	56	56	55
(As percent of total area)				
Total area cultivated	100.0	100.0	100.0	100.0
Groundnuts	13.6	16.8	17.1	19.0
Wheat	28.0	28.4	27.1	25.7
Sorghum	36.1	29.0	28.5	30.1
Cotton	18.4	21.7	23.3	20.5
Other noncotton	4.0	4.1	3.9	4.7
(In thousands of metric tons)				
Output				
Groundnuts	159	231	242	212
Wheat	230	254	270	211
Sorghum	338	276	465	342
(In kilograms per feddan)				
Yield				
Groundnuts	850	1,000	1,000	950
Wheat	600	650	700	700
Sorghum	683	690	1,149	970

Sources: Sudan Gezira Board; and Ministry of Agriculture.

Table 17. Sudan: Manufacturing Production, 1994/95–97

	1994/95	1995	1996	1997
<b>Food and beverages</b>				
Flour (thousand tons)	300	350	360	324
Sugar (thousand tons)	428	450	460	500
Vegetable oils (thousand tons)	90	70	118	90
Soft drinks (million dozen bottles)	29	33	29	23
<b>Textiles and apparel</b>				
Textiles (million yards)	30	24	19	36
Shoes (million pairs)	5.2	6.0	9.0	24.0
<b>Other consumer goods</b>				
Cigarettes (tons)	1,417	1,317	1,300	1,138
Tires (thousands)	133	186	198	60
<b>Intermediate goods</b>				
Cement (thousand tons)	249	199	380	288
Petroleum products (thousand tons)	...	...	...	1,145

Source: Ministry of Industry.

Table 18. Sudan: Central Government Revenue, 1994/95–98 1/

	1994/95	1995	1996	1997	1998
(In billions of Sudanese pounds)					
Total Revenue	285.2	365.4	629.5	1,086.0	1,569.0
Tax Revenue	212.3	288.7	532.6	922.0	1,264.0
Taxes on income and profits	75.1	104.9	177.9	216.8	312.0
Personal income tax	4.3	7.1	14.3	21.3	41.0
Business profit tax	64.7	83.6	135.2	61.6	87.0
Sudanese working abroad	5.0	10.2	21.1	40.0	47.0
Development tax	***	0.3	2.8	2.9	7.0
Other 2/	1.1	3.7	45.0	90.8	130.0
Taxes on goods and services	54.1	69.8	78.0	187.0	259.0
Excise duties	44.1	59.8	71.3	187.0	213.0
Sales taxes	10.0	10.0	6.7	0.0	46.0
Taxes on international trade and transactions	74.9	105.9	276.8	517.0	693.0
Import duties	42.1	60.2	167.4	257.0	355.0
Export tax	7.2	8.0	21.0	33.0	12.0
Consumption tax	24.2	32.3	62.8	128.5	171.0
Other	1.4	5.3	25.6	127.5 3/	155.0
Other taxes	8.2	8.1	0.0	0.0	
Nontax revenue	72.9	76.7	96.9	164.0 4/	304.0
Fees and charges on public services	4.6	45.3	57.1	63.1	95.0
Charges on land and water	0.7	3.2	***	***	***
Public enterprises profits, interest, rent, and dividends	5.2	9.3	30.2	54.8	80.0
Commodity price differentials (oil)	37.6	***	***	***	***
Commodity price differentials (sugar)	4.7	9.3	***	***	***
Sales of Sudanese petroleum	***	***	***	13.8	12.0
Receipts from sales of public enterprises	7.8	2.0	3.0	0.6	***
Land sales	2.6	2.0	***	0.0	***
Pension contributions	***	***	***	0.0	***
Other 3/	9.6	5.4	5.6	31.3	117.0
Loan repayments	0.1	0.1	0.9	0.0	
(In percent of GDP)					
Total revenue	9.4	8.7	6.2	6.8	8.0
Tax revenue	7.0	6.9	5.2	5.1	6.5
Nontax revenue	2.4	1.8	0.9	1.6	1.5
(In billions of Sudanese pounds)					
Nominal GDP	3,052	4,179	10,217	15,845	19,507

Source: Ministry of Finance and Economic Planning; and Fund staff estimates.

1/ Starting in 1996, all official accounting moved from a fiscal year (July–June) to a calendar year basis.

2/ Includes rent tax, capital gains tax, stamp duty, withholding tax and sales tax.

3/ Includes price differential on oil, sugar and cement classified as indirect taxes.

4/ Excludes price differential on oil, sugar and cement.

Table 19. Sudan: Central Government Expenditure, 1994/95–98

	1994/95	1995	1996	1997	1998
(In billions of Sudanese pounds)					
Total expenditure	670.6	1,033.7	2,176.0	3,386.0	3,949.9
Total expenditure (excluding interest arrears)	337.6	503.7	925.0	1,202.0	1,709.0
Current expenditure (excluding interest arrears)	278.1	376.0	727.0	1,109.0	1,550.0
Wages and salaries	48.9	60.0	220.0	375.0	573.0
Goods and services	105.9	155.7	244.0	329.0	312.0
Ministries	32.8	55.4	78.8	***	***
Defense 1/	65.5	80.6	95.2	***	***
Other 2/	7.6	19.7	70.0	***	***
Current transfers	39.1	38.5	56.0	48.0	89.0
To regions	20.0	16.7	35.4	***	***
To institutions	19.1	21.7	20.6	***	***
Interest paid	34.0	39.6	100.0	100.0	139.0
Other	***	***	***	258.0	440.0
General reserves, (including for emergency, exchange rate changes, and other expenditures)	50.2	82.1	107.0	213.0	185.0
Capital expenditure and net lending	59.5	67.0	56.0	93.1	156.0
Development expenditure	58.8	67.0	56.0	93.1	156.0
Foreign financed	31.0	39.0	34.1	26.4	34.0
Domestically financed	23.5	23.7	21.9	66.7	122.0
Agriculture and industry funds	4.3	4.3	***	0.0	0.0
Equity	0.7	***	***	0.0	0.0
Net lending	***	***	***	0.0	0.0
Extrabudgetary outlays	***	58.0	192.0	0.0	0.0
Interest arrears	333.0	530.0	1,251.0	2,184.0	2,240.0
(In percent of GDP)					
Total expenditure	22.0	24.0	26.6	18.2	22.0
Expenditure on cash basis	11.1	12.1	9.6	7.5	8.8
Current expenditure (excluding interest arrears)	9.1	9.0	7.1	7.0	8.0
Defense	3.0	2.9	0.9	1.0	***
Wages and salaries	1.6	1.4	2.2	2.1	2.9
Development expenditure	2.0	1.6	0.6	0.6	0.8
Interest arrears	17.7	11.9	13.9	13.8	11.5

Source: Ministry of Finance and Economic Planning; and Fund staff estimates.

1/ As reported by the authorities.

2/ General social support, including support for poor families, medicine, and medical treatment.

Table 20. Sudan: Monetary Authorities' Accounts, 1994-98

(In billions of Sudanese pounds)

	1994	1995	1996	1997	1998
Net international reserves	-1,343	-2,716	-4,719	-5,337	-7,287
Foreign assets	31	86	155	140	215
Foreign liabilities	1,374	2,798	4,874	5,478	7,502
Net domestic assets	213	385	730	879	1,095
Net domestic credit	168	258	487	619	800
Net claims on government	162	252	481	576	720
Net lending to government	171	265	589	668	757
Government deposits with BOS	9	12	108	92	37
Central Bank credit to banks	4	4	4	40	78
Central Bank credit to public enterprises	2	2	2	2	3
Other items (net)	45	127	243	260	295
Counterpart to valuation changes	1332	2,685	4,638	5,329	7,330
Monetary base	202	357	649	872	1,138
Currency outside banks	148	249	444	585	821
Banks' reserves	50	97	186	269	289
Required reserves	28	40	73	122	161
Excess reserves	22	58	113	147	128
Banks' holding of CMCs	0	0	0	0	10
Other deposits with the Central Bank	5	12	19	18	18

Sources: Bank of Sudan.



