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Chad—Recent Economic Developments

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INTERNATIONAL MONETARY FUND

CHAD

Recent Economic Developments

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Approved by the African Department

May 9, 1996

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CHAD – Basic Data

Area, Population, and GDP per capita

Area	1,284,000 square kilometers
Population (mid–year 1995)	6.35 million
Population growth rate	2.4 percent
GDP per capita (1995)	US\$ 168

	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>
	<u>(In billions of CFA francs)</u>				
<u>Gross domestic product</u>					
At current prices	372.8	350.6	291.7	458.9	533.5
At 1977 prices	214.5	231.5	195.2	215.1	222.1
	<u>(In percent of GDP, at constant prices)</u>				
Primary Sector	41.7	44.5	41.3	47.5	45.9
Secondary Sector	15.5	14.1	14.7	12.9	14.0
Tertiary Sector	38.4	36.8	38.9	36.4	36.7
	<u>(Annual changes in percent)</u>				
Real GDP	8.3	6.1	-15.9	10.2	3.2
Nominal GDP	8.8	-5.9	-17.0	57.3	16.3
<u>Prices</u>					
GDP deflator	0.5	-11.3	-1.3	42.8	6.5
Consumer price Index	4.2	-3.8	-7.0	41.3	6.5
	<u>(In billions of CFA francs)</u>				
<u>Central government finance</u>					
Revenue	32.2	31.4	29.1	32.0	44.8
Total expenditure and net lending	80.1	96.3	83.8	124.7	126.5
Of which: Current expenditure	54.3	52.9	51.9	65.5	64.7
Capital expenditure	25.9	27.6	29.6	59.2	61.8
Overall deficit (commitment basis)	-47.9	-64.9	-54.6	-92.7	-81.6
Change in arrears (decrease -)	8.3	11.1	15.2	5.8	6.4
Overall deficit (cash basis)	-39.6	-53.8	-39.4	-86.9	-75.2
Financing	39.6	53.8	39.4	86.9	75.2
Domestic	-0.8	19.5	8.8	-0.8	-6.8
External	40.4	34.2	30.6	87.8	82.1
Of which: Net drawings	(14.8)	(8.1)	(6.4)	(17.2)	(18.4)
Current grants	(15.2)	(8.1)	(3.7)	(17.8)	(19.5)
Project grants	(9.7)	(15.5)	(15.4)	(44.2)	(37.3)
	<u>(In percent of GDP)</u>				
Current account deficit	-5.9	-6.1	-7.8	-7.3	-3.7
Overall deficit (commitment basis)	-12.8	-18.5	-18.7	-20.2	-15.3
Overall deficit (cash basis)	-10.6	-15.3	-13.5	-18.9	-14.1

CHAD - Basic Data (concluded)

	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>
	<u>(In billions of CFA francs)</u>				
<u>Money and credit</u>					
Net foreign assets	20.9	13.2	-1.6	30.2	62.3
Net domestic assets	47.1	48.6	49.6	49.8	45.6
Net claims on the Government	9.1	31.2	44.1	47.9	36.3
Money and Quasi-money	67.5	60.8	47.7	79.3	107.8
<u>Balance of payments</u>					
Exports, f.o.b.	54.6	48.2	43.0	83.2	115.0
Of which: Cotton	26.8	25.3	16.2	29.0	56.2
Imports, f.o.b.	-70.5	-64.3	-58.1	-97.6	-111.2
Trade balance	-15.9	-16.1	-15.1	-14.4	3.8
Services, net	-50.7	-51.5	-54.5	-68.4	-72.8
Private transfers	-2.5	-3.9	-6.5	-5.5	-4.4
Current account before grants	-69.1	-71.5	-76.1	-88.3	-73.5
Official transfers	28.8	28.7	17.6	34.3	32.3
Medium- and long- term official capital	44.7	39.0	58.9	61.5	55.7
Project grants	21.7	20.1	26.9	44.2	37.3
Disbursements	25.9	22.0	34.8	25.1	24.2
Amortization due	-2.9	-3.1	-2.8	-7.8	-5.8
Long term private capital	1.6	0.8	6.1	3.7	3.0
Short-term capital and errors and omissions	-18.7	-7.9	-23.2	11.7	6.4
Monetary capital	7.2	0.8	4.9	-1.8	-2.5
Overall surplus/deficit (+/-)	-5.5	-10.0	-11.8	21.0	21.4
Change in external arrears (principal; + incr)	3.2	2.6	2.9	6.7	-14.1
	<u>(In percent of GDP)</u>				
Trade balance	-4.3	-4.6	-5.2	-3.1	0.7
Exports, f.o.b.	14.6	13.8	14.7	18.1	21.6
Imports, f.o.b.	-18.9	-18.3	-19.9	-21.3	-20.9
Current account deficit before grants	-18.5	-20.4	-26.1	-19.2	-13.8
Current account deficit after grants	-10.8	-12.2	-20.1	-11.8	-7.7
Overall balance	-1.5	-2.9	-4.1	4.6	4.0
<u>External public debt</u>					
Disbursed and outstanding (medium and long term)	40.8	50.7	65.4	85.7	75.1
Debt service ratio (percent of exports of goods and nonfactor services)	9.7	11.2	12.7	15.5	10.9
	<u>(In millions of US dollars)</u>				
<u>Gross official reserves</u>					
Gross reserves	80.3	48.7	85.4	111.4	183.9
	<u>(CFA francs per U.S. dollar)</u>				
<u>Exchange rates</u>					
Period average	282.1	264.7	283.2	555.2	499.1
End of period	259.0	275.3	294.8	534.6	490.0

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I. Recent Economic Developments

1. Background

Chad is a large landlocked country in the Sahel region of Africa, with an area of 1,284,000 square kilometers. The nearest major seaports, Douala in Cameroon and Lagos in Nigeria, are located 1,800 and 2,200 kilometers away, respectively, from the capital city, N'Djaména. The population was estimated at some 6.5 million at end-1995, with an annual growth rate of 2.5 percent. Prolonged civil strife, dating back to 1979, destroyed the country's infrastructure, which, added to recurrent droughts, resulted in a widespread disruption of the economy. Some political stability was brought about by the accession to power of a new government in 1990; an interim legislative body was installed in 1993, and a new constitution was approved by referendum in March 1996. Presidential and parliamentary elections are slated for June and October 1996.

The Chadian economy depends heavily on the primary sector, which accounts for 40 percent of GDP, and is highly vulnerable to the vagaries of the Sahelian climate. Agricultural exports are composed primarily of cotton and livestock. Cereal production falls short of domestic needs, with a deficit averaging 14 percent of domestic consumption.

A structural adjustment program was implemented with some success during 1987-90. However, the increased political instability that prevailed over the period 1990-93 brought structural reforms to a standstill. Chad resumed adjustment and reform policies in 1994-95. An adjustment program was put in place in the aftermath of the devaluation of the CFA franc, but quickly went off track. The authorities renewed their commitment to reform in late 1994 and embarked on the current comprehensive structural adjustment program.

2. Overall developments

After a noticeable deterioration during the years 1991-93, Chad's economy rebounded in 1994 following the devaluation and continued to expand in 1995. During 1991-93, economic and financial developments were characterized by persistent domestic and external imbalances, which negatively affected economic growth and increased poverty. Real GDP and import volumes stagnated, export volumes dropped by 12 percent, and the terms of trade declined by 11 percent; investment remained low, barely averaging 10 percent of GDP, and real consumption per capita declined by 15 percent (Table 1). Consequently, the external resource gap widened from 18 percent of GDP in 1991 to 23 percent in 1993 (Chart 1).

The financial situation of the country deteriorated considerably during the period. The overall government budget deficit averaged 17 percent of GDP, while the external current account deficit (excluding grants) widened by 8 percentage points to 26 percent of GDP in 1993. Gross domestic savings were negative and reached an average of -10.4 percent of GDP, while recourse

Table 1. Chad: Gross Domestic Product by Sector of Origin, 1991-95

	1991	1992	1993	1994	1995 Est.
(At constant 1977 prices)					
Primary sector	89,512	103,105	80,606	102,188	102,000
Agriculture ^{1/}	64,325	77,245	55,360	76,404	76,299
Food crops	57,795	72,676	51,809	70,540	69,937
Cotton	6,530	4,569	3,551	5,864	6,362
Livestock	25,187	25,860	25,246	25,784	25,701
Secondary sector	33,254	32,706	28,781	27,657	30,984
Manufacturing industries	29,323	28,383	25,283	24,172	26,742
Of which: cotton processing	(7,324)	(8,237)	(5,743)	(4,538)	7,446
Construction and public works	2,137	2,501	1,803	1,801	2,379
Other ^{2/}	1,794	1,822	1,695	1,684	1,863
Tertiary sector	82,416	85,185	75,967	78,305	81,555
Commerce, transport, and communications	61,377	64,031	54,718	56,819	60,069
Other services, including general government	21,039	21,154	21,249	21,486	21,486
GDP at factor cost	205,182	220,996	185,354	208,150	214,539
Indirect taxes (net)	9,279	10,538	9,891	6,970	7,567
GDP at 1977 market prices	214,461	231,534	195,245	215,120	222,106
Implicit GDP deflator index (1977=100)	173.8	151.4	149.4	213.3	240.2
GDP at current market prices	372,762	350,632	291,693	458,891	533,488
(Annual percentage changes)					
Memorandum items:					
GDP at 1977 market prices	6.4	8.0	-15.7	10.2	3.2
GDP at current market prices	16.7	-5.9	-16.8	57.3	16.3
Implicit GDP deflator	9.7	-12.9	-1.3	42.8	12.6

Sources: Data provided by the Chadian authorities; and staff estimates.

^{1/} No data for forestry and fishing are available.

^{2/} Comprises mining, and electricity and water distribution.

EXPENDITURE, RESOURCE GAP AND SAVINGS, 1991-95 (in percent of GDP)

Source: Chadian authorities.

to foreign savings increased markedly, averaging 23.2 percent of GDP. ^{1/} These imbalances were exacerbated by an expansionary credit policy, including a large monetization of the Treasury's deficit, which led to an acute liquidity crisis in the banking system; the external position of the banking system deteriorated sharply and the portfolios of the commercial banks worsened considerably.

The economy responded vigorously to the January 1994 devaluation of the CFA franc, with real GDP growth estimated to have reached 10.2 percent in 1994, albeit slowing to 3.2 percent in 1995. The increase in prices as measured by the GDP deflator reached 43 percent in 1994, but declined sharply in 1995. These positive results were accompanied by a narrowing of the domestic and external financial imbalances, as a result of the satisfactory implementation of structural adjustment policies beginning in mid-1994. The immediate impact of the devaluation was to sharply reduce consumption and imports, as households shifted final consumption away from imported goods toward locally produced goods. External trade was restructured in favor of exports, which, together with a substantial 18 percent improvement in the terms of trade, led to a trade surplus of about 0.7 percent of GDP in 1995, and the narrowing of the resource gap by some 8 percentage points of GDP in 1994-95, compared with 1993 (Table 2).