Table 21. Sudan: Consolidated Balance Sheet of the Commercial and Specialized Banks, 1994/95–98 1/

(In billions of Sudanese pounds)

	1994/95	1995	1996	1997	1998
<b>Assets</b>	<b>308.2</b>	<b>395.6</b>	<b>783.2</b>	<b>1,141.5</b>	<b>1,420.6</b>
Reserves	79.0	80.1	142.7	280.7	306.2
Vault cash	21.7	22.5	42.8	51.2	43.3
Balances with Bank of Sudan	56.9	57.3	99.1	226.6	254.2
Statutory reserves	35.2	39.7	73.4	116.6	160.2
Other balances	21.7	17.6	25.7	110.0	94.0
Other claims	0.3	0.2	0.8	2.9	8.6
Foreign assets	119.1	168.7	299.8	445.0	639.6
<i>Of which</i>					
Claims on foreign banks	109.4	153.2	278.2	404.7	614.5
Claims on central government	0.4	1.6	1.2	0.3	1.3
Claims on public enterprises	8.3	11.9	16.7	16.8	25.7
Claims on private sector	100.0	130.7	319.0	393.5	443.4
<i>Of which</i>					
Agriculture	19.3	30.4	80.5	114.8	138.5
Industry	18.3	25.4	63.4	72.0	87.1
Local trade financing	4.3	3.7	4.9	16.8	19.9
Claims on nonbank financial institutions	1.3	1.2	2.2	3.6	4.3
<b>Liabilities</b>	<b>308.2</b>	<b>395.6</b>	<b>783.2</b>	<b>1,141.5</b>	<b>1,420.6</b>
Demand deposits	124.5	156.0	309.2	413.5	469.4
Time and saving deposits	20.6	26.4	30.5	105.8	170.7
Margin accounts on trade financing	9.2	7.9	13.6	10.8	8.3
Restricted deposits	0.3	0.1	0.1	0.1	0.1
Central government deposits	5.9	3.1	7.7	4.0	4.2
Liabilities to Bank of Sudan	6.9	7.5	0.8	1.1	3.2
Foreign liabilities, <i>of which</i> :	19.4	28.1	43.0	44.1	47.2
To nonresident banks	9.3	13.4	17.0	21.3	0.5
Foreign currency deposits 2/	139.9	222.9	246.9	433.3	548.4
Capital accounts	45.0	54.7	111.5	147.7	203.4
Exchange valuation	6.9	10.8	13.9	28.1	23.6
adjustment (net) 3/					
Unclassified liabilities, net 4/	-70.4	-171.9	-81.0	-68.3	-58.4
<b>Memorandum item:</b>					
Net foreign currency position 5/	-40.2	-82.3	-40.2	-32.5	43.9

Source: Bank of Sudan.

1/ Data excludes Agricultural Bank of Sudan.

2/ Foreign currency deposits of Sudanese residents.

3/ Net valuation effect between assets and liabilities.

4/ Net of unclassified assets, including interbranch accounts.

5/ Foreign assets, less foreign liabilities and foreign currency deposits of residents. Small amounts of foreign currency positions may be located elsewhere in the balance sheets.

Table 22. Sudan: Commercial and Specialized Banks: Balance Sheets  
Assets and Deposits at Bank of Sudan, December 1998  
(In millions of Sudanese pounds)

	Deposits at Bank of Sudan	Balance Sheet Assets
<b>Commercial banks</b>		
Bank of Khartoum Group 1/ 2/	23,627	24,456
El Nilein Bank Group 1/ 3/	13,774	13,429
El Tadamon Islamic Bank	10,541	10,527
Al Shamal Islamic Bank	16,211	16,986
Sudan Islamic Bank	20,667	22,024
Sudanese-French Bank	27,210	27,393
Al Baraka Bank	7,656	8,365
National Bank of Sudan	4,161	5,836
Saudi Sudanese Bank	15,361	15,562
Sudan Commercial Bank 4/	10,187	11,252
Faisal Islamic Bank	11,169	11,059
Omdurman National Bank	18,773	18,135
El Gharb Islamic Bank	2,749	955
Animal Resources Bank	8,011	7,589
Citibank 3/	-	-
National Bank of Abu Dhabi	3,746	4,642
Farmers' Bank	5,172	6,780
Workers National Bank	2,723	3,429
Islamic Cooperation Development Bank	13,957	14,610
Al Mashreq Bank	8,079	13,217
Blue Nile Bank	4,492	5,023
National Development Bank	3,997	3,807
Habib Bank	723	1,784
Safa Investment and Credit Bank	3,876	8,807
Ivory Bank (established 1994)	140	234
<b>Specialized banks</b>		
Agricultural Bank of Sudan 1/	1,645	-
Sudan Savings Bank 1/	2,520	2,371
Sudan Estates Bank 1/	4,333	4,672
<b>Total</b>	<b>245,500</b>	<b>262,924</b>

Source: Bank of Sudan.

1/ Government-owned bank.

2/ Merger of Bank of Khartoum, Unity Bank, and Exim Bank in 1993.

3/ Merger of El Nilein Bank and Industrial Bank in 1993.

4/ Privatized in sale to Farmers' Bank.

5/ Citibank closed in 1998 following the imposition of economic sanctions by the U.S. in November 1997.

**Table 23. Sudan: Claims of the Banking System on the Central Government, 1994/95–98**

(In billions of Sudanese pounds)

	1994/95	1995	1996	1997	1998
<b>Total net claims on Central Government</b>	160.2	251.0	475.0	624.3	730.9
<b>Bank of Sudan</b>					
Net claims on Central Government	165.8	252.5	481.5	628.0	733.8
Claims on Central Government	174.3	264.9	589.2	668.1	757.0
Main government account	61.3	61.3	61.3	61.3	0.0
Temporary advances	101.9	192.5	516.8	595.8	685.8
Long-term loans	9.3	9.3	9.3	9.3	0.0
Arrears on Fund charges	0.7	0.7	0.7	0.7	0.0
Treasury IMF position	1.2	1.2	1.2	1.1	0.0
Less: Government deposits	8.5	12.4	107.7	40.1	23.2
<b>Commercial banks</b>					
Net claims on Central Government	-5.6	-1.5	-6.5	-3.7	-2.9
Claims on Central Government	0.4	1.6	1.2	0.3	1.3
Less: Government deposits	6.0	3.1	7.7	4.0	4.2
<i>Of which</i>					
Demand deposits	2.3	2.1	5.9	1.3	2.3
Margin accounts 1/	0.6	0.8	0.9	0.0	0.1

Source: Bank of Sudan.

1/ Margins collected for import transactions.

Table 24. Sudan: Commercial Banks' Rates of Return and Charge, 1983-98 1/

(In percent per annum or percent ranges)

	1993	1995	1996	1997	1998
<b>Lending rates</b>					
Discount of bills of exchange	0.00	0.00	0.00	0.00	0.00
Advances against bills of exchange	0.00	0.00	0.00	0.00	0.00
Advances to industrial borrowers	0.00	0.00	0.00	0.00	0.00
Overdrafts and other advances	0.00	0.00	0.00	0.00	0.00
<b>Murabaha</b>					
Short-term 2/	0.00	0.00	0.00	0.00	30
Long-term	0.00	0.00	0.00	0.00	30
<b>By purpose:</b>					
Agriculture	30	30	35	45	30
Exports	30	30	40	45	30
Other productive sectors	36	15	20	40	30
Crafts and Cooperatives	25	25	30	40	30
Local trade	48	36	40	0.00	0.00
<b>Musharaka</b>					
Minimum on customer participation	0.00	55	70	80	70
Share for management	0.00	0.00	0.00	0.00	20-30
Bank's share	0.00	0.00	0.00	0.00	64
		0.00	0.00	0.00	0.00
<b>Deposit rates</b>					
Demand deposits	0	0	0	0	0
<b>Fixed deposits</b>					
6 months	0.00	0.00	0.00	0.00	0.00
12 months	0.00	0.00	0.00	0.00	0.00
<b>Savings deposits</b>					
	0.00	0.00	0.00	0.00	0.00
		0.00	0.00	0.00	0.00
<b>Foreign currency deposits</b> (U.S. dollars and pounds sterling)					

Source: Bank of Sudan.

1/ The charging and payment of interest was prohibited by law effective September 1984, when banks' operations were made subject to Islamic principles. Observations for April 1989 of Sudan circulars.

2/ Minimum annualized nominal rates. Owing to discounts, advance payments, and other lending practices, effective rates are higher.

3/ Monthly profit margins for loans under one year.

Table 25. Sudan: Central Bank Musharaka Certificate, July 1998–February 1999

	1998						1999		
	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
CMC price developments 1/									
				(In millions of Sudanese pounds)					
Sale auction price	10	9.80	10.00	10.00	10.20	10.30	10.21	9.99	10.05
Buy auction price	0	10.30	10.20	10.23	0.00	0.00	0.00	0.00	0.00
On-demand repurchase price	0	10.05	10.09	10.13	10.19	10.35	10.35	10.11	10.15
CMC movements				(Number of CMCs)					
CMCs sold in auction	200	400	650	681	650	1010	1269	480	342
CMCs bought in auction	0	175	264	297	0	0	0	0	0
CMCs bought on-demand	0	75	193	112	755	577	1328	530	469
				(End-of-month; in millions of LSd)					
CMC net outstanding position	2,000	5,226	5,378	7,862	6,794	11,249	10,243	9,693	8,367

Sources: Bank of Sudan; and Fund staff estimates.

1/ Average monthly prices.