The recovery of economic growth was accompanied by a reduction in consumption and a resumption of investment. Gross domestic expenditure averaged 115 percent of GDP, or 5 percentage points less than in 1991-93. Private sector investment remained limited, averaging 3.4 percent of GDP in 1994-95 as against 1.3 percent in 1991-93, while government investment rose from an average of 8.3 percent of GDP in 1991-93 to 12.4 percent in 1994-95. Total consumption declined to the equivalent of 98.4 percent of GDP in 1995, thus allowing for positive domestic savings (Chart 1).

Monetary policy during the period 1993-95 reflected the authorities' desire to revitalize the banking system. To that end, credit policy was restrained. The level of advances to the Treasury was contained and efforts were undertaken to restructure several banks with problematic balance sheets.

All together, the financial situation of the country improved in 1994-95, with the overall government budget deficit declining to 15.3 percent of GDP, while the external current account deficit before grants was reduced to

^{1/} Consisting of current grants (7.4 percent of GDP), capital grants (6.8 percent of GDP), net drawings (8.1 percent of GDP), and accumulation of external arrears (0.9 percent of GDP).

Table 2. Chad: Supply and Use of Resources at Current Prices, 1991-95

	1991	1992	1993	1994	1995 Est.
(In billions of CFA francs)					
Gross domestic product	372.8	350.6	291.7	458.9	533.5
Domestic demand	438.6	419.0	357.9	536.5	597.9
Consumption	409.9	389.1	321.2	462.8	524.1
Central Government	60.0	66.5	58.7	65.7	66.9
Private sector	349.9	322.5	262.5	397.1	457.3
Gross Investment	28.7	29.9	36.8	73.7	73.8
Central Government	25.9	27.6	29.6	59.2	61.8
Private sector	2.9	2.3	7.1	14.4	12.0
Resource gap	-65.9	-68.4	-66.3	-77.6	-64.4
Exports of goods and nonfactor services	63.3	55.3	55.2	100.4	136.2
Goods	54.6	48.2	43.0	83.2	115.0
Nonfactor services	8.7	7.1	12.2	17.2	21.2
Imports of goods and nonfactor services	-129.2	-123.6	-121.5	-178.0	-200.6
Goods	-70.5	-64.3	-58.1	-97.6	-111.2
Nonfactor services	-58.7	-59.3	-63.4	-80.4	-89.3
Gross domestic savings	-37.1	-38.4	-29.5	-3.9	9.4
Private unrequited transfers	-2.5	-3.9	-6.5	-5.5	-4.4
Current public transfers	28.8	28.7	17.6	34.3	32.3
Net factor income from abroad	-0.7	0.7	-3.3	-5.2	-4.7
Gross national savings	-11.6	-12.9	-21.8	19.7	32.6
Central Government	-2.2	-25.8	-19.0	-7.1	3.0
Private sector	-9.3	12.9	-2.8	26.8	29.6
Saving-investment balance	-40.3	-42.8	-58.5	-54.0	-41.2
Central Government	-28.1	-53.4	-48.7	-66.4	-58.8
Private sector	-12.2	10.6	-9.9	12.4	17.6
Gross national product	372.1	351.4	288.4	453.7	528.8
National disposable income	398.3	376.2	299.4	482.5	556.7
(In percent of GDP)					
Gross domestic product	100.0	100.0	100.0	100.0	100.0
Domestic demand	117.7	119.5	122.7	116.9	112.1
Consumption	110.0	111.0	110.1	100.9	98.2
Central Government	16.1	19.0	20.1	14.3	12.5
Private sector	93.9	92.0	90.0	86.5	85.7
Gross Investment	7.7	8.5	12.6	16.1	13.8
Central Government	6.9	7.9	10.2	12.9	11.6
Private sector	0.8	0.7	2.4	3.1	2.2
Resource gap	-17.7	-19.5	-22.7	-16.9	-12.1
Exports of goods and nonfactor services	17.0	15.8	18.9	21.9	25.5
Goods	14.6	13.8	14.7	18.1	21.6
Nonfactor services	2.3	2.0	4.2	3.7	4.0
Imports of goods and nonfactor services	-34.7	-35.3	-41.6	-38.8	-37.6
Goods	-18.9	-18.3	-19.9	-21.3	-20.9
Nonfactor services	-15.7	-16.9	-21.7	-17.5	-16.7
Gross domestic savings	-10.0	-11.0	-10.1	-0.9	1.8
Private unrequited transfers	-0.7	-1.1	-2.2	-1.2	-0.8
Current public transfers	7.7	8.2	6.0	7.5	6.1
Net factor income from abroad	-0.2	0.2	-1.1	-1.1	-0.9
Gross national savings	-3.1	-3.7	-7.5	4.3	6.1
Central Government	-0.6	-7.4	-6.5	-1.6	0.6
Private sector	-2.5	3.7	-0.9	5.8	5.5
Saving-investment balance	-10.8	-12.2	-20.1	-11.8	-7.7
Central Government	-7.5	-15.2	-16.7	-14.5	-11.0
Private sector	-3.3	3.0	-3.4	2.7	3.3
Gross national product	99.8	100.2	98.9	98.9	99.1
National disposable income	106.9	107.3	102.6	105.1	104.4

Sources: Data provided by the Chadian authorities; and staff estimates and projections.

13.8 percent of GDP. In turn, gross domestic savings reached a positive 0.5 percent of GDP. Recourse to foreign savings (excluding debt relief) was reduced by 1.8 percentage points to 21.4 percent of GDP. ^{1/}

3. Production, prices, and employment

a. Production trends

Real GDP growth fluctuated widely during the 1991-95 period. After an average annual increase of 7.2 percent in 1991-92, real GDP plummeted 15.9 percent in 1993, owing to a particularly strained political situation and a severe drought, which affected agriculture production. The economy reacted vigorously to the devaluation of the CFA franc and grew by 10.2 percent in 1994; agriculture's value added increased by 38 percent in real terms, with cotton output reaching 156,700 tons, compared with 95,000 tons in 1993. In 1995, bad weather conditions and deterioration in security in the most economically advanced regions had a negative effect on food crops and resulted in economic growth slowing down to 3.2 percent in real terms.

(1) Primary sector

The primary sector in Chad is heavily dependent on weather conditions. The country has two main agricultural regions: the Sahelian grassland in the center of the country and the Sudanian zone, essentially a savanna in the south. Cotton and more than 70 percent of foodstuffs are raised in the Sudanian zone. The agriculture subsector essentially comprises the production of foodstuffs for the domestic market and the production of cotton seed which, after local processing, is exported. Subsistence production of food crops by individual farmers is the principal economic activity and fluctuates widely depending upon rainfall; cereals (mainly millet, sorghum, maize, and rice) account for 80 percent of output, while oils, groundnuts, and sesame account for 20 percent (Table 3). Cotton and livestock activities constitute the most important source of income for the rural population.

The agricultural policies have focused on expanding and diversifying domestic production, with a view to developing the sector's potential, while ensuring self-sufficiency especially in cereals. To that end, efforts were made to provide extension services to farmers and to improve rural infrastructures. The government also supported livestock production by providing vaccinations and other sanitary services, with a view to reducing losses and stimulating growth of the herd. Production incentives were limited before 1994, especially for cotton, by low world commodity prices and the real appreciation of the CFA franc. The

^{1/} Composed of current grants (6.7 percent of GDP), capital grants (8.2 percent of GDP), public loans (5 percent of GDP) and accumulation of external arrears (1.5 percent of GDP).

Table 3. Chad: Production of Principal Food Crops, 1991/92-1995/96

	1991/92	1992/93	1993/94	1994/95	1995/96 Est.
	(In thousands of metric tons)				
Sudanian zone	631.8	687.7	562.3	751.0	684.0
Cereals	454.5	494.7	394.5	565.7	493.0
Millet	145.3	135.7	104.4	119.7	102.9
Sorghum and berber	242.6	258.8	241.1	305.6	289.9
Rice and maize	66.6	100.2	49.0	140.4	100.2
Oils	177.3	193.0	167.8	185.3	191.0
Groundnut	163.9	176.2	158.0	163.5	179.7
Sesame	13.4	16.8	9.8	21.8	11.3
Sabelian zone	351.7	545.1	386.2	653.5	486.5
Cereals	316.2	491.5	352.2	606.0	439.1
Millet	122.8	170.1	130.0	200.0	162.6
Sorghum and berber	189.6	292.8	139.4	296.9	229.7
Rice and maize	3.8	28.6	82.8	109.1	46.8
Oils	35.5	53.6	34.0	47.5	47.4
Groundnut	33.4	48.7	32.0	43.7	43.7
Sesame	2.1	4.9	2.0	3.8	3.7
Total cereals	770.7	986.2	746.7	1171.7	932.1
Total oils	212.8	246.6	201.8	232.8	238.4
Total agricultural production	983.5	1232.8	948.5	1404.5	1170.5

Sources: Data provided by the Chadian authorities; and staff estimates.

devaluation, which allowed for increased producer prices, thus triggered a strong supply response. However, it revealed also the necessity for agricultural policies to find a balance between stimulating cotton production and increasing foodstuff output to make up for the country's food deficit, by providing incentives and assistance to the small farmers to improve their productivity.

(a) Agricultural output

In the absence of much ability to increase the amount of arable land, foodstuff production and cotton production are closely linked. Production of foodstuffs, which represents on average about 90 percent of agricultural production, doubled during 1991-92 to 1.2 million tons, reflecting the farmers' reaction to the reduction in the world prices of cotton. The shift of demand to locally produced goods induced by the devaluation of the CFA franc led to a rise in foodstuff output by 48 percent in 1994. However, renewed insecurity in some agricultural areas and bad weather conditions resulted in a 17 percent decline in 1995. The country's cereal balance fluctuated between quasi-equilibrium reached in 1992 and 1994 and deficits of 238,000 tons in 1995 (23 percent of total needs), and 252,000 tons in 1993 (28 percent of total needs) (Table 4 and Chart 2).

Cotton is the main cash crop in Chad--the most important export commodity, accounting for about half of the country's export earnings--and accounts for 10 percent of the agricultural sector's value added and for 25 percent of the value added of the manufacturing sector. Cottonseed is produced by small landowners under the supervision of the official marketing agency, COTONTCHAD, which supplies them with seeds, fertilizers, pesticides, and other inputs. The producer price of cotton is fixed by the Government and is adjusted periodically to reflect world prices. Cotton production fluctuated widely during the period 1991-95, reflecting unstable producer prices and variable weather conditions. After a 10 percent increase in 1991 to 174,000 tons, output declined by 29 percent in 1992 in response to an 11 percent reduction in the producer price. Although the producer price was restored to its 1991 level in 1993, output continued to decline to 95,000 tons (a drop of 24 percent), and productivity, as measured by the yield per hectare, decreased by 4 percent to 599 kilograms per hectare. In 1994-95, following the devaluation of the CFA franc and favorable world prices, the producer price was increased twice, by 33 percent in 1994, and by an additional 16 percent, to CFAF 140, in 1995. As a result, output rebounded in 1994, reaching 157,000 tons and expanded by a further 8.5 percent in 1995, to 170,000 tons. The yield per hectare rose to 770 kilogram in 1994 and to 805 kilogram in 1995 (Table 5 and Chart 2).