Table 26. Sudan: Commodity Composition of Exports, f.o.b., 1994/95-98

(Value in millions of U.S. dollars; volume in thousand of tons except when indicated; price in U.S. dollars per ton except when indicated)

	1994/95	1995	1996	1997	1998
Total exports	421.7	555.6	620.2	594.2	595.7
Total recorded exports	421.5	555.6	620.2	594.2	595.7
Cotton	95.5	123.0	128.2	105.6	95.6
Extra long staple	26.4	31.7	25.9	23.2	36.4
Volume (thousand bales)	71.9	86.1	50.9	60.7	117.5
Unit value (U.S. cents/lb)	87.4	87.5	121.2	90.8	73.8
Other	69.1	91.3	102.3	82.5	59.1
Volume (thousand bales)	244.1	348.6	383.2	372.3	316.9
Unit value (U.S. cents/lb)	67.4	62.4	63.6	52.7	44.4
Groundnuts	23.1	21.2	22.8	68.1	63.5
Seeds and edible nuts	3.0	2.5	1.2	7.1	14.2
Volume	7.0	4.5	2.1	14.8	25.4
Unit value	428.6	555.6	571.4	478.7	558.4
Oil	14.0	11.5	12.6	47.2	38.6
Volume	21.3	12.5	14.0	54.8	44.6
Unit value	657.3	920.0	900.0	861.1	865.9
Cake	6.1	7.2	9.0	13.8	10.7
Volume	57.8	64.7	67.5	82.7	102.8
Unit value	105.5	111.3	133.3	167.0	103.7
Sesame	60.6	80.6	141.1	118.3	105.1
Seed	60.6	80.3	141.0	117.3	104.8
Volume	91.9	97.4	157.4	171.3	167.2
Unit value	659.4	824.4	895.8	684.9	626.5
Cake	0.0	0.3	0.1	1.0	0.3
Volume	3.0	1.7	0.9	5.2	1.8
Unit value	—	176.5	111.1	193.7	170.5
Dura	21.4	44.0	2.6	0.0	5.4
Volume	210.5	407.0	17.3	0.0	35.1
Unit value	101.7	108.1	150.3	0.0	155.0
Gum arabic	44.7	51.4	29.2	27.0	23.7
Volume	15.3	18.5	15.3	23.1	24.1
Unit value	2,923.7	2,778.5	1,908.5	1,165.8	983.0
Sugar	15.8	22.0	33.1	28.9	29.3
Volume	128.1	215.8	279.4	123.4	102.3
Unit value	123.3	101.9	118.5	234.6	286.2
Livestock	61.7	84.1	81.2	78.3	120.3
Sheep and lambs	57.5	71.6	74.5	71.0	97.8
Volume (thousand head)	707.8	884.4	1,187.6	1,230.2	1705.9
Unit value (U.S. dollars per head)	81.2	80.9	62.7	57.7	57.3
Cattle	0.2	1.0	2.5	0.4	1.1
Camels and goats	4.0	11.5	4.2	6.9	21.4
Other	98.7	129.4	182.0	167.9	153.0
Hibiscus (karkadeh)	11.8	13.1	13.4	17.6	10.7
Yarn	2.9	7.2	15.1	11.0	9.4
Watermelon seeds	6.6	8.1	22.5	14.7	8.2
Hides and skins	15.1	20.5	28.7	22.8	20.2
Fruits and vegetables	2.5	4.4	3.4	3.7	5.1
Gold	16.8	46.7	53.3	47.2	43.7
Other	43.0	29.4	45.6	50.9	55.7

Sources: Information provided by the Sudanese authorities; and Fund staff estimates.

Table 27. Sudan: Commodity Composition of Imports, c.i.f., 1994/95–98

(In millions of U.S. dollars)

	1994/95	1995	1996	1997	1998
<b>Total Imports</b>	<b>1,023.4</b>	<b>1,218.8</b>	<b>1,547.3</b>	<b>1,579.7</b>	<b>1,924.7</b>
<b>Foodstuffs 1/</b>	<b>181.4</b>	<b>214.5</b>	<b>232.2</b>	<b>237.9</b>	<b>263.7</b>
Wheat	5.7	30.3	47.5	77.6	73.0
Wheat flour	40.0	58.9	50.3	60.8	59.0
Sugar	0.1	0.8	0.5	0.0	0.2
Tea	26.9	26.6	33.4	32.2	36.3
Coffee	5.1	9.0	12.9	18.1	15.3
Dairy products	8.1	9.1	6.3	8.9	12.5
Animal and vegetable oils	25.6	5.8	10.9	1.7	4.7
Other foodstuffs	69.9	74.0	70.4	38.6	62.8
Customs data	40.1	38.2	42.9	38.6	46.7
World Food Program	29.8	35.8	27.5	0.0	16.1
<b>Drinks and tobacco</b>	<b>14.5</b>	<b>16.5</b>	<b>15.2</b>	<b>32.3</b>	<b>20.1</b>
<b>Crude materials</b>	<b>196.8</b>	<b>224.8</b>	<b>354.8</b>	<b>324.1</b>	<b>307.5</b>
Petroleum	178.2	194.2	305.9	292.7	255.7
Customs data	178.2	194.2	305.9	292.7	255.7
Quantity	1,032.2	1,162.4	1,489.2	1,599.6	1,760.10
Unit value	169.8	165.3	205.5	183.6	158.6
GPC petroleum	0.0	0.0	0.0	0.0	0
Other	18.6	30.6	48.9	31.4	51.8
<b>Chemicals</b>	<b>116.8</b>	<b>134.0</b>	<b>233.7</b>	<b>189.9</b>	<b>157</b>
Pharmaceuticals	40.4	38.1	28.6	38.7	49.2
Fertilizers	11.0	15.7	74.8	47.4	10.6
Insecticides	25.0	31.8	6.9	2.9	1.6
Other	40.4	48.2	123.4	100.9	95.6
<b>Manufactured goods</b>	<b>228.6</b>	<b>276.6</b>	<b>298.3</b>	<b>292.6</b>	<b>592.1</b>
<b>Machinery, equipment</b>	<b>188.5</b>	<b>209.8</b>	<b>253.8</b>	<b>269.7</b>	<b>348.2</b>
<b>Transport equipment</b>	<b>70.4</b>	<b>112.4</b>	<b>133.3</b>	<b>173.2</b>	<b>192.7</b>
Automobiles	18.2	38.1	24.1	19.5	29.5
Trucks	8.9	18.0	51.2	38.0	86.4
Auto spare parts	21.8	17.8	21.5	65.7	31.1
Other	21.5	38.5	36.5	50.0	45.7
<b>Textiles</b>	<b>26.3</b>	<b>30.2</b>	<b>26.1</b>	<b>60.0</b>	<b>43.4</b>

Sources: Information provided by the Sudanese authorities; and Fund staff estimates.

1/ Includes commodity aid imports, and emergency aid assistance.

**Table 28. Sudan: Summary Index of Export and Import Prices  
and Volumes, 1994/95–98**

(Index 1993/94 = 100)

	1994/95	1995	1996	1997	1998
<b>Total Exports</b>	83.9	110.5	123.4	118.2	118.5
Change in percent	-16.1	31.8	11.6	-4.2	0.3
<b>Export volume</b>	75.4	94.6	104.0	112.2	121.4
Change in percent	-24.6	25.6	9.8	7.9	8.2
<b>Export prices</b>	111.3	116.8	118.7	105.4	97.6
Change in percent	11.3	4.9	1.6	-11.2	-7.4
<b>Total Imports</b>	83.4	99.3	126.1	128.7	156.8
Change in percent	-16.6	19.1	27.0	2.1	21.8
<b>Import volume</b>	78.6	89.8	109.6	120.6	163.8
Change in percent	-21.4	14.3	22.0	10.0	35.9
<b>Import prices</b>	106.1	110.5	115.0	106.7	95.7
Change in percent	6.1	4.2	4.0	-7.2	-10.3
<b>Terms of trade</b>	104.9	105.7	103.2	98.7	102.0
Change in percent	4.9	0.7	2.3	-4.4	3.3

Source: Staff estimates based on data provided by the Sudanese authorities.



Table 29. Sudan: Destination of Exports, 1994–98

(In percent of total)

	1994	1995	1996	1997	1998
Industrial countries	42.2	46.1	40.2	44.8	38.6
<i>Of which</i>					
United States	3.4	4.7	2.1	1.5	0.4
France	5.5	3.0	1.4	3.2	2.7
Germany	2.7	3.9	3.1	6.9	5.4
Italy	7.6	8.0	7.7	9.4	9.9
Japan	4.5	6.2	4.0	3.7	2.8
United Kingdom	7.4	14.3	12.6	11.8	9.7
African countries	4.2	1.7	2.8	3.5	3.0
Asian countries	17.4	19.5	17.9	14.4	15.0
<i>Of which</i>					
China	6.1	10.8	6.8	2.8	0.1
Thailand	4.6	3.9	7.6	3.3	2.9
South Korea	1.7	0.9	1.4	3.9	3.2
Taiwan	0.1	0.2	0.1	0.2	0.1
Middle East countries	35.1	32.5	37.3	33.8	40.7
<i>Of which</i>					
Egypt	0.7	4.7	6.7	5.6	5.2
Saudi Arabia	23.2	19.5	18.9	18.7	24.4
United Arab Emirates	0.4	1.5	1.9	1.0	1.7
Libya	4.5	1.2	0.7	...	0.5
Other countries	1.1	0.2	1.8	3.5	2.7
Total	100.0	100.0	100.0	100.0	100.0

Source: Fund staff estimates based on Bank of Sudan, Foreign Trade Statistical Digest—several issues.