(b) Livestock

Since 1991, livestock has contributed on average about 11 percent to nominal GDP, although its share declined from 12.3 percent in 1991-93 to 9.8 percent in 1994 and 10.3 percent in 1995 (Table 1). In volume terms, the size of the herd has been growing steadily, at an annual rate of

Table 4. Chad: Cereal Production, Consumption, and Deficit, 1991-95

(In thousands of metric tons)

	1991	1992	1993	1994	1995
Production	770.7	986.2	746.7	1171.7	932.1
Losses and seed use <u>1/</u>	115.6	147.9	112.0	175.8	139.8
Domestic consumption <u>2/</u>	824.2	848.8	886.8	956.0	1030.6
Cereal Deficit <u>3/</u>	-169.1	-10.5	-252.1	39.9	-238.3

Sources: Data provided by the Chadian authorities; and staff estimates.

1/ Estimated at around 15 percent of production.

2/ Calculated by using minimum food requirements per person: 80 kilograms per person in the saharan zone, 135 kilograms in the sahelian zone, and 150 kilograms in the sudanian zone.

3/ Covered by external food aid and border trade.

Table 5. Chad: Cotton Production, 1991/92-1995/96 ^{1/}

	1991/92	1992/93	1993/94	1994/95	1995/96
(In thousands of metric tons)					
Production					
Unginned	174.1	124.5	94.8	156.7	170.0
Traditional cultivation	44.6	29.1	26.1	24.3	31.9
Productivity program	129.5	95.4	68.7	132.4	138.1
Ginned	67.7	47.2	37.1	61.2	67.2
Ginning ratio (in percent)	38.9	37.9	39.1	39.1	39.5
(In thousands of hectares)					
Area under cultivation					
Total	283.4	199.4	158.4	203.4	211.0
Traditional planting	117.7	80.4	64.5	60.6	71.1
Productivity program	165.7	119.0	93.9	142.8	139.9
Share of productivity program (i	58.5	59.7	59.3	70.2	66.3
(In kilograms per hectare)					
Yield per hectare					
Total average yield	614.3	624.4	598.5	770.4	805.5
Traditional planting	378.9	361.9	404.7	401.0	448.0
Productivity program	781.5	801.7	731.6	927.2	987.1
(In CFA francs per kilogram)					
Producer prices					
Grade 1	90.0	80.0	90.0	120.0	140.0
Grade 2	70.0	60.0	60.0	90.0	100.0
Grade 3	45.0	30.0	30.0	60.0	60.0
Average weighted price ^{2/}	88.3	79.7	89.6	119.9	139.0
Producers' gross income	15,403	9,733	8,494	18788.0	23,630

Sources: Data provided by the Chadian authorities; and staff estimates.

^{1/} Marketing year, starting in November.

^{2/} Before profit distribution.

AGRICULTURE SECTOR, 1991-95

Source: Chadian authorities.

1/ Net of losses.

2.7 percent, reaching 11.5 million head at end-1995. This growth was the result of the active technical support of the Government under a five-year National Livestock Program, which ended in 1994. The program aimed at creating stock-breeders' cooperatives and providing adequate veterinarian services. According to official data, exports of livestock have not followed the same pattern as production. They declined steadily to 33,000 head during 1991-93, again owing to the appreciation of the CFA franc, which eroded Chad's competitiveness in Nigeria, the main export market for cattle. The devaluation boosted exports to 106,000 head in 1994 and 121,000 head in 1995 (Table 6). 1/

(2) The industrial sector

The share of the secondary sector in GDP is relatively small in Chad, averaging 17 percent over the period 1991-95 (Table 1). The secondary sector is dominated by manufacturing activities, which represent 90 percent of the value added of the sector. Industrial activities are concentrated in four enterprises: the Société Cotonnière du Tchad (COTONTCHAD), the Société Sucrière du Tchad (SONASUT), the Manufacture de Cigarettes du Tchad (MCT), and the Brasserie du Logone (BDL). The value added of the sector declined steadily during 1991-94 at an average rate of 9 percent in real terms, because of fierce competition from large-scale smuggling from neighboring countries, mostly Nigeria, and systemic sectoral distortions and weaknesses. It increased by 12 percent in 1995, owing mainly to the 64 percent increase in real terms in the value added of cotton processing, while the value added of the other manufacturing activities is estimated to have declined by 2 percent in real terms.

Cotton processing activity fluctuated with cottonseed output, whereas the ginning ratio was stable at 38.5 percent throughout the period 1991-95. 2/ Thus, production of cotton fiber, after averaging 42,200 tons in 1992-93 (38 percent less than in 1991), increased to 61,000 tons in 1994 and 67,200 tons in 1995 (Table 5).

The financial situation of COTONTCHAD worsened dramatically in 1991-93, with a cumulative loss estimated at more than CFAF 16.3 billion. To improve the financial situation of the company, a continuous cost reduction action program has been carried out, the transport activities of the company were privatized in 1992, and measures were taken to improve performance and productivity. These measures, together with the impact of the devaluation

1/ As a result, official export numbers are not consistent with balance of payments figures. This discrepancy has not been explained and reflects systemic weaknesses in economic data in Chad. However, owing to the heavy tax burden imposed on livestock activity and widespread smuggling, official data underestimate exports to Nigeria.

2/ Because of the crop cycle, cotton processing value added in any given calendar year reflects cottonseed production in the previous year.

Table 6. Chad: Livestock Population and Exports, 1991-95

	1991	1992	1993	1994	1995
Size of herd	(In thousands of head)				
Cattle	4,400	4,506	4,615	4,727	4,842
Sheep and goats	4,904	5,052	5,204	5,362	5,525
Horses	203	207	211	215	219
Camels	565	582	600	618	637
Donkeys	249	254	259	264	269
Pigs	15	15	16	17	18
Total	10,336	10,616	10,905	11,203	11,510
	(Annual percentage changes)				
Cattle	2.4	2.4	2.4	2.4	2.4
Sheep and goats	3.0	3.0	3.0	3.0	3.0
Horses	2.0	2.0	1.9	1.9	1.9
Camels	3.0	3.0	3.1	3.0	3.1
Donkeys	2.0	2.0	2.0	1.9	1.9
Pigs	5.0	0.0	6.7	6.3	5.9
Total	2.7	2.7	2.7	2.7	2.7
Exports	(In thousands of head)				
Cattle	39.9	26.2	29.0	100.2	117.2
Sheep and goats	4.2	4.2	4.4	6.0	4.0
Camels	---	---	---	0.3	0.1
Total	44.1	30.4	33.4	106.2	121.3

Sources: Data provided by the Chadian authorities; and staff estimates.

resulted in a substantial improvement during 1994-95, with net profits increasing to CFAF 3.8 billion in 1994, and an estimated CFAF 14.0 billion in 1995 (Table 7).

In the other industrial activities, sugar output fluctuated near 26,000 tons, whereas beverage production, essentially beer, displayed a steadily declining trend, from 144,400 hectoliters (hl) in 1991 to 95,000 hl in 1995. Beginning in 1990, production of cooking oil declined, reaching 70,000 hl in 1993, but increased in the wake of the devaluation after local producers regained the market shares lost to imports. Output reached 87,000 hl in 1994 and 117,000 hl in 1995. Production of cigarettes grew rather steadily from 23.8 million packs in 1991 to 25.0 million packs in 1993 and 28 million packs in 1995.

Production and distribution of electricity and water and the potential for oil production are reviewed in Section III.

(3) The tertiary sector

The tertiary sector contributes 40 percent of GDP (Table 1). After declining by 7 percent in real terms during 1991-93, the value added of the sector increased by 3.1 percent in 1994 and 4.2 percent in 1995, because of a rebound of activity in commerce and transport in connection with the recovery of overall economic growth. An important segment of commercial activities lies in the marketing of petroleum products, which are imported primarily from Cameroon and Nigeria by foreign oil companies--mainly Total, Shell, and Mobil, which constitute the Groupement des Pétroliers Privés (GPP), and Elf--and by local petroleum product marketing companies, which are grouped in the Syndicat des Pétroliers Privés (SPP). 1/

b. Prices and employment

The official consumer price index (CPI) for N'Djaména dates back to 1988 and is based on a 1972 household survey. The weights of local goods and imported goods are 77 percent and 23 percent, respectively (Table 8). The increase in the index was 2.2 percent on average during the years 1991-92, thanks to a 4 percent decline in the price of the imported consumption goods which partially offset an increase of 4.4 percent in the price of locally produced goods. In 1993, there was a sharp decline in the CPI of 8.2 percent, reflecting a 4 percent decline in the prices of imported goods and a 9.3 percent drop in the prices of the locally produced goods. The CPI rose by 42 percent in 1994 on account of the devaluation of the CFA franc, which resulted in a 51 percent average increase in the price of imported goods. The index of foodstuff prices rose by 49 percent, while the

1/ Petroleum product imports and consumption are not well captured by official data, because of the large informal sector, legal and illegal. Petroleum imports for 1995 are roughly estimated at 120,000 cubic meters.

Table 7. Chad: Financial Indicators of Cotton Marketing, 1990/91-1994/95 ^{1/}

	1990/91	1991/92	1992/93	1993/94	1994/95
	<u>(In thousands of metric tons)</u>				
Export volume of ginned cotton	57.7	63.7	43.0	32.6	52.5
	<u>(In CFA francs per kilogram)</u>				
Average export price and cost					
Export price (f.o.b.)	436.0	362.0	302.0	710.0	948.0
Export cost ^{2/}	459.0	454.0	447.0	588.0	584.5
Net profit (+) or loss (-)	-23.0	-92.0	-145.0	122.0	363.5
	<u>(In millions of CFA francs)</u>				
COTONTCHAD financial results					
Gross profit (+) or loss (-)	-1,000	-4,710	-6,244	5,058	16,200
Amortization	-1,635	-1,445	-1,281	-1,293	-2,200
Net profit (+) or loss (-)	-2,635	-6,155	-7,525	3,765	14,000

Sources : Data provided by the Chadian authorities; and staff estimates.

^{1/} Marketing year, starting in November.

^{2/} Includes provisions for amortization, but excludes other charges.

CONSUMER PRICE INDEX, 1991-95

(Changes in percent)

Source: Chadian authorities.

Table 2. Chad: Consumer Price Index, 1991-95
(February 1993 = 100)

	Local products	Imported products	Food-stuffs	Nonfood-stuffs	Services	Overall index	Percentage change	
Weights (in percent)	77.0	23.0	59.0	30.3	10.7	100.0	(A)	(B)
1991	105.1	98.2	105.5	97.3	109.9	105.5	3.7	3.7
1992	101.9	94.6	100.6	96.8	107.8	100.2	-3.2	-3.2
1993	92.4	90.5	86.7	96.3	108.9	92.8	-7.4	-7.4
1994	129.5	136.6	129.5	127.6	126.8	131.1	41.3	41.3
1995	138.0	160.0	138.0	155.0	133.0	143.0	9.1	9.1
1993								
March	89.6	89.8	84.4	93.7	107.0	89.6	-6.2	-11.6
June	92.4	90.3	86.2	96.2	111.4	91.9	2.6	-9.5
September	95.1	94.2	88.2	102.0	111.7	94.9	3.3	-5.6
December	96.2	93.1	93.1	96.4	105.9	95.5	0.6	0.0
1994								
January	95.4	100.5	94.0	98.0	107.0	96.6	1.2	2.7
February	107.0	118.2	107.7	113.4	109.3	109.6	13.5	21.9
March	119.1	126.2	121.7	122.3	111.0	120.8	10.2	34.8
April	131.1	135.2	135.2	129.2	123.4	132.1	9.4	53.2
May	134.6	143.5	137.2	138.2	129.9	136.7	3.5	52.6
June	138.0	141.1	141.1	136.7	130.9	138.7	1.5	50.9
July	137.2	142.8	140.8	136.3	132.3	138.5	-0.1	49.1
August	142.3	145.4	145.8	140.4	135.0	143.0	3.2	51.5
September	143.0	147.9	147.2	141.6	134.7	144.1	0.8	51.8
October	139.8	146.6	141.7	141.7	138.5	141.3	-1.9	52.4
November	132.5	145.4	131.4	143.7	134.6	135.5	-4.1	47.1
December	133.8	147.0	133.3	144.1	136.7	136.9	1.0	43.4
1995								
January	135.7	149.6	135.0	147.4	136.8	138.9	1.5	43.8
February	137.1	150.4	136.5	150.3	132.3	140.2	0.9	27.9
March	132.9	152.6	132.0	150.9	130.1	137.5	-1.9	13.8
April	130.4	154.9	129.6	151.1	129.9	136.1	-1.0	3.0
May	130.6	156.5	130.4	151.0	130.2	136.6	0.4	-0.1
June	138.8	160.7	141.2	153.6	131.5	143.9	5.3	3.7
July	140.1	160.3	142.5	153.3	133.5	144.8	0.6	4.5
August	142.4	160.4	143.4	156.5	135.8	146.6	1.2	2.5
September	141.4	162.9	141.5	158.9	137.8	146.4	-0.1	1.6
October	140.8	167.7	140.0	163.9	138.8	147.1	0.5	4.1
November	142.6	169.6	144.0	164.3	132.3	148.9	1.2	9.9
December	142.2	169.4	144.5	163.0	130.0	148.6	-0.2	8.5

Sources: Data provided by the Chadian authorities; and staff estimates.

1/ (A) is relative to preceding period, and (B) relative to same period of preceding year.

prices of manufactured goods and services rose by 32.5 and 16.4 percent, respectively (Chart 3). Inflation declined to 8.5 percent during the 12 months of 1995. This increase could have been lower if resumption of military fighting in some agricultural areas had not hampered production, resulting in lower output and sustained pressures on food prices during the last quarter of the year, a period of seasonally declining food prices. As a result, after a cumulative increase of 7.0 during the first half of the year, the price index rose by an additional 1.5 in the last quarter. Overall in 1995, foodstuff prices are estimated to have increased by 6.6 on average, while prices of manufactured goods and services rose by an average of 21.5 and 4.9, respectively.

Data on employment and its distribution by sector are not available for recent years. However, the April 1993 census showed that active population was estimated at 2.7 million, with 2.3 million persons in the rural areas and the remainder in urban areas. Overall, it is estimated that 83 percent of the active population works in the agricultural sector. The size of the civil service remained stable, at about 27,000, throughout the period 1991-95. In 1995, the authorities carried out a civil service census with a view to streamlining and reforming it. The census was completed at the end of 1995, and its final results are expected in mid-1996.

As the rural economy is dominated by family labor in agriculture and livestock, wage labor is concentrated in the modern economy and the civil service. However, data on wages in the modern private sector remain sketchy and unreliable.

4. Public finance

The fiscal year in Chad coincides with the calendar year, with a complementary period of one month in the following year. Government revenue and expenditure are recorded on a cash basis and on a payment order basis, respectively. 1/ Although efforts have been made in recent years to improve budgetary procedures and address some of the statistical weaknesses hampering public finance analysis, financial management remains poor. Budgetary management continues to suffer from a lack of material and supplies, and low productivity of government employees, owing to lack of training and irregularity in salary payments.

a. Main developments

The Government's financial situation remained difficult throughout the period 1991-95, with the budget deficit (excluding grants) averaging

1/ Government financial operations comprise those of the Treasury and of the Autonomous Amortization Fund (Caisse Autonome d'Amortissement) before it was abolished in 1994. They do not include operations of the social security system and of other public agencies.

17.5 percent. 1/ During 1991-94, the current account deficit increased steadily from an average of 6 percent of GDP in 1991-92 to an average of 7.6 percent of GDP during 1993-94 (Tables 9 and 10). Investment expenditure increased steadily as a percentage of GDP from 7 percent in 1991 to 13 percent in 1995. 2/ It was mostly financed through foreign grants (60 percent) and concessional external loans (37.5 percent). The public finance situation improved markedly in 1995, owing mainly to effective implementation of fiscal reforms and improvements in tax administration. The current account deficit was limited to 3.7 percent of GDP, and the overall deficit (excluding grants) was reduced by 5 percentage points, to 15 percent of GDP. However, owing to a significant shortfall in external financing, additional domestic arrears were accumulated in an amount of CFAF 10.2 billion (2.2 percent of GDP), while the net decline in the stock of external arrears did not exceed CFAF 14.2 billion.

b. Revenue trends

Overall revenue performance was weak during 1991-95, with revenue averaging less than 9 percent of GDP (Table 9). After some progress during 1991-93, total revenue declined by 3 percentage points of GDP in 1994, barely reaching 7 percent of GDP, mainly because of widespread tax avoidance facilitated by systemic weaknesses in tax administration. In order to turn the situation around, the authorities centered their 1995 policy on strengthening tax and customs administration, and implemented a comprehensive reform of the customs directorate, which resulted in revenues increasing by 40 percent, to some CFAF 45 billion (8.4 percent of GDP).

A noticeable shift in the structure of government revenue took place in 1994-95, with the share of tax revenue increasing to 86 percent of total revenue compared with 77 percent in 1991-93. At the same time, the share of domestic taxes in total tax revenue declined from an average of 82 percent in 1991-93 to 72 percent in 1994-95, mirroring the increase in the share of international trade taxes from 18 percent to 28 percent. Of particular note was the increase in the share of income taxes in total tax revenue, from 26 percent in 1991-93 to 29 percent in 1994 and 39 percent in 1995 (Table 11).

To carry out the 1995 fiscal reforms, the tax directorate was strengthened along with an improvement in the functioning of, and the coordination between, the main directorates within the Ministry of Finance. In addition, there were extensive reforms of trade taxes and customs administration (see Section II).

1/ The budget deficit was financed through net concessional loans (21 percent), balance of payment grants (12 percent), arrear accumulation (6 percent), debt relief (1 percent), and domestic financing (21 percent).

2/ The more than 100 percent increase in investment outlays reflects in part the impact of the devaluation on the prices of investment goods.

Table 9. Chad: Indicators of Central Government Operations, 1991-95

	1991	1992	1993	1994	1995
(In percent of GDP)					
Total revenue and grants	11.3	13.4	15.3	16.6	15.4
Total revenue	8.6	9.0	10.0	7.0	8.4
Tax revenue	6.9	7.3	7.8	5.8	7.4
Income tax	2.3	2.5	2.4	2.0	3.3
Tax on goods and services	2.1	2.2	2.3	2.0	1.2
Of which: petroleum taxes	0.7	0.7	0.8	0.5	0.4
Tax on international trade	1.3	1.4	1.4	1.4	2.3
Other taxes	1.2	1.2	1.7	0.5	0.7
Nontax revenue	1.7	1.7	2.2	1.2	1.0
Total grants	2.6	4.4	5.3	9.6	7.0
Total expenditure	21.5	27.5	28.7	27.2	23.7
Current expenditure	14.6	15.1	17.8	14.3	12.1
Wages and salaries	5.4	5.8	7.8	5.7	5.6
Materials and supplies	3.3	2.8	3.0	2.8	2.2
Transfers	0.9	1.0	0.8	1.1	0.9
Defense	3.2	3.3	3.8	2.7	1.9
Other	0.8	1.2	0.7	0.4	0.1
Interest	0.9	1.0	1.7	1.7	1.4
Of which: external	0.9	0.9	1.5	1.4	1.2
Current balance (deficit = -)	-5.9	-6.1	-7.8	-7.3	-3.7
Investment expenditure	6.9	7.9	10.2	12.9	11.6
Domestically financed	0.2	0.3	0.4	0.3	0.1
Foreign-financed	6.8	7.6	9.7	12.6	11.5
Restructuring of banking system	0.0	4.5	0.8	0.0	0.0
Overall deficit (commitment basis)					
Excluding grants	-12.8	-18.5	-18.7	-20.2	-15.3
Including grants	-10.2	-14.1	-13.5	-10.6	-8.3
Change in payments arrears	2.2	3.2	5.2	1.3	1.2
External (interest)	0.3	0.5	1.0	0.5	-0.7
Domestic	1.9	2.7	4.3	0.8	1.9
Overall deficit (cash basis, excluding grants)	-10.6	-15.3	-13.5	-18.9	-14.1
Overall deficit (cash basis, including grants)	-8.0	-10.9	-8.2	-9.3	-7.1
Financing	8.0	10.9	8.2	9.3	7.1
External (net)	8.2	5.3	5.2	9.5	8.4
Loans	4.5	3.4	4.4	5.5	4.5
Amortization due	-0.6	-1.1	-2.3	-1.7	-1.1
Change in external arrears (principal)	0.2	0.7	1.7	0.9	-1.9
Debt relief/rescheduling obtained	0.0	0.0	0.0	0.9	3.2
Other external assistance	4.1	2.3	1.3	3.9	3.7
Domestic (net)	-0.2	5.6	3.0	-0.2	-1.3
Banking system	-0.0	5.0	1.3	0.4	-1.1
Nonbank sector	-0.2	0.5	1.7	-0.5	-0.2
Sale of assets	0.0	0.0	0.0	0.0	0.0
(Annual percentage changes)					
Total revenue	2.1	-2.6	-7.2	9.7	40.3
Tax revenue	-12.1	-0.9	-11.4	17.6	49.4
Of which: income tax	13.5	0.9	-20.9	33.6	89.9
Tax on goods and services	-8.4	-3.4	-10.4	34.9	-28.0
Tax on international trade	-35.9	-0.2	-19.4	56.5	96.3
Nontax revenue	401.8	-9.2	10.9	-17.7	-4.7
Total grants	-74.5	59.8	-0.7	187.5	-15.7
Total expenditure	-24.2	20.1	-13.0	48.9	1.4
Current expenditure	14.1	-2.5	-1.8	26.1	-1.2
Wages and salaries	-2.2	0.8	12.1	14.3	15.9
Materials and supplies	53.1	-21.6	-10.1	44.2	-6.4
Transfers	9.3	10.9	-34.9	113.5	-1.0
Defense	26.1	-4.9	-3.4	11.3	-18.9
Other	-32.8	36.5	-47.5	-14.4	-73.2
Interest	86.5	9.1	33.6	57.8	-4.9
Investment expenditure	-55.5	6.8	7.3	99.9	4.3

Sources: Data provided by the Chadian authorities; and staff estimates and projections.