Table 30. Sudan: Sources of Imports, 1994-98

(In percent of total)

	1994	1995	1996	1997	1998
Industrial countries	40.6	44.2	38.4	38.2	35.4
<i>Of which:</i>					
United States	3.5	5.0	4.6	4.3	2.3
France	3.7	5.9	5.5	5.0	6.7
Germany	3.7	6.4	4.7	4.4	3.8
Italy	3.1	2.9	2.9	3.2	3
United Kingdom	11.3	6.1	6.9	6.0	5.3
Japan	3.7	5.7	4.2	3.7	4.5
African Countries	4.5	4.4	6.7	5.7	4.4
<i>Of which:</i>					
Kenya	1.8	1.6	1.9	1.8	1.7
Asian countries	17.7	17.5	20.6	21.2	25.9
<i>Of which:</i>					
China	3.2	3.6	4.3	6.3	13.8
South Korea	1.6	6.9	1.6	1.8	1.6
India	2.0	2.1	3.8	2.8	3.3
Indonesia	2.0	1.0	1.1	1.2	1.4
Middle East Countries	28.9	24.9	22.6	25.4	28.0
<i>Of which:</i>					
Egypt	6.0	6.1	3.5	3.5	2.9
Saudi Arabia	16.0	10.3	11.3	13.1	15.5
United Arab Emirates	2.7	4.3	4.7	4.3	4.1
Other countries	8.3	9.0	11.7	9.5	6.3
Total	100.0	100.0	100.0	100.0	100.0

Source: Fund staff estimates based on Bank of Sudan, Foreign Trade Statistics Digest—several issues.

Table 31. Sudan: Official Transfers, 1994/95–98

(In millions of U.S. dollars)

	1994/95	1995	1996	1997	1998
Total official transfers	52.3	54.4	48.3	26.8	16.9
Multilateral creditors	48.1	53.6	40.6	---	---
<i>Of which project grants</i>	11.1	10.6	7.7	4.1	---
Official bilateral creditors	4.2	2.6	0.0	0.0	0.0
Paris Club	4.4	2.6	0.0	0.0	0.0
Non-Paris Club	0.0	0.0	0.0	0.0	0.0
Cash and commodity aid	40.7	43.8	32.9	22.7	16.9
1. Budgetary inflows	16.7	15.6	8.6	0.0	0.0
Official bilateral	3.7	0.8	0.0	0.0	0.0
France	0.0	0.0	0.0	0.0	0.0
Germany	0.0	0.0	0.0	0.0	0.0
Italy	3.7	0.8	0.0	0.0	0.0
Japan	0.0	0.0	0.0	0.0	0.0
Netherlands	0.0	0.0	0.0	0.0	0.0
Pakistan	0.0	0.0	0.0	0.0	0.0
Multilaterals	13.0	14.8	8.6	0.0	0.0
World Food Program	13.0	14.8	8.6	0.0	0.0
Food for schools, etc.	---	---	---	0.0	0.0
Food for sale	---	---	---	0.0	0.0
2. Non-budgetary inflows	24.0	28.2	24.3	22.7	16.9
World Food Program	24.0	28.2	24.3	22.7	16.9
Food aid	16.8	21.0	18.9	22.7	16.9
Cash aid	7.2	7.2	5.4	0.0	0.0
Project aid	11.6	10.6	7.8	4.1	0.0
1. Budgetary inflows	5.9	6.0	2.9	0.1	0.0
Official bilateral	0.5	1.8	0.0	0.0	0.0
Canada	0.0	0.0	0.0	0.0	0.0
Germany	0.7	1.8	0.0	0.0	0.0
Iran	0.0	0.0	0.0	0.0	0.0
Japan	0.0	0.0	0.0	0.0	0.0
Saudi Arabia	0.0	0.0	0.0	0.0	0.0
Multilaterals	5.4	4.2	2.9	0.1	0.0
African Development Fund	2.6	2.6	2.7	0.0	0.0
EEC/EDF	2.4	1.3	0.0	0.0	0.0
Islamic Development Bank	0.4	0.3	0.1	0.1	0.0
UNDP	0.0	0.0	0.0	0.0	0.0
2. Non-budgetary inflows	5.7	4.7	4.9	4.0	0.0
Multilaterals	5.7	4.7	4.9	4.0	0.0
UNDP (TA)	5.7	4.7	4.9	4.0	0.0

Sources: Sudanese authorities; and Fund staff estimates.

Table 32. Sudan: Loan Disbursements, 1994/95–98

(In millions of U.S. dollars)

	1994/95	1995	1996	1997	1998
<b>Total loan disbursements</b>	<b>76.7</b>	<b>86.0</b>	<b>28.6</b>	<b>18.6</b>	<b>12.7</b>
<b>Multilateral creditors</b>	<b>76.7</b>	<b>86.0</b>	<b>16.4</b>	<b>17.9</b>	<b>12.7</b>
<b>Bilateral creditors</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.7</b>	<b>0.0</b>
Paris Club	0.0	0.0	0.0	0.0	0.0
Non-Paris Club	0.0	0.0	0.0	0.7	0.0
<b>Commercial banks</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Cash and Commodity loans</b>	<b>20.9</b>	<b>22.9</b>	<b>12.7</b>	<b>0.0</b>	<b>0.0</b>
<b>Multilateral Funds/Banks</b>	<b>20.9</b>	<b>22.9</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
African Development Bank	7.2	22.9	0.0	0.0	0.0
Islamic Development Bank	0.0	0.0	0.6	0.0	0.0
OPEC Fund	13.7	0.0	0.0	0.0	0.0
<b>Other</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
Libyan Arab Foreign Bank	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	12.1	0.0	0.0
<b>Project loans (budget)</b>	<b>55.8</b>	<b>63.1</b>	<b>15.9</b>	<b>18.6</b>	<b>12.7</b>
<b>Multilaterals</b>	<b>55.8</b>	<b>63.1</b>	<b>15.8</b>	<b>17.9</b>	<b>12.7</b>
IDA (World Bank)	0.0	0.0	0.0	0.0	0.0
IFAD	1.0	2.5	13.4	10.2	5.9
African Development Bank	22.9	26.2	0.0	0.0	0.0
African Development Fund	29.2	31.5	0.1	0.0	0.0
European Investment Bank	0.0	0.0	0.0	0.0	0.0
Islamic Development Bank	2.6	2.8	1.9	7.5	6.4
OPEC Fund	0.0	0.1	0.6	0.2	0.2
<b>Arab Funds</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
Kuwait Fund	0.0	0.0	0.0	0.0	0.0
<b>Other</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
Germany	0.0	0.0	0.0	0.0	0.0
China	0.0	0.0	0.1	0.0	0.0

Sources: Sudanese authorities; and Fund staff estimates.

Table 33. Sudan: Total External Arrears, 1994–98

(In millions of U.S. dollars)

	1994	1995	1996	1997	1998
<b>Total</b>	<b>13,738.0</b>	<b>16,310.0</b>	<b>17,217.2</b>	<b>17,963.5</b>	<b>19,311.7</b>
<b>Multilaterals</b>	<b>2,277.7</b>	<b>2,373.4</b>	<b>2,432.0</b>	<b>2,392.9</b>	<b>2,524.2</b>
IMF	1,736.0	1,763.8	1,697.0	1,570.0	1,614.6
IBRD group	32.1	27.6	74.0	94.7	122.1
IBRD	1.0	2.3	3.0	4.1	5.2
IDA	31.1	25.3	71.0	90.5	116.9
Arab Monetary Fund	259.9	295.1	307.0	307.4	322.7
Islamic Development Bank	0.8	1.1	0.0	1.0	0.0
African Development Bank	5.2	12.7	8.0	21.6	23.3
African Development Fund	3.1	8.5	17.0	9.1	12.2
Arab Fund for Ec/Soc	---	192.9	239.0	283.1	309.0
European Investment Bank	32.6	24.8	32.0	33.7	39.3
International Fund for Agriculture Development	0.0	0.0	0.0	0.0	0.0
OPEC Fund	14.9	12.0	19.0	29.4	41.7
APICORP	22.7	34.2	38.0	39.9	41.7
<b>Paris Club bilaterals</b>	<b>3,663.7</b>	<b>4,423.4</b>	<b>4,746.0</b>	<b>4,933.6</b>	<b>5,425.0</b>
Rescheduled	2,867.9	3,553.0	3,826.0	3,992.6	4,374.1
Unrescheduled	795.8	870.4	920.0	941.0	1,050.9
<b>Non-Paris Club bilaterals</b>	<b>4,330.9</b>	<b>5,073.0</b>	<b>5,463.0</b>	<b>5,740.5</b>	<b>6,123.2</b>
OPEC countries	---	4,459.0	4,869.0	5,114.8	5,446.1
Libya	---	359.0	337.0	818.7	863.7
Comecom countries	---	255.0	257.0	345.5	365.5
Other countries	302.5	255.0	257.0	280.1	311.5
Malaysia	37.8	47.0	50.0	54.8	57.8
Pakistan	13.8	3.5	5.0	5.3	5.6
China	45.4	38.0	33.0	34.8	42.7
<b>Commercial</b>	<b>3,465.7</b>	<b>4,440.3</b>	<b>4,576.2</b>	<b>4,896.5</b>	<b>5,239.3</b>
Banks	2,823.7	3,640.6	3,569.5	3,819.3	4,086.7
Suppliers	642.0	799.6	1,006.7	1,077.2	1,152.6
<b>Memorandum items:</b>					
<b>Proportion of total debt in arrears</b>					
Total	80.3	82.4	83.9	84.5	86.1
Multilaterals	57.9	56.2	56.8	56.5	58.2
Paris Club	78.8	82.6	86.0	85.3	88.0
Non-Paris Club bilaterals	85.7	87.8	89.0	90.3	91.6
Commercial	99.9	100.0	100.0	100.0	100.0

Sources: Bank of Sudan and Fund staff estimates.

Table 34. Sudan: Breakdown of Paris Club Debt, 1994-97

(In millions of U.S. dollars)

	1994	1995	1996	1997
<b>Total</b>	<b>4,649.6</b>	<b>4,981.8</b>	<b>5,520.8</b>	<b>5,521.2</b>
Austria	402.2	432.1	497.1	462.7
Belgium	267.8	288.0	354.7	333.7
Canada	19.5	20.9	24.4	26.9
Denmark	143.6	153.7	171.0	170.9
France	599.2	641.9	724.6	735.0
Germany	128.0	137.5	188.5	171.4
Ireland	4.6	5.0	7.6	7.7
Italy	493.8	529.7	572.7	595.7
Japan	405.9	434.5	422.9	415.7
Netherlands	203.1	218.6	246.6	226.3
Norway	46.3	49.3	72.3	74.3
Spain	26.6	28.2	31.1	32.3
Switzerland	132.6	142.5	165.6	160.4
United Kingdom	647.5	696.7	834.2	781.8
United States	1,128.8	1,203.1	1,270.6	1,326.1
<b>Previously Rescheduled Debt</b>	<b>3,351.7</b>	<b>3,606.6</b>	<b>4,122.7</b>	<b>4,055.9</b>
Austria	361.6	389.1	457.9	423.5
Belgium	262.6	282.6	347.9	325.3
Canada	12.0	12.9	13.9	14.7
Denmark	94.8	102.1	123.9	118.3
France	429.3	461.9	547.2	532.7
Germany	113.8	122.5	174.8	157.7
Ireland	4.6	5.0	7.6	7.7
Italy	394.6	424.6	479.5	500.9
Japan	263.1	283.1	291.6	282.0
Netherlands	203.1	218.6	246.6	226.3
Norway	16.1	17.3	26.7	24.0
Spain	4.4	4.7	5.1	5.4
Switzerland	118.4	127.5	149.5	144.3
United Kingdom	645.4	694.5	832.2	779.8
United States	427.8	460.4	418.3	513.1
<b>Debt Not Previously Rescheduled 1/</b>	<b>1,297.9</b>	<b>1,375.1</b>	<b>1,398.1</b>	<b>1,465.3</b>
Austria	40.6	43.0	39.2	39.2
Belgium	5.2	5.5	6.8	8.4
Canada	7.6	8.0	10.5	12.2
Denmark	48.8	51.7	47.1	52.6
France	169.9	180.0	177.4	202.3
Germany	14.2	15.0	13.7	13.7
Ireland	0.0	0.0	0.0	0.0
Italy	99.2	105.1	93.2	94.8
Japan	142.8	151.3	131.3	133.7
Netherlands	0.0	0.0	0.0	0.0
Norway	30.2	32.0	45.6	50.3
Spain	22.2	23.5	26.0	26.9
Switzerland	14.2	15.0	16.1	16.1
United Kingdom	2.1	2.2	2.0	2.0
United States	701.0	742.7	789.3	813.0

Source: Staff estimates based on information provided by the Sudanese authorities.

1/ Breakdown between pre- and post-cut off date debt not provided.

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Table 35. Sudan: External Public Debt (including arrears), 1994-98

(In millions of U.S. dollars)

	1994	1995	1996	1997	1998
<b>Total</b>	<b>17,104.8</b>	<b>19,798.3</b>	<b>20,516.2</b>	<b>21,269.3</b>	<b>22,354.5</b>
<b>Multilaterals</b>	<b>3,934.9</b>	<b>4,223.5</b>	<b>4,282.0</b>	<b>4,233.5</b>	<b>4,271.8</b>
IMF	1,736.0	1,763.8	1,697.0	1,570.0	1,546.2
IBRD group	1,141.9	1,287.8	1,282.0	1,289.6	1,303.3
IBRD	6.3	6.8	6.0	6.1	6.4
IDA	1,135.7	1,281.0	1,276.0	1,283.5	1,296.9
Arab Monetary Fund	259.9	295.1	307.0	319.4	334.7
Islamic Development Bank	10.3	11.2	13.0	20.5	25.1
African Development Bank	50.2	81.3	90.0	97.6	99.3
African Development Fund	239.3	272.5	353.0	350.1	347.5
Arab Fund for Ec/Soc	263.2	278.7	296.0	330.1	351.6
European Investment Bank	78.1	71.7	67.0	67.7	68.9
International Fund for Agriculture Development	***	73.5	84.0	90.9	93.8
OPEC Fund	47.5	53.8	55.0	57.6	59.5
APICORP	26.8	34.2	38.0	39.9	41.7
<b>Bilateral loans</b>	<b>9,701.2</b>	<b>11,135.6</b>	<b>11,658.0</b>	<b>12,139.3</b>	<b>12,843.4</b>
Paris Club bilaterals	4,648.7	5,354.6	5,521.0	5,780.8	6,162.2
Rescheduled	3,351.7	3,979.5	4,122.0	4,319.9	4,614.4
Unrescheduled	1,297.0	1,375.1	1,399.0	1,460.9	1,547.8
<b>Non-Paris Club Bilaterals</b>	<b>5,052.5</b>	<b>5,781.0</b>	<b>6,137.0</b>	<b>6,358.5</b>	<b>6,681.2</b>
OPEC countries	4,253.1	4,975.0	5,385.0	5,576.8	5,863.1
Eastern European countries	385.3	351.0	337.0	350.5	370.5
Other countries	414.1	455.0	415.0	431.1	447.5
<b>Commercial</b>	<b>3,468.7</b>	<b>4,439.3</b>	<b>4,576.2</b>	<b>4,896.5</b>	<b>5,239.3</b>
Banks	2,826.7	3,639.6	3,569.5	3,819.3	4,086.7
Suppliers	642.0	799.6	1,006.7	1,077.2	1,152.6

Sources: Bank of Sudan and Fund staff estimates.

Table 36. Sudan: External Public Debt Service Obligations, 1994/95–98

(In millions of U.S. dollars)

	1994/95	1995	1996	1997	1998
<b>Principal due</b>	311.8	287.6	279.6	232.9	219.3
IMF	0.0	0.0	0.0	0.0	0.0
Other	311.8	287.6	279.6	232.9	219.3
<b>Interest due</b>	931.2	912.6	956.0	1,107.0	1149.4
IMF 1/	49.7	53.1	40.2	37.0	39.9
Other 2/	881.4	859.6	915.7	1,070.0	1109.5
<b>Total debt service due</b>	1,243.0	1,200.3	1,235.5	1,339.9	1368.7
IMF 1/	49.7	53.1	40.2	37.0	39.9
Other 2/	1,193.2	1,147.2	1,195.3	1,302.9	1328.8
<b>Actual debt service payments</b>	68.4	73.5	52.3	65.4	67.1
IMF 3/	53.4	55.6	46.0	60.4	60.2
Other	15.0	17.9	6.3	5.0	6.9
<i>Of which:</i>					
Private sector					
Payments	3.8	3.7	1.6	0.0	0.0
<b>Memorandum item:</b>					
Total debt service due 4/	250.4	174.6	183.8	214.7	223.8
Actual debt service payments 4/	13.8	10.6	7.8	10.5	11.0

Sources: Fund staff estimates based on information provided by the Sudanese authorities.

1/ Including GRA charges, Trust Fund interest, special charges, arrangement charges, and total SDR charges.

2/ Includes estimates of late interest and interest on short-term credits.

3/ Including payments of arrears on repurchases and burden sharing refunds.

4/ In percent of exports of goods and non-factor services.



Table 37. Sudan: Imports of Petroleum Products,  
and Landed Costs, 1994/95–98

	1994/95	1995	1996	1997	1998
<b>Import values c.i.f.</b>					
(In millions of US\$) 1/	113	204	265	285	182
Crude oil	49	113	124	110	53
Benzine	7	11	18	33	26
Gas Oil	42	70	108	124	87
Jet A1	5	1	7	9	9
FF 3,500	7	5	2	0	2
LPG	2	4	6	9	4
Other (including Kerosene and avgas)	1	0	0	0	1
<b>Import volumes (000 mt)</b>	738	1,357	1,337	1,401	1352
Crude oil	338	671	712	669	432
Benzine	35	80	76	128	171
Gas Oil	254	528	480	575	638
Jet A1	25	7	25	9	63
FF 3,500	79	58	27	0	25
LPG	6	11	17	20	18
Other (including Kerosene and avgas)	2	2	0	0	5
<b>Domestic refining of</b>					
Imported crude (000 mt)	324	688	694	528	411
Benzine	54	114	137	89	63
Gas Oil	98	214	210	157	125
Jet A1	24	40	41	43	43
FF 1,500	0	303	288	231	174
FF 3,500	145	2	0	0	0
Diesel	0	8	9	4	0
LPG	3	7	9	4	6
<b>Landed cost (LSd per ton) 2/</b>					
Crude oil	***	***	281,648	298,100	246,944
Benzine	***	***	378,252	458,732	347,268
Gas Oil	***	***	362,935	430,646	277,822
Jet A1	***	***	379,103	338,043	291,052
FF 3,500	***	***	229,754	0	211,955
LPG	***	***	658,630	725,128	947,771
Avgas	***	***	854,035	0	0

Source: Sudan petroleum Corporation

1/ Refers only to imports made directly by the Sudan Petroleum Corporation or in conjunction with other private sector enterprises.