Table 10. Chad: Consolidated Government Operations, 1991-95

(In billions of CFA francs)

	1991	1992	1993	1994	1995
Total revenue and grants	41,943	46,921	44,533	76,195	82,108
Total revenue	32,243	31,421	29,149	31,964	44,834
Tax revenue	25,746	25,523	22,606	26,577	39,699
Income tax	8,606	8,681	6,863	9,172	17,422
Tax on goods and services	7,820	7,558	6,771	9,135	6,578
Of which: petroleum taxes	2,452	2,525	2,451	2,254	2,046
Tax on international trade	4,929	4,917	3,962	6,199	12,166
Other taxes	4,390	4,367	5,011	2,071	3,533
Nontax revenue	6,498	5,898	6,543	5,387	5,135
Total grants	9,700	15,500	15,384	44,231	37,273
Total expenditure	80,133	96,273	83,781	124,710	126,482
Current expenditure	54,261	52,891	51,948	65,481	64,684
Wages and salaries	20,112	20,266	22,713	25,968	30,109
Materials and supplies	12,469	9,770	8,783	12,664	11,851
Transfers	3,257	3,611	2,349	5,015	4,963
Defense	12,063	11,470	11,085	12,333	10,000
Other	3,043	4,154	2,182	1,867	500
Interest	3,316	3,619	4,836	7,634	7,261
Of which: external	3,316	3,119	4,236	6,503	6,301
Current balance (deficit = -)	(22,017)	(21,470)	(22,799)	(33,517)	(19,849)
Investment expenditure	25,872	27,624	29,633	59,229	61,799
Domestically financed	672	924	1,300	1,199	320
Foreign-financed	25,200	26,700	28,333	58,030	61,479
Restructuring of banking system	0	15,758	2,200	0	0
Overall deficit (commitment basis)	(47,889)	(64,852)	(54,632)	(92,746)	(81,648)
Excluding grants	(47,889)	(64,852)	(54,632)	(92,746)	(81,648)
Including grants	(38,189)	(49,352)	(39,248)	(48,515)	(44,375)
Change in payments arrears	8,318	11,081	15,250	5,834	6,440
External (interest)	1,248	1,753	2,851	2,329	(3,718)
Domestic	7,070	9,328	12,399	3,505	10,158
Overall deficit (cash basis, excluding grants)	(39,571)	(53,771)	(39,382)	(86,912)	(75,208)
Overall deficit (cash basis, including grants)	(29,871)	(38,271)	(23,998)	(42,681)	(37,935)
Financing	29,871	38,271	23,996	42,681	37,935
External (net)	30,678	18,734	15,184	43,530	44,784
Loans	16,904	11,883	12,949	25,071	24,205
Amortization due	(2,073)	(3,786)	(6,595)	(7,848)	(5,788)
Change in external arrears (principal)	689	2,512	5,100	4,347	(10,335)
Debt relief/rescheduling obtained	0	0	0	4,192	17,219
Other external assistance	15,158	8,125	3,730	17,767	19,481
Domestic (net)	(806)	19,537	8,812	(850)	(6,849)
Banking system	(7)	17,654	3,820	1,650	(6,086)
Nonbank sector	(799)	1,883	4,992	(2,499)	(923)
Sale of assets	0	0	0	0	160

Sources: Data provided by the Chadian authorities; and staff estimates and projections.

Table 11. Chad: Government Revenue and Grants, 1991-95

	1991	1992	1993	1994	1995
(In millions of CFA francs)					
Total revenue	28,653	27,921	25,276	31,166	44,834
Tax revenue	22,155	22,024	18,733	25,779	39,699
Taxes on income and profits	8,166	8,522	6,372	8,695	16,630
Companies	2,789	1,956	1,469	3,073	8,395
Individuals	4,499	5,804	4,130	4,614	7,189
Employers' payroll tax	878	762	773	1,009	1,046
Property tax	441	159	490	476	792
Taxes on goods and services	7,820	7,558	6,771	8,337	6,578
Turnover tax	2,585	2,257	1,826	3,080	1,728
Tax on petroleum products	2,452	2,525	2,451	2,254	2,046
Single tax	2,413	2,342	1,866	2,519	2,015
Other	370	434	628	484	789
Taxes on international trade	4,929	4,917	3,962	6,199	12,166
Import taxes	4,477	4,506	3,280	4,944	9,600
Export taxes	360	281	473	1,049	1,432
Other	92	130	210	206	1,134
Other tax revenues	800	868	1,138	2,071	1,270
Nontax revenue	6,498	5,898	6,543	5,387	5,135
Property income	2,007	4,244	704	350	1,246
Administrative fees	70	40	184	100	124
Nonindustrial sales	851	743	758	432	804
Other	3,569	871	4,897	342	2,960
Nonclassified items	--	--	--	4,163	2,263
(In percent of total)					
Total revenue	100.0	100.0	100.0	100.0	100.0
Tax revenue	77.3	78.9	74.1	82.7	88.5
Taxes on income and profits	28.5	30.5	25.2	27.9	37.1
Companies	9.7	7.0	5.8	9.9	18.7
Individuals	15.7	20.8	16.3	14.8	16.0
Employers' payroll tax	3.1	2.7	3.1	3.2	2.3
Property tax	1.5	0.6	1.9	1.5	1.8
Taxes on goods and services	27.3	27.1	26.8	26.8	14.7
Turnover tax	9.0	8.1	7.2	9.9	3.9
Tax on petroleum products	8.6	9.0	9.7	7.2	4.6
Single tax	8.4	8.4	7.4	8.1	4.5
Other	1.3	1.6	2.5	1.6	1.8
Taxes on international trade	17.2	17.6	15.7	19.9	27.1
Import taxes	15.6	16.1	13.0	15.9	21.4
Export taxes	1.3	1.0	1.9	3.4	3.2
Other	0.3	0.5	0.8	0.7	2.5
Other tax revenues	2.8	3.1	4.5	6.6	2.8
Nontax revenue	22.7	21.1	25.9	17.3	11.5
Property income	7.0	15.2	2.8	1.1	2.8
Administrative fees	0.2	0.1	0.7	0.3	0.3
Nonindustrial sales	3.0	2.7	3.0	1.4	1.8
Other	12.5	3.1	19.4	1.1	6.6
Nonclassified items	0.0	0.0	0.0	13.4	5.0

Sources: Data provided by the Chadian authorities; and staff estimates.

c. Expenditure trends

During the period 1991-95, total expenditure increased by an average 12 percent per annum, reflecting mainly a sharp rise in capital outlays, which more than doubled to reach CFAF 62 billion at end-1995, as against CFAF 25.9 billion in 1991 (Table 12). In terms of GDP, expenditure averaged 26 percent in 1991-94 and declined to 23.7 percent in 1995 (Chart 4). The increase in current expenditure was limited to 4.5 percent a year on average, with primary current expenditure growing at an average annual rate of only 2.8 percent. Nonwage primary expenditure declined by an average of 3 percent a year, as against a 10 percent annual increase in the wage bill. Military expenditure, excluding demobilization outlays, declined from CFAF 12 billion in 1991 to CFAF 10 billion in 1995, as a result of a demobilization program that reduced the size of the army by more than 30 percent (from 47,000 soldiers in 1991 to 32,000 at end-1995). Other nonprimary current expenditure rose sharply from CFAF 3.3 billion in 1991 to CFAF 7 billion in 1993 and to an average of CFAF 8.4 billion in 1994-95, owing mainly to a surge in external debt obligations, rising interest on the domestic debt, and demobilization outlays.

The expansion of the wage bill during the years 1993-95 exacerbated the financial difficulties of the Government. Wage outlays increased steadily, from 39.5 percent of total primary current expenditure in 1991 to 50.6 percent in 1993. After a drop to 45.9 percent in 1994, the ratio rose again to 52.9 percent in 1995. These wage developments reflected serious slippages in wage policy, which allowed for a 12 percent increase in the wage bill in 1993, despite the decision to freeze advancements and promotions effective mid-1992, and an additional 14.3 percent increase in 1994, despite a large-scale dismissal of 1,000 persons above retirement age. In 1995, the wage bill increased by 15.6 percent, consistent with a 10 percent general increase in salaries and reactivation of the automatic advancement policy.

Public investment increased by some 14 percent a year on average during the period 1991-95. The investment outlays were concentrated in infrastructure (26 percent of the total), in agriculture (23 percent of total), and in human resource development (22 percent of the total) (Table 13).

d. Accumulation of arrears

The chronic lack of financial resources during the period 1991-95 led to an accumulation of both domestic and external arrears by the Government. While the total stock of external arrears is now clearly identified, no exhaustive inventory of the stock of domestic arrears has been carried out.

External arrears began to buildup in 1991, when the Autonomous Amortization Fund (CAA), which services the country's external and domestic debt, began to run into severe financial difficulties. Its resources consisted of earmarked taxes on luxury products (beer, other alcoholic products, and cigarettes) and on petroleum products, and the proceeds from

Table 12. Chad: Economic Classification of Central Government Expenditure, 1991-95

	1991	1992	1993	1994	1995
(In millions of CFA francs)					
Total expenditure	80,133	96,273	83,781	124,710	126,482
Current expenditure	54,261	52,891	51,948	65,481	64,684
Primary current expenditure	50,945	49,025	44,930	56,545	56,923
Wages and salaries	20,112	20,266	22,713	25,968	30,109
Materials and supplies	12,469	9,770	8,783	12,664	11,851
Transfers	3,257	3,611	2,349	5,015	4,963
Others	3,043	3,907	--	565	--
Defense	12,063	11,470	11,085	12,333	10,000
Salaries	...	...	9,340	8,996	7,100
Materials and supplies	...	...	1,745	3,337	2,900
Demobilization	--	247	2,182	1,302	500
Interest	3,316	3,619	4,836	7,634	7,261
domestic	...	500	600	1,131	960
external	3,316	3,119	4,236	6,503	6,301
Investment expenditure	25,872	27,624	29,633	59,229	61,799
Domestically financed	672	924	1,300	1,199	320
Foreign-financed	25,200	26,700	28,333	58,030	61,479
(In percent of total expenditure)					
Total expenditure	100.0	100.0	100.0	100.0	100.0
Current expenditure	67.7	54.9	62.0	52.5	51.1
Primary current expenditure	63.6	50.9	53.6	45.3	45.0
Wages and salaries	25.1	21.1	27.1	20.8	23.8
Materials and supplies	15.6	10.1	10.5	10.2	9.4
Transfers	4.1	3.8	2.8	4.0	3.9
Others	3.8	4.1	--	0.5	--
Defense	15.1	11.9	13.2	9.9	7.9
Salaries	...	--	11.1	7.2	5.6
Materials and supplies	...	--	2.1	2.7	2.3
Demobilization	--	0.3	2.6	1.0	0.4
Interest	4.1	3.8	5.8	6.1	5.7
domestic	...	0.5	0.7	0.9	0.8
external	4.1	3.2	5.1	5.2	5.0
Investment expenditure	32.3	28.7	35.4	47.5	48.9
Domestically financed	0.8	1.0	1.6	1.0	0.3
Foreign-financed	31.4	27.7	33.8	46.5	48.6

Sources: Data provided by the Chadian authorities; and staff estimates and projections.

Table 13. Chad: Public Investment Program, 1991-95 ^{1/}

	1991	1992	1993	1994	1995
(In billions of CFA francs)					
Agriculture, forestry and livestock	11.8	14.3	11.2	24.3	19.5
Mining, industry and energy	5.4	4.8	6.3	3.9	0.6
Infrastructure and transport	22.9	13.7	7.8	15.5	32.1
Human resources	11.8	10.8	10.8	21.3	27.1
Multisectoral investment ^{1/}	3.6	3.8	9.6	6.6	6.4
Development support	3.5	9.1	8.1	11.6	14.3
Total	59.0	56.5	53.7	83.3	100.1
(In percent of total)					
Agriculture, forestry and livestock	20.0	25.2	20.9	29.2	19.5
Mining, industry and energy	9.2	8.4	11.7	4.7	0.6
Infrastructure and transport	38.9	24.2	14.4	18.7	32.1
Human resources	20.0	19.2	20.0	25.6	27.1
Multisectoral investment ^{1/}	6.1	6.8	17.9	7.9	6.4
Development support	5.9	16.1	15.0	13.9	14.3
Total	100.0	100.0	100.0	100.0	100.0
(In percent of total)					
Financing					
Grants	37.5	56.1	51.9	74.7	60.3
Loans	59.9	40.5	43.7	23.3	39.2
National budget	2.6	3.3	4.4	2.0	0.5

Sources: Data provided by the Chadian authorities; and staff estimates.

^{1/} Based on the physical execution of the investment program.

CENTRAL GOVERNMENT OPERATIONS, 1991-95 (In percent of GDP)

Source: Chadian authorities.

taxes on bank loans, as well as proceeds from the recovery of external loans. The CAA's revenue stagnated at a level of CFAF 3.6 billion during 1991-93, falling far behind scheduled external obligations, and resulting in an accumulation of CFAF 14.2 billion of external arrears. The CAA was abolished in 1994 and replaced by a directorate to manage debt at the Ministry of Finance. In 1994, additional external debt-related arrears of CFAF 6.7 billion were accumulated, bringing the total stock of external arrears to the level of CFAF 36.5 billion (8 percent of GDP). In 1995, new external arrears were accumulated on current obligations in an amount of CFAF 7.6 billion, while a total rescheduling of CFAF 22.4 billion brought down the total stock of arrears to CFAF 22.4 billion.

On the domestic front, both wage and nonwage arrears were accumulated, and the total stock at end-1995 was estimated at CFAF 28 billion; this amount excludes arrears to the social security agencies and other arrears to other public entities, the assessment of which was not yet completed.

e. Parastatal sector

In 1991, Chad's state enterprises, including mixed public-private entities numbered about forty, and employed more than 8,000 people, or some 25 percent of total modern sector employment. In 1992, the authorities decided to divest the State of most of these enterprises, as part of a strategy aiming at reducing the scope of public sector activity and at creating more room for private sector activity. As a result, ten public enterprises were privatized in the sectors of agriculture, insurance, pharmaceuticals, cigarettes, and printing works; and nine were liquidated, including a textile enterprise, a state owned bank, a marketing board, and the Cotton, Petroleum and Sugar Stabilization Funds.

5. Money and banking

a. Introduction

Chad is one of the six member countries that constitute the Central African Monetary Area and share a common currency, the CFA franc. Monetary policy for the area is formulated by the board of the regional Central Bank, the Banque des Etats de l'Afrique Centrale (BEAC), with the assistance of a National Monetary Committee in each country. An independent regional banking commission (Commission bancaire de l'Afrique Centrale, COBAC), was established in 1992, under the authority of the Governor of the BEAC, to enact and update bank regulation, and to conduct region-wide banking supervision, including on-site inspections.

In addition to the local agency of the Central Bank, the Chadian banking system comprises four deposit money banks: the Banque Tchadienne des Crédits et des Dépôts (BTCD), the Méridien Banque Internationale pour l'Afrique (BMBT), Financial Bank of Tchad (FBT), and the Banque Commerciale du Chari (BCC); one development bank, the Banque du Développement du Tchad (BDT), and a postal checking system, Centre des Chèques Postaux (CCP). The

Government has shareholdings equivalent to 40 percent, 25 percent, and 20 percent of the capital of BTCD, BDT, and BMT, respectively.

b. Rehabilitation of the banking system

The Chadian banking system came close to collapse in 1991, owing mainly to the vulnerable state of the economy and an expansionary credit policy, which resulted in the ratio of total credit to the economy to total reserves reaching 264 percent, while the liquidity ratio dropped below 4. To avoid a major financial crisis, the monetary authorities embarked on a comprehensive rehabilitation program of the banking system, involving enhancement of central bank supervision through the COBAC, and the liberalization of banking activity. In addition, they eased the liquidity crisis of the commercial banks in 1993 by consolidating into a long-term loan to the Government the CFAF 18 billion of rediscounted commercial bank loans that had been extended mainly to public enterprises. Credit policy was tightened; the amount of direct advances to the Treasury by the Central Bank was stabilized; and the Banque Internationale pour le Commerce et l'Industrie du Tchad (BICIT), which had not been active since 1979, was liquidated. As a result, the net foreign assets position of the banking system was strengthened and the liquidity position of the banks was gradually restored.

Developments in 1994-95 reflected the significant improvement in the domestic economic outlook following the devaluation of the CFA franc; a progressive return of confidence in the currency, which boosted repatriation of flights capital; and the more cautious approach in the commercial banks' lending policies in view of past difficulties. Overall, solvency was restored; the ratio of total credit to total deposits dropped sharply to 125 percent in 1995; and the liquidity ratio rose to 35 percent from 18 percent in 1993.

c. Monetary and credit policy

The period 1991-95 was one of monetary reforms in the BEAC area, with a progressive move toward indirect instruments of monetary management and the emergence, at the end of the period, of regional interbank and money markets. Until 1993, the monetary policy of the BEAC was conducted on the basis of annual country monetary programs, which included targets for net foreign assets, and for net credit to the private sector and to the Government, based on a projection of money demand. Beginning in July 1994, the Central Bank put in place weekly money market auctions, open to banks and financial institutions. However, the interest rates at which transactions are settled were still determined by the Central Bank, and the discount window--or the penalty rate--was maintained, as was a special window for automatic refinancing of medium-term credits. The amounts rediscounted under the special rediscount facility are kept outside the national refinancing ceiling, and the rate applicable is adjusted twice a year on the basis of the average auction rate for the last six-month period.

Table 14. Chad: Monetary Survey, 1991-95

	1991	1992	1993		1994	1995
			Act.	Adjusted 1/		
(In millions of CFA francs)						
Net foreign assets (net)	20,932	13,218	(625)	(1,574)	30,248	62,319
Central Bank	20,756	13,392	4,435	8,546	36,270	65,882
Commercial banks	2,979	2,629	(2,257)	(4,514)	(416)	2,043
Postal debt	(2,803)	(2,803)	(2,803)	(5,606)	(5,606)	(5,606)
Medium- and long-term foreign liabilities	(585)	(1,059)	(206)	(412)	(729)	(92)
Net domestic assets	47,147	48,646	48,494	49,649	49,750	45,559
Domestic credit	54,962	65,135	61,171	72,151	79,218	71,717
Claims on government (net)	9,107	31,205	33,091	44,071	47,942	36,277
Treasury and CAA (net) 2/	14,546	30,245	35,803	43,980	43,310	37,224
Others	(5,439)	960	(2,712)	91	4,630	(947)
Claims on the private sector	45,855	33,930	28,080	28,080	31,276	35,440
Other items (net)	(7,815)	(16,489)	(12,677)	(22,502)	(29,468)	(26,158)
Of which: revaluation account	--	--	--	(9,825)	(9,825)	(9,825)
Money and quasi-money	67,494	60,805	47,663	47,663	79,269	107,786
Currency outside banks	49,624	47,128	35,838	35,838	56,298	76,562
Demand deposit 4/	15,237	10,116	9,622	9,622	20,108	23,352
Quasi-money	2,633	3,561	2,203	2,203	2,863	7,872
(In percent of beginning of the period money stock)						
Net foreign assets	-16.1	-11.4	-22.8	-24.3	66.8	40.5
Net domestic assets	21.0	2.2	-0.2	1.6	0.2	-5.3
Domestic credit	22.6	15.1	-6.5	11.5	14.8	-9.5
Claims on government (net)	9.8	32.7	3.1	21.2	8.1	-14.7
Of which: Treasury and CAA (net) 2/	9.8	23.3	9.1	22.6	-1.4	-7.7
Claims on the private sector	9.8	-17.7	-9.6	-9.6	6.7	5.3
Money and quasi-money	6.0	-9.9	-21.6	-21.6	66.3	36.0
Currency outside banks	4.2	-3.7	-18.6	-18.6	42.9	51.4
Demand deposit	2.0	-7.6	-0.8	-0.8	22.0	17.3
Quasi-money	-0.2	1.4	-2.2	-2.2	1.4	7.2
Memorandum item:						
Currency outside banks						
as a percentage of broad money	73.5	77.5	75.2	75.2	71.0	71.0
as a percentage of deposits	277.7	344.6	303.1	303.1	245.1	245.2
Velocity of broad money	5.5	5.8	6.1	6.1	5.8	4.9

Source: Data provided by the BEAC.

1/ After inclusion of valuation effects of the devaluation (backdated to December 1993).

2/ CAA, Autonomous Amortization Fund.

3/ Consolidation of the BEAC rediscounts to banks into claims on the Government.

4/ Include private sector deposits with the CCP.

MONEY, FINANCIAL SAVINGS AND VELOCITY, 1991-95 (In percent of GDP)

Source: Chadian authorities.

Another monetary innovation, the repurchase agreement (prise en pension) was introduced by the Central Bank to provide temporary liquidity to banks at a rate between the discount rate and the money market rate. These monetary reforms have been accompanied by the institution of a regional interbank market, where transactions are settled with no interference by the Central Bank.

d. Monetary trends

Monetary developments in Chad were characterized by wide fluctuations in the demand for money, reflecting the highly unstable domestic economic environment. During 1991-93, the velocity of broad money increased slightly from 5.1 in 1991 to 5.4 in 1993, reflecting a 25 percent decline in broad money (Table 14 and Chart 5). The evolution of net domestic assets was flat, and the net foreign assets position of the banking system declined continuously and turned into a debtor position in 1993. Overall, the composition of the money stock was stable, with the share of currency in circulation averaging 75 percent, while demand deposits and time and savings deposits accounted for 20 percent and 5 percent of the total, respectively.