2/ Includes bank charges, operating and administrative expenses, quay dues, and interest charges.

Table 38. Sudan: Consumption of Petroleum Materials  
during the period 1995-98

(In metric tons)

	1995	1996	1997	1998
Gasoline	179,761	217,716	203,132	248,161
Kerosene	3,756	10,038	9,075	9,200
Gasoil	715,131	766,581	812,064	846,454
Furnace 1500 (fuel oil)	340,395	280,882	247,389	188,228
Furnace 3500 (fuel oil)	0	0	0	0
Airplane Gas	79,431	65,911	75,844	106,000
Diesel	45,428	42,030	34,467	35,000
LPG	16,805	19,417	22,092	24,000
Avgas	1,625	1,108	584	1,300
Total	1,382,333	1,403,682	1,431,646	1,458,343

Sources: Sudan Ministry of Energy and Mining; Statistics and Information Section

Table 39. Sudan: Price Structure of Petroleum Prices 1/

	Gasoline		Gasoil	
	LSd per metric ton	In percent of total	LSd	In percent of total
Cost of import	347,290	37.2	321,872	60.8
Medit./Italy (in U.S. dollars)	125.7	...	116.5	...
Exchange rate	2,445	...	2,445	...
C&F import price	347,290	...	321,872	...
Taxes	298,670	32.0	57,937	10.9
Customs duties	20,837	2.2	19,312	3.6
Excise tax	277,832	29.8	38,625	7.3
Other costs	92,079	9.9	72,148	13.6
Distributor's margin	59,086	6.3	41,570	7.8
Other costs 2/	32,993	3.5	30,578	5.8
Total cost per metric ton	738,038	79.1	451,957	85.3
Over/under recovery per metric ton	194,902	20.9	77,603	14.7
Retail price in Khartoum/MT	932,940	100.0	529,560	100
Retail price in Khartoum/IG	3,000		2,000	

Source: Sudan Petroleum Corporation

1/ As of January 1999.

2/ Includes bank charges, administrative expenditures payable to the SPC and quay dues.

Table 40. Sudan: Domestic Retail Prices of Oil Products, 1996-99

	In Sudanese pounds				In U.S. dollars 1/			
	Nov. 96	Jan. 97	Aug. 97	Mar. 99	Nov. 96	Jan. 97	Aug. 97	Mar. 99
LPG (MT)	600,000	720,000	1,040,000	1,040,000	410.96	493.15	641.67	425.36
Gasoline (IG) 2/	2,800	3,000	3,000	3,000	1.92	2.05	1.85	1.23
Gasoil (Diesel) (IG) 2/	1,500	1,800	2,000	2,000	1.03	1.23	1.23	0.82
Kero/Jet (IG) 2/	3,000	2,450	2,450	2,450	1.37	1.68	1.51	1.00
Furnace (fuel oil) (MT)	180,000	190,000	190,000	190,000	123.29	130.14	117.23	77.71

Sources: Sudan Petroleum Corporation (SPC) and Ministry of Energy.

1/ Exchange rate LSd/US\$ are as follows: December 1996 - LSd 1,460; February 1997 - LSd 1,460; August 1997 - LSd 1,621; and March 1999 - LSd 2,445.

2/ Imperial gallon equivalent to 1.220095 American gallon.

**Table 41. Average Capacity Utilization in the Industrial Sector, 1993/94–97**

**(In percent)**

	1994/95	1995	1996	1997
<b>Food and beverages</b>				
Flour	25	29	31	21
Sugar	63	69	68	74
Vegetable oils	15	12	17	19
Soft drinks	48	55	42	50
<b>Textiles and apparel</b>				
Textiles	10	8	9	10
Shoes	30	34	28	31
<b>Other consumer goods</b>				
Cigarettes	19	18	23	28
<b>Intermediate goods</b>				
Cement	65	59	75	88

Source: Ministry of Industry.

Table 42. Sudan: Gross Fixed Capital Formation, 1991/92–97

(In millions of Sudanese pounds)

	1991/92	1992/93	1993/94	1994/95	1996	1997
<b>Construction and Building</b>	33.0	114.0	285.0	353.0	922.0	1,585.0
Major repair	...	...	...	24.0	44.0	53.0
New construction	...	...	...	329.0	878.0	1,532.0
Residential building	...	...	...	297.0	701.0	934.0
Non-residential building	...	...	...	32.0	177.0	426.0
Other	...	...	...	5.0	49.0	172.0
<b>Other</b>	9.0	14.0	18.0	161.0	618.0	1,033.0
Land improvement and plantation	...	...	...	1.0	2.0	3.0
Transport equipment	...	...	...	89.0	280.0	429.0
Machinery equipment	...	...	...	71.0	336.0	601.0
<b>Total fixed capital formation</b>	<b>42.0</b>	<b>128.0</b>	<b>303.0</b>	<b>514.0</b>	<b>1,540.0</b>	<b>2,618.0</b>
<b>Memorandum item:</b>						
<b>Gross fixed capital formation by sectors</b>						
Agriculture, livestock and fishing	0.9	4.5	2.6	...	...	...
Manufacturing and mining	4.5	1.0	1.2	...	...	...
Electricity	0.3	0.9	0.6	...	...	...
Water	0.3	0.7	1.1	...	...	...
Construction	33.0	114.0	285.0	...	...	...
Trade	1.4	2.3	4.3	...	...	...
Transport and communications	0.2	1.7	2.1	...	...	...
Other services	1.4	3.0	5.5	...	...	...

Source: Sudanese authorities.

**Table 43. Sudan: Value Added in Selected Industries,  
at Constant Prices, 1992/93–98**

(In billions of Sudanese pounds)

	1992/93	1993/94	1994/95	1996	1997	1998
<b>Manufacturing (including mining)</b>	<b>516</b>	<b>503</b>	<b>675</b>	<b>1,043</b>	<b>1,055</b>	<b>1,118</b>
<b>Mining</b>	<b>12</b>	<b>12</b>	<b>13</b>	<b>90</b>	<b>105</b>	<b>105</b>
<b>Manufacturing</b>	<b>504</b>	<b>491</b>	<b>662</b>	<b>953</b>	<b>950</b>	<b>1,013</b>
<b>Selected industries</b>	<b>409</b>	<b>360</b>	<b>348</b>	<b>407</b>	<b>566</b>	<b>582</b>
<b>Food and beverages</b>	<b>301</b>	<b>208</b>	<b>193</b>	<b>227</b>	<b>216</b>	<b>229</b>
<b>Flour</b>	<b>72</b>	<b>57</b>	<b>41</b>	<b>51</b>	<b>34</b>	<b>35</b>
<b>Sugar</b>	<b>72</b>	<b>65</b>	<b>65</b>	<b>70</b>	<b>77</b>	<b>88</b>
<b>Vegetable oils</b>	<b>121</b>	<b>60</b>	<b>60</b>	<b>79</b>	<b>78</b>	<b>78</b>
<b>Soft drinks</b>	<b>37</b>	<b>26</b>	<b>27</b>	<b>27</b>	<b>27</b>	<b>29</b>
<b>Textiles and apparel</b>	<b>42</b>	<b>39</b>	<b>39</b>	<b>52</b>	<b>221</b>	<b>230</b>
<b>Textiles</b>	<b>31</b>	<b>33</b>	<b>13</b>	<b>8</b>	<b>16</b>	<b>14</b>
<b>Shoes</b>	<b>12</b>	<b>6</b>	<b>25</b>	<b>44</b>	<b>205</b>	<b>216</b>
<b>Other consumer goods</b>	<b>21</b>	<b>32</b>	<b>25</b>	<b>25</b>	<b>33</b>	<b>34</b>
<b>Cigarettes</b>	<b>14</b>	<b>30</b>	<b>22</b>	<b>20</b>	<b>31</b>	<b>31</b>
<b>Tires</b>	<b>7</b>	<b>3</b>	<b>3</b>	<b>5</b>	<b>2</b>	<b>2</b>
<b>Intermediate goods</b>	<b>44</b>	<b>81</b>	<b>91</b>	<b>103</b>	<b>97</b>	<b>90</b>
<b>Cement</b>	<b>6</b>	<b>6</b>	<b>8</b>	<b>13</b>	<b>10</b>	<b>23</b>
<b>Petroleum products 1/</b>	<b>39</b>	<b>74</b>	<b>83</b>	<b>90</b>	<b>87</b>	<b>67</b>
<b>Other</b>	<b>95</b>	<b>131</b>	<b>314</b>	<b>546</b>	<b>384</b>	<b>431</b>

Sources: Sudanese authorities; and staff estimates.

1/ Data have been adjusted to reflect the actual volume of refined products shown in Table 38B.