Money supply rose by 66 percent in 1994, with the stagnation in net domestic assets resulting in a strong improvement in the external position of the banking system. In terms of beginning-of-period money stock, net claims on the Government increased by 8.6 percent and expansion of credit to the private sector was limited to 11.4 percent. Broad money increased by an additional 36 percent in 1995, well ahead of nominal GDP growth. Net domestic assets declined by 5 percent in terms of the money stock of the beginning of the period, as a result of the improvement by some CFAF 12 billion in the net government position vis-à-vis the banking system, which more than offset the 13 percent annual increase in credit to the economy. As a result, the net foreign asset position of the banking system increased by CFAF 30.2 billion, or the equivalent of 41 percent of the beginning-of-period money stock. Overall, composition of the money stock shifted slightly in favor of deposits, which accounted on average for 29 percent of the total, of which 22 percentage points represented demand deposits.

6. External sector

a. Overall balance of payments trends

Chad's balance of payments position was unstable from 1991 to 1995, reflecting wide fluctuations in the domestic economic situation as well as in the terms of trade and external financial assistance. During 1991-93, there was a persistent deterioration in the current account deficit (including grants) from 10.8 percent of GDP in 1991 to 20.1 percent in 1993. As the trade deficit stagnated around CFAF 15 billion, this was mainly the result of the deterioration in the service account and the reduction in the net current transfers from abroad (Table 15). The overall balance deficit

Table 15. Chad: Balance of Payments, 1991-95

(In billions of CFA francs)

	1991	1992	1993	1994	1995 Est.
Exports, f.o.b.	54.6	48.2	43.0	83.2	115.0
Of which: cotton	(26.8)	(25.3)	(16.2)	(29.0)	(56.2)
Imports, f.o.b.	-70.5	-64.3	-58.1	-97.6	-111.2
Trade balance (deficit / surplus -/+)	-15.9	-16.1	-15.1	-14.4	3.8
Services (net)	-50.7	-51.5	-54.5	-68.4	-72.8
Nonfactor services (net)	-50.0	-52.3	-51.2	-63.2	-68.1
Factor services (net)	-0.7	0.7	-3.3	-5.2	-4.7
Of which: public interest payments	(-32)	(-3.1)	(-3.7)	(-6.5)	(-6.3)
Transfers	26.3	24.8	11.1	28.8	27.9
Private (net)	-2.5	-3.9	-6.5	-5.5	-4.4
Official (net)	28.8	28.7	17.6	34.3	32.3
Of which: exceptional financing	(15.2)	(8.1)	(3.7)	(17.9)	(14.4)
Current account (deficit -)	-40.3	-42.8	-58.5	-54.0	-41.2
Excluding official transfers	-69.1	-71.5	-76.1	-88.3	-73.5
Nonmonetary capital	31.4	29.9	41.6	63.9	58.2
Direct investment (net)	1.6	0.8	6.1	3.7	3.0
Long term (net)	44.7	39.0	58.9	61.5	55.7
Project grants	21.7	20.1	26.9	44.2	37.3
Drawings	25.9	22.0	34.8	25.1	24.2
of which: program loans	(..)	--	--	11.3	--
Amortization	-2.9	-3.1	-2.8	-7.8	-5.8
Short term (net)	-14.8	-10.0	-23.4	-1.3	-0.5
Monetary capital (net)	7.2	0.8	4.9	-1.8	-2.5
Errors and omissions	-3.9	2.1	0.2	13.0	6.9
Overall balance	-5.5	-10.0	-11.8	21.0	21.4
Financing	5.5	10.0	11.8	-21.0	-21.4
Change in net official reserves	2.3	7.4	9.0	-31.8	-29.6
Of which: use of Fund resources (net)	--	--	-0.5	7.0	3.5
Debt relief	--	--	--	4.2	22.2
Change in external arrears (increase +)	3.2	2.6	2.9	6.7	-14.1

(In percent of GDP)

Memorandum items:

Trade balance (deficit / surplus -/+)	-4.3	-4.6	-5.2	-3.1	0.7
Services (net)	-13.6	-14.7	-18.7	-14.9	-13.7
Transfers	7.1	7.1	3.8	6.3	5.2
Current account deficit (before grants)	-18.5	-20.4	-26.1	-19.2	-13.8
Current account deficit (after grants)	-10.8	-12.2	-20.1	-11.8	-7.7
Capital movements and errors and omissions	9.3	9.4	16.0	16.3	11.7
Overall balance (deficit / surplus -/+)	-1.5	-2.9	-4.1	4.6	4.0

Source: Central Bank (BEAC); and staff estimates and projections.

EXTERNAL TRADE, 1991-95

Source: Chadian authorities.

rose from the equivalent of 1.5 percent of GDP to 4.1 percent of GDP, and was financed by a drawdown of official reserves and an accumulation of external arrears (Chart 6).

The devaluation of the CFA franc brought some relief to the balance of payments of Chad. In 1994, the trade deficit was reduced by more than 2 percentage points, to 3.1 percent of GDP, and the external current account deficit was nearly 7 percentage points of GDP lower than in 1993. In the meantime, the deficit in the service accounts widened by some 3 percent of GDP, partly because of the more than twofold increase in the scheduled interest on external debt. The sharp increase in net capital inflows and official transfers also helped the overall balance of payments to turn to a surplus equivalent to 4.6 percent of GDP. However, despite debt relief of CFAF 4.2 billion, arrears on external debt were accumulated in an amount of CFAF 6.7 billion, because of the tight government financial situation, while external reserves rose by CFAF 32 billion in part on account of a 23 percent improvement in the terms of trade. The balance of payments picture improved even further in 1995, with the trade balance recording a surplus for the first time, and the current account before grants narrowing by 5 percentage points, to 13.8 percent of GDP. The resulting overall surplus of CFAF 21 billion (4 percent of GDP) together with debt relief of CFAF 22 billion allowed for a net reduction in external arrears of CFAF 14 billion, and the increase in net foreign assets was estimated at CFAF 30 billion.

b. Merchandise trade

Exports of goods declined from CFAF 54.6 million in 1991 to CFAF 43 billion in 1993, as a result of a drop of 12.5 percent in export volumes and a decline of 10 percent in the export unit price. The export base remained dominated by cotton and livestock, with average shares of 47 percent and 29 percent, respectively. While cotton export volumes were unstable, increasing by 6 percent to 63,000 tons in 1992 only to decline by 33 percent in 1993, the average price per kilogram of cotton declined continuously from CFAF 445.6 in 1991 to CFAF 396 in 1992 and CFAF 376 in 1993. Exports of livestock, mainly to neighboring Nigeria, fluctuated around an upward trend, to reach 250,000 head in 1993 as against 219,000 head in 1991, while unit prices dropped by 32 percent during the period. Other exports, mainly arabic gum, are estimated to have increased during 1991-93 by an annual average rate of 11 percent. Although the devaluation of the CFA franc boosted livestock and other exports in 1994, it had no effect on cotton export volumes, which declined by 14 percent, because it took place after the crop year had ended. As a result, total exports of goods stagnated in 1994 in real terms. In 1995, total exports increased by 13 percent in real terms and export unit prices rose by some 22 percent. Boosted by the new producer price of cotton, set in the aftermath of the devaluation, cotton export volumes increased by 60 percent, to 59,000 tons.

Imports of goods declined by 18 percent between 1991 and 1993, reflecting mainly a sharp reduction in import volumes. This drop was linked to the instability of the domestic economic environment, as evidenced by the

stagnation of the ratio of imports to GDP, and affected all categories of goods: imports of consumption goods declined by 22 percent, and imports of equipment and intermediate goods declined by 14 percent and 11 percent, respectively. In 1994, although import prices remained stable in dollar terms (Table 15), import volumes declined by an additional 18 percent, with the devaluation of the local currency shifting domestic demand toward locally produced goods and resulting in the compression of imports of consumption goods by some 41 percent. Imports of equipment also declined by 7 percent in real terms, owing mainly to a lower execution rate of the public investment program, whereas imports of intermediary goods rose by 17 percent, in connection with the recovery in economic activity. Overall the share of consumption goods in total imports declined to 33 percent, from 44 percent in 1991-93, and the shares of equipment goods and intermediate goods increased by 2 and 9 percentage points, to 38 percent and 29 percent, respectively. In 1995, imports of goods are estimated to have increased by 14 percent in value and 16 percent in volume, reflecting mainly the improvement in the domestic economic environment and progressive restoration of confidence. Consumption goods in the total returned almost to their pre-devaluation level, while the share of equipment and intermediate goods were reduced to 31 percent and 27 percent, respectively.

c. Services and transfers

During the period 1991-95, the service balance reached a peak in terms of GDP of 18.7 percent in 1993, before declining to 14.9 percent in 1994 and 13.6 percent in 1995. The service account deficit is mainly composed of the deficit in nonfactor services. The nonfactor service deficit, which accounted for 98 percent of the total in 1991-93 and for 93 percent during 1994-95 held more or less steady around CFAF 51 billion in 1991-93, before increasing by 23.4 percent in 1994 and by an additional 8 percent in 1995, consistent with the nominal increase in imports. The factor service deficit remained largely dominated by interest on external debt; it reached CFAF 3.3 billion in 1993, as against an average of CFAF 0.7 billion in 1991-92, and widened further to CFAF 5.3 billion in 1994, owing to the large increase in CFA franc terms in interest obligations on external debt. In 1995, the factor service deficit declined to CFAF 4.7 billion in 1995.

Net unrequited private transfers, which consist primarily of wage remittances by the large expatriate community, remained negative throughout the period; they culminated at CFAF 6.5 billion in 1993, as against CFAF 2.5 billion in 1991; and declined afterwards to reach CFAF 4.4 billion in 1995. Official transfers, averaged 7 percent of GDP throughout the period.

d. Capital account

The capital account surplus reflected the continuous capital inflows in support of the public investment program. The surplus increased from CFAF 31 billion in 1991 (8.4 percent of GDP) to CFAF 42 billion in 1993 (14.3 percent of GDP), despite substantial capital outflows in anticipation

of the devaluation of the CFA franc. 1/ Total net capital inflows slowed down to 73.9 percent of GDP in 1994 and to 10.4 percent of GDP in 1995, reflecting a shift in the investment program financing away from loans.

e. External debt and debt service

Chad continued to pursue a prudent external debt policy, as evidenced by its relatively low debt service ratio and ratio of debt to GDP. However, external debt outstanding increased steadily during the period, from CFAF 149 billion (40 percent of GDP) in 1991 to CFAF 191 billion (65.4 percent of GDP) in 1993 (Table 16 and Chart 7). The debt stock jumped to CFAF 393 billion (85.7 percent of GDP) in 1994, owing mainly to the impact of devaluation of the CFA franc, and increased only slightly in 1995, to CFAF 401 billion (75.1 percent of GDP). At the same time the share of the debt stock owed to the multilateral institutions increased progressively: at end-1995, the latter accounted for 85 percent of the total, as against 78 percent at end-1993. The share of debt to bilateral donors dropped to 13 percent from 19 percent at end-1993, and the share of commercial bank debt declined to 2.5 percent from 2.8 percent. This relative increase of indebtedness to the multilateral institutions reflects the switch to grants by bilateral creditors and the Government's decision to stop contracting nonconcessional loans.