Table 44. Sudan: Basic Electricity Data Summary of the National Electricity Corporation (National Grid) during 1994/95–1998

Details	1994/95	<u>July-Dec.</u> 1995	1996	1997	1998
Energy Generated (GWH)	1,864	994	2,063	2,150	1,966
Energy Sales (GWH)	1,343	736	1,380	1,344	1,338
Residential and staff	780	437	774	664	580
<i>of which: staff</i>	22	11	38		
Government and street lighting	78	40	106	95	165
Commercial	74	40	80	116	115
Industry	378	200	388	469	478
Agricultural pumps	33	19	32	36	36
GWH losses and internal consumption	521	258	683	806	628
Revenue From Electricity Sale (LSd million)	28,409	19,419	71,345	94,629	105,909
Expenditure (LSd million)	41,950	31,156	124,230	208,792	236,655
No. of Consumers	39,044	405,414	407,559	407,565	444,224
No. of Employees	11,846	11,374	10,174	17,255	17,500
Fuel Consumption (000 tons) 1/	280	124	321	355	295

Source: National Electricity Corporation

1/ Refers to fuel oil, diesel and gas oil.



**Table 45. Sudan: Average National Electricity Company (NEC)  
Tariff by Sectors, 1996–98  
(In Sudanese pounds/Kw hour)**

	July		October
	1996	1997	1998
Industrial	92	80	120
Domestic	85	88	105
Agriculture	46	65	100
Unified (including commercial, government, semi-government) 1/	150	160	200
Staff	...	85	103
Government 1/			160

Source: National Electricity Company

1/ Starting in October 1998, the unified tariff no longer applies to the government.

## Sudan: The Tax System

1. This appendix describes the operation and performance of the main taxes levied in Sudan up to 1998. It also highlights some of the important factors that have affected the operation of certain specific taxes.

### Operation and performance of taxes

#### *Personal income tax*

2. The personal income tax (PIT) is paid annually by residents on all income earned in Sudan or abroad, including wages, salaries, leave and sick pay, and all other remuneration for employment or services rendered. However, interest and domestic dividends, employers' contributions to retirement and medical schemes, and housing and transport allowances are excluded. Individual income taxes are "pay-as-you-earn" basis, and are deducted by employers who are obliged to submit collected monthly revenues by the 15th day of the following month. In the case of a refund, employees may file their returns after December 31.

As of January 1999, the applicable personal income tax rates are as follows:

First	LSd	900,000	exempted
Next	LSd	12,000	5 percent
Next	LSd	15,000	10 percent
Next	LSd	24,000	15 percent
Next	LSd	36,000	20 percent
Next	LSd	36,000	25 percent
Exceeding	LSd	102,3000	30 percent

3. Effective January 1998, the minimum threshold was raised from LSd 240,000 to LSd 360,000, while the highest income bracket was increased to LSd 483,000. It has been raised to LSd 1,023,000 in 1999.

4. Overall, less than 300,000 individuals are subject to the PIT, but only 50,000 tax declarations are normally submitted. This is due to the fact that most employers withhold the tax directly from the wages and salaries, and also because other additional sources of income are usually insignificant. Between 1982/83 and 1997, the revenue from the personal income tax as a share of GDP has declined almost continuously (from 0.6 percent to 0.1 percent).

#### *Business profit tax*

5. The business profit tax, which was based on the Income Tax Act of 1986, is levied on net business profits of individual entrepreneurs, limited public and private companies,

partnerships, trusts and associations, banks, and insurance companies. Profit taxes are calculated on the basis of profits earned over the year ended December 31 and companies must file their returns by March 31. The first installment is due by April 30, and the second by October 31.

The schedule of rates is currently as follows:

***Individual entrepreneurs***

a. Non-agriculture

First	LSd	240,000	exempted
Next	LSd	150,000	10 percent
Next	LSd	250,000	20 percent
Next	LSd	500,000	30 percent
exceeding	LSd	1,140,000	40 percent

b. *Agriculture (1 percent on gross income)*

6. The Taxation Bureau of the Ministry of Finance and Economic Planning (TB) estimates that about 182,000 individual entrepreneurs are currently subject to this tax. Owing to the high rate of inflation and the lack of corresponding adjustments in the nominal tax brackets, about 95 percent of taxpayers currently fall in the highest bracket. Hence, the profit tax has become regressive, posing a relatively higher burden on smaller or medium level business incomes. In January 1997, the minimum threshold was raised from LSd 100,000 to LSd 240,000. Revenue from this tax has been transferred in 1997 to the state governments.

***Private companies, including banks and insurance companies***

7. Since January 1998, the net income of private industrial companies is taxed at 35 percent while that of banks and insurance companies are taxed at 40 percent. The TB estimates that there are about 4,500 registered enterprises which are subject to this tax.

8. Revenue from the profit tax fell during the 1980s primarily because of two factors. First, the existence of generous exemptions and immunities led to a decline of revenue. A broad range of concessions and exemptions were granted in accordance with the 1989 Taxation Act and the 1991 Investment Encouragement Act. Over 200 companies and several banks currently benefit from these tax exemptions.<sup>1</sup> The loss in revenues from these specific

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<sup>1</sup>For example, companies operating under the 1991 Investment Encouragement Act are granted a maximum of five years tax holiday. This Act subjects tax concessions to the fulfillment of any of several conditions, among which are: (a) the contribution of the

(continued...)

exemptions and immunities was large. Furthermore exemptions were extended also to cooperatives dealing with trade, transport, agriculture, and other activities, and 53 charity organizations which undertook commercial activities. In March 1995, exemptions were eliminated for cooperatives and charities that operate on commercial basis and in July 1995, a 1 percent development tax on the income of enterprises benefiting from tax holiday was introduced (strategic projects are exempted from this tax). In 1998, actual collection was LSd 2.9 billion. Second, the decline in revenues was also caused by the large lags in tax payments. To minimize the loss from such lags, in March 1995, a ministerial decree was issued stating that business profit tax and rental tax payments would be made at the time of tax payer declaration or presentation of audited accounts. The main factors that still exist behind these delays are the weak penalty system and the widespread utilization of the appeal system.

*c. Tax on Sudanese working abroad*

The current annual rates of taxation are as follows:

Rates as of December 1997 (In U.S. dollars)	
Laborers	150
Employees	350
Professionals	500-800
University educators	500-800
Businessmen	2,000

9. The rates are enforced by requiring that citizens obtain an exit visa verifying tax payment before leaving Sudan and that passports be renewed every two years. About 200,000 expatriates have complied with this tax in recent years.

<sup>1</sup>(...continued)

investment project to the increase of national income; (b) the removal of "any bottlenecks obstructing development;" (c) the "consolidation" of economic developments; and (d) an increase in employment. After an initial effective period of five years, the tax concession can be extended for additional five years in the case of large investments. Furthermore, the Act also exempts these investment schemes from customs duties and excises on equipments, machineries, and spare parts. Losses may be carried forward and deducted from profits for a period of five years.

*d. Agricultural tax*

10. Farmers are subject to local taxation (by regional and provincial governments). Most of these taxes are collected during the harvest period from November to April.

11. In July 1993, the agricultural tax rate collected by the Central Government was lowered from 5 percent to 2 percent, and beginning in 1996, the amount collected by the Central Government was transferred to the state governments.

*e. Capital gains tax*

12. In July 1995, the capital gains tax rate was lowered from 10 percent to 5 percent for real estate and from 5 percent to 2.5 percent for cars, and is levied on the difference between the sales and purchase price without adjustment for inflation. Revenue from this tax has been transferred in 1997 to the state governments.

*f. Sales tax*

13. Most items manufactured in Sudan are subject to a sales tax of 10 percent, with the exception of medicine, food, and vegetable oils. Both the consumption and excise taxes are collected at the factory by the Customs Department. Since 1996, the amount collected from sales and excise taxes on a number of commodities have been transferred to the state governments. Inspectors located within the factory issue forms certifying that taxes have been paid before allowing goods to be shipped. This tax is not applicable to corresponding imports, which are subject to customs duty and consumption tax. The rates for the major items are listed in Appendix I, Table 7.

(1) *Sales tax on services*

14. The tax on services is charged at a rate of 20 percent for hotels, restaurants, and club services. An airport departure tax is levied on all international flights by the Civil Aviation Authority. In October 1994, this tax was raised to LSd 5,000 per passenger and to US\$10.00 per nonresident. In October 1996, the airport departure was raised to US\$20.00 per nonresident.

(2) *Excise tax*

15. The excise tax is also levied on several domestically manufactured products at a variety of ad valorem rates ranging from 2 percent to 150 percent. As mentioned above, beginning 1996, the revenue generated from excise tax on a number of commodities is transferred to the state governments. Currently, there are 7 different excise rates applicable to about 7 goods (called Federal goods) namely: Tobacco (150 percent), cars (20 percent), soft drinks (5 percent), paints and polish (10 percent), sugar (17 percent), cement (40 percent),

and petroleum products (6 percent on naptha and kerosene, 12 percent on gas oil and 80 percent on brent).

*g. Taxes on international trade*

16. Sudan has relied considerably on taxes on international trade as a source of income; these include import and export duties, and the consumption tax. Their contribution to total tax collection increased from 37 percent in 1995 to 51 percent in 1997. This increase was due to the merging in (April 1997) of the customs valuation rate with the official exchange rate and the increase in imports.

*(1) Import duties*

17. All import duties are ad valorem and are applied to a fair market c.i.f. import price. The import duty rates range from 6 percent to 80 percent (Table 8). The revenue generated from import duties are transferred to the Central Government.

*(2) Export duties*

18. All export duty rates are ad valorem and are calculated on free along side (f.a.s.) value. Until end-1997, with the exception of cotton and gum arabic, export duties were applied according to two bands 0 and 1 percent. Export duties on cotton and gum arabic were charged at the rate of 7 percent. Beginning in January 1998, export duty rates were reduced by 3 percentage points.

*(3) Consumption tax*

19. The consumption tax rate is levied at a rate of 10 percent on a broad range of items. Items exempted from the consumption tax include the following: wheat flour, printed books and booklets, sacks and bags for packing, and medical supplies (Table 8).

*(4) Defense tax*

20. Beginning in August 1997, a defense tax at a rate of 4 percent was reinstated, on a temporary basis, on a number of commodities equivalent to about 40 percent of total imports. Revenue from the defense tax accounted for about 0.2 percent of GDP in 1997. This tax has been abolished in December 1998.

*(5) Services tax*

21. Instituted in 1994 as a levy of 5 percent of c.i.f. import value on products previously subject to quantitative restrictions. This tax was abolished on December 9, 1998.

*h. Other taxes*

22. Other taxes include various levies and fees, such as stamp duties and car license fees. Their contribution to the budget has been insignificant. In Appendix I Table 16, these revenues are combined with those from the agriculture tax, and have yielded no more than 0.5 percent of GDP since the mid-1980s. The stamp duty is charged at various rates on more than 260 instruments of various kinds.

**National revenue**

23. Non-tax.

## **Sudan: Review of Banking Supervision Framework**

1. **Legal.** In 1991, the Banking Regulation Act became law giving the BOS legally defined autonomy and authority to supervise commercial banks. In 1994, the Banking Adaptation Scheme Regulation was adopted to bring banks into agreement with Basle risk-weighted capital requirements. This regulation called for banks to be in compliance with capital requirements by 1997. A new law regulating the BOS and the banking system is being prepared and is expected to be approved in 1999. Sudan has laws regarding contracts, negotiable instruments, liens on collateral, repossession, bankruptcy and liquidation.<sup>1</sup> Since 1984, when Islamic banking was adopted, the High Sharia Supervisory Council in conjunction with the legal department of the Bank of Sudan has circulated decisions regarding Islamic banking requirements to all banks and their branches. Banks are allowed to own nonbanking institutions. Commercial companies, however, are not allowed to hold a majority ownership of other commercial banks.

2. **Licensing.** All banking licenses are issued and can be revoked by the BOS. Licenses are subject to minimum capital requirements, a satisfactory feasibility plan and character and capacity requirements by the owners, directors, and senior bank management. When those requirements have been met, a provisional license is granted and the applicants request formation of a company with the registrar of companies. No new banking licenses have been approved since 1995.

3. **Prudential Regulations.** Banks have a legal lending limit to member of the board of directors and their companies not to exceed 25 percent of the bank paid capital and reserves. There is a legal total limit to all directors and their companies which equal to 10 percent of the total loan portfolio or the bank capital and reserves whichever is greater. Banks also have a legal lending limit to the banks' subsidiary and sister companies equal or amounting to not more than 25 percent of the bank paid capital plus reserves. For the purpose of public disclosure, all banks are treated as exchange listed banks and are required to publish their audited financial statements at the end of the year in at least one local news paper.

4. **Organization of Prudential Banking Supervision at the BOS.** Until August 1998, prudential banking supervision was performed by the Banking Control and Financial Institution Administration Department (established in 1969), and comprises three internal departments, the Financial Institutions Department which has off-site and on-site responsibility for development banks, industrial banks, pension funds and insurance companies; the Inspection Department which as on-site inspection responsibility for commercial banks; and the Credit Statistics Department which has off-site supervision responsibility for commercial banks. In August 1998, the department was divided into two separate departments, the

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<sup>1</sup>In 1992, Sudan enacted a Bank Foreclosure Act which provides for an auction process to convert collateral values.



Inspection Department which as on-site inspection responsibility for banks, and Banking Development Department.

5. **Staffing.** At present, all inspectors at the BOS, must be college graduates, majoring economics, statistics, accounting or business administration. Training is available (although not fully adequate) through formal courses within the BOS and on-the-job. Inspectors usually spend one year performing clerical work and then move to a on-site inspection team. Inspectors are not certified but are given assignments according to their abilities. A major problem at the BOS in prudential banking supervision is retention of qualified personnel.

6. **Liquidity.** Commercial banks are required to maintain a reserve with the BOS amounting to 28 percent (as of end-March 1999) of qualifying liabilities in domestic currency and an additional suggested 10 percent held in vault cash (internal liquidity rates). Required reserves (amounting to 6 percent at end-March 1999) on foreign currency deposits were introduced at end-June 1997. The liquidity ratio of liquid assets to short term liabilities are monitored from the monthly bank returns.

7. **Capital adequacy.** All commercial banks are required by the BOS to meet the Basle Committee risk weighted capital requirements. Calculations are to be made on year-end financial statements and compliance in subsequent quarters will be evaluated against this benchmark. Assets are risk weighted in categories of 0 percent, 20 percent, 50 percent, and 100 percent, and capital is comprised of tier I and tier II categories. Tier I capital is composed of paid-up capital, general reserves, legal reserves, special reserves, other reserves, and retained earnings. Tier II capital is composed of the general reserve for loan losses that exceed 1.25 percent of risk assets and 45 percent of a revaluation reserve for fixed assets and investment shares less investment in bank-owned companies and loss in provisions. Tier II capital cannot be greater than tier I capital. Investment in fixed assets and investment in shares of companies must not exceed 100 percent of paid-in capital plus reserves. In the event a commercial bank does not meet risk weighted capital requirements, options of nonpayment of dividends, capital injection or reduction of assets will be required until the standards are met.

8. **Credit concentration.** Lending to a single customer is limited to 25 percent of bank paid up capital plus reserves; any credit facilities that exceed that limit must be submitted to the BOS for approval.

9. **Insider lending.** Loans to banks directors and their companies are limited to 25 percent of bank's capital plus reserves or 10 percent of its loan portfolio (total loans) whichever is higher.

10. **Internal controls.** BOS requires that every bank have an internal control system. Inspectors review the adequacy of the internal control program and evaluate procedures during on-site inspections.

11. **Asset quality.** Classification of individual loans is done by the bank's external auditors on a basis of payment performance. There are three categories of loans: (i) good loans—includes all loans that are paid current; (ii) below ordinary loans—includes all loans 1–3 months overdue, loans 3–6 months overdue, loans 6–9 months overdue (deemed duration doubtful) and loans 9–12 months overdue (deemed duration doubtful); and (iii) procedure doubtful loans (bad debts)—includes loans for which recovery procedures have failed and may be pursued in courts of law. Provisions for loan reserves are charged to current income before taxes for general reserves up to 2 percent of total loans. Additional provisions are charged to current income before taxes on non-performing loans as follows: 4 percent for loans overdue by 1–3 months; 6 percent for loans overdue by 3–6 months; 8 percent for loans overdue by 6–12 months; and loans overdue by over 12 months are classified as bad loans and banks are required to write off the debt during a period of 10 years by charging 10 percent of the loan annually. Provisions in amount greater than 1.25 percent of total weighted assets are charged to earnings after taxes and made to a general reserve in tier II capital. The income tax rate for banks in Sudan is 45 percent. Loans are charged-off by the bank's external auditor, bank management and the BOS.

12. **Off-site surveillance.** The 28 commercial banks in Sudan have over 700 branches. Each bank is required to submit consolidated reports to the BOS Banking Development Department. The reports are a reserve requirement report, a consolidated monthly balance sheet and income statement and a monthly credit report. These reports go to respective subsections of the Department. The reports are not yet the basis of a computerized information system. The Credit Risk Section collects and analyzes data relating to reserves, liquidity, concentrations of credit and credit limits. The Banking System Development Section monitors the geographic distribution of banking facilities in Sudan. It monitors and approves branch openings and closings as well as the movement of employees. The Bad Debt Section monitors the payment status of all borrowers in Sudan. The monthly reporting is made on computer diskette and details the names of borrowers, amounts borrowed and amounts guaranteed. The section follows up on the financial status of defaulters.

13. **On-site examination.** Inspector teams inspect bank branches throughout the country. A report of inspection is prepared for each branch and is first discussed with the branch manager. A revised report may be written and sent to the head office of the bank. After reviewing, replies from the head office of the bank the report is summarized and sent to the Banking Control and Financial Institution Administration Department at the Bank of Sudan. The report then goes to a Deputy Governor and then to the Governor. Two types of inspections are performed, either an all inclusive inspection or a restricted inspection. Inclusive inspections are performed on a surprise basis and begin with a cash count and control of bank records. In addition to the verification of the accuracy of bank returns, capital adequacy, asset quality, management, earnings and liquidity are the major areas of evaluation of an all inclusive inspection. A restricted inspection targets specific areas of concern.