External debt service obligations including those to the Fund remained relatively low in terms of exports of goods and nonfactor services throughout the period: the debt service ratio to exports of goods and nonfactor services went up from 9.7 percent in 1991 to 12.7 percent in 1993 and 15.5 percent in 1994. In 1995 debt service obligations declined, partly due to the debt cancellation granted by France in 1994, bringing the ratio down to 10.9 percent.

f. Exchange system

Chad is a member of the Central African Economic and Monetary Community, CAEMC; its currency, the CFA franc, is issued by the BEAC and is shared by Cameroon, the Republic of Congo, Gabon, the Central African Republic, Equatorial Guinea. The CFA franc is pegged to the French franc at a fixed rate and the Central Bank maintains an operations account with the French Treasury. Movements against the SDR and foreign currencies therefore reflect the movements of the French franc vis-à-vis these currencies. The exchange rate of the CFA franc against the French franc was decreased on January 12, 1994 to CFAF 1 = FF 0.01, from CFAF 1 = FF 0.02, previously. There are no taxes or subsidies on purchases or sales of foreign exchange.

1/ Short-term capital outflows averaged CFAF 16.3 billion a year during the period, with a peak of CFAF 23 billion in 1993.

Table 16. Chad: External Debt Outstanding, Public and Publicly Guaranteed, 1991-95

	1991	1992	1993	1994	1995	1995 Arrears
(In millions of CFA francs)						
Total	148,936	175,112	190,900	393,231	400,860	15,325
Multilateral loans	106,178	129,480	148,712	345,609	340,000	8,796
IMF	8,186	8,478	7,868	22,776	24,496	--
World Bank (IDA)	61,307	73,652	80,735	190,935	193,846	--
African Development Fund/Bank	26,324	32,071	45,965	103,569	94,272	336
EDF/EIB 1/	5,188	6,097	5,681	11,564	11,727	4,149
Islamic Development Bank	1,317	4,478	3,276	6,805	5,926	539
OPEP Special Fund	708	1,131	1,511	3,142	3,086	547
BADEA 1/	2,252	2,613	2,474	5,144	4,520	2,913
BDEAC 1/	901	960	1,202	1,166	1,255	311
FIDA	--	--	--	507	872	--
Bilateral loans	42,758	45,632	42,188	47,621	60,860	6,531
Paris Club official debt	26,451	28,757	29,504	24,054	35,817	3,404
Pre cut-off	26,451	28,757	29,504	19,134	27,949	758
France	24,769	27,176	27,983	16,165	23,424	388
COFACE	8,082	8,082	8,082	16,165	23,424	388
Rescheduling 89	8,082	8,082	8,082	16,165	10,462	388
Rescheduling 95	--	--	--	--	12,962	--
CFD 1/	14,795	17,085	17,892	--	--	--
Banque de France	1,892	2,009	2,009	--	--	--
Germany (Ferrostaal)	435	348	348	777	516	177
Rescheduling 87	435	348	348	777	354	177
Rescheduling 95	--	--	--	--	161	--
Italy	836	816	724	1,361	3,154	--
Italcit	636	617	525	962	2,035	--
Rescheduling 89	636	617	525	962	847	--
Rescheduling 95	--	--	--	--	1,188	--
Techno Frigo	200	199	199	399	1,119	--
Rescheduling 89	200	199	199	399	399	--
Rescheduling 95	--	--	--	--	720	--
Netherlands (Phillips)	349	350	348	699	755	160
Rescheduling 89	349	350	348	699	305	160
Rescheduling 95	--	--	--	--	451	--
Austria (Daimler)	62	67	63	132	100	33
Post cut-off	--	--	--	4,920	7,868	2,645
Spain (ICO)	--	--	--	4,920	4,870	--
USA (Camac Inc.)	--	--	--	--	2,998	2,645
Non Paris Club official debt	11,061	11,133	7,256	15,086	15,216	2,214
China	5,326	5,917	5,915	11,830	11,435	1,114
Gabon	1,225	1,225	1,225	1,225	1,225	1,000
Saudi Arabia	--	--	--	1,915	2,440	--
Kuwait	4,394	3,875	--	--	--	--
Israel	115	115	115	115	115	100
Russia	1	1	1	1	1	1
Other creditors	5,246	5,742	5,428	8,481	9,828	913
Prochimco Gauff	68	55	48	96	48	21
Payeur de France (FF)	--	--	--	735	735	--
Postal Debt	--	--	--	5,014	5,264	251
Assistance Publique	--	--	--	1,915	3,190	200
SCOA Paris	17	17	17	35	35	31
Paribas	122	128	128	266	202	56
BFC	--	--	--	421	355	355
Rover	77	--	--	--	--	--
Other	4,962	5,542	5,235	--	--	--

Source: Data provided by the Chadian authorities and staff estimates

1/ EDF, European Development Fund; EIB, European Investment Bank; BADEA, Arab Bank for Economic Development of Africa; BDEAC, Central African States Development Bank; CFD, French Fund for Development; SCOA, Societe Commerciale Ouest-Africaine; BFC, Banque Internationale Cooperative.

EXTERNAL DEBT AND DEBT SERVICE, 1991-95

Source: Chadian authorities.

Chad maintains an exchange system that is virtually free of restrictions on payments and transfers for current international transactions. However, in August 1993, Chad, together with the other members of the CAEMC, partially restrained convertibility of the BEAC issued bank notes, in an effort to stem capital outflows triggered by persistent rumors of a devaluation of the CFA franc. Repurchases of these notes from the CFA zone were suspended effective August 2, 1993. This measure was extended to the West African Monetary Union zone in December of the same year. Until 1993, the country's trade system had included a number of regulations with respect to both imports and exports. In 1995, all external trade-related licenses were repealed, and the negative list of products subject to special import authorization was restricted to products involving health and public safety. A detailed survey of Chad's exchange and trade system is contained in the Fund's Annual Report on Exchange Arrangements and Exchange Restrictions.

In the period 1991-93, the nominal effective exchange rate appreciated by 35.8 percent, which, after correction for the relative price movement between Chad and its partner countries, led to an overall real appreciation of 5 percent in 1991-92 followed by a depreciation by some 10 percent in 1993. However, a sharp real appreciation took place vis-à-vis currencies in some neighboring countries, such as Nigeria. This appreciation was corrected by the devaluation of the CFA franc, which lowered the real effective exchange rate by 42 percent in 1994-95.

II. Reform of the Customs Administration

1. Introduction

Revenues collected by the customs administration have traditionally been the most important source of government tax revenues in Chad. ^{1/} In a landlocked country with limited exploitation of natural resources, the tax base at the country's borders is, in the authorities' view, among the simplest to identify and to monitor. However, the collection of customs taxes is also sensitive to developments in economic activity and the authorities' diligence in enforcement. In 1987-90, in the context of a structural adjustment program, with support from the Fund, customs revenues on a cash basis improved by 88 percent in nominal terms. In the following period (1991-93), which were characterized by sluggish economic activity and weaker collection efforts, customs revenues dropped by 57 percent in nominal terms. The ratio of customs tax obligations revenues to total imports (officially recorded) declined from 14.7 percent in 1990 to 12.9 percent in

^{1/} Revenues collected by the customs administration in Chad (referred to as customs revenues in this appendix) include a broad range of taxes such as customs duties and other customs fees, import surcharges, statistical taxes, indirect taxes (including the single tax), petroleum taxes, and export taxes.

1993, while the recovery rate for custom tax obligations averaged 83 percent (Table 17). ^{1/} Furthermore, the ratio of customs revenues to total tax revenues fell from 57.8 percent in 1990 to 47.5 percent in 1993. Against this background, in the wake of the devaluation of the CFA franc in January 1994 and most particularly during the second half of that year, the authorities decided to reform the customs revenue administration. This was viewed as a cornerstone of their program to reap the benefits of an expected resumption of economic activity, to strengthen revenue management and performance, and to improve the overall balance of public finances.

Figure 1 Customs Revenues, 1989-95

In the years preceding the devaluation, the underlying cause of the customs administration inefficiencies stemmed from a general deterioration of the economic system in Chad. Poor administrative management and the lack of motivation of customs officials reflected larger structural administrative and political weaknesses, and were compounded by a stagnant economy and the buildup of wage arrears to civil servants and the military. Against this backdrop, one of the key problems directly related to customs administration appeared to be the interference of paramilitary forces in the collection of customs duties, particularly during the period 1991-92. Other constraints included ill-conceived customs clearance procedures, the lack of supervision and control, as well as weak coordination between the customs and treasury departments. In addition, the increasing use of exemptions, often granted on a discretionary basis, resulted in substantial revenue shortfalls; from 1991 to 1993, the value of exempted goods as a percent of total imports rose from 34 percent to 45 percent from 1991 to 1993, while revenues forgone because of exemptions were estimated to have risen from the equivalent of 115 percent of customs revenue to 133 percent (Table 18).

Prior to the devaluation, nominal protection was relatively high, as the level of customs and indirect taxation of non-exempted imports varied

^{1/} In the meantime, the gross value of total imports dropped by almost one third.

Table 17. Chad: Customs Revenues (1989–1995)

(In millions of CFA francs)

	1989	1990	1991	1992	1993	1994	1995
Total customs revenues (obligations)	16,100	14,665	14,495	13,392	10,305	12,241	18,923
Customs duties	1,290	1,375	987	755	539	2,252	5,599
Entry tax	3,389	3,367	2,612	2,615	2,017	1,006	--
Turnover tax on imports	1,409	1,264	1,037	884	579	1,192	4,268
Single tax	2,888	3,291	3,786	2,118	1,898	2,519	2,601
Export taxes	297	241	322	219	355	1,049	906
Statistical tax	99	265	241	224	185	864	923
Petroleum taxes	6,168	4,416	5,165	4,594	4,250	3,153	2,646
Others	560	446	345	1,983	482	206	1,980
of which: CAA 1/	(--)	(--)	(--)	(1,286)	(211)	...	(169)
excise taxes	(--)	(--)	(--)	(--)	(--)	(--)	(292)
temporary surcharges	(--)	(--)	(--)	(--)	(--)	...	(563)
penalties	(145)	(61)	(21)	(81)	(22)	...	(853)
Total customs revenues (cash)	12,818	14,559	11,044	11,743	8,900	10,972	16,996
Change (in percent)	...	13.6	-24.1	6.3	-24.2	23.3	54.9
Memorandum items							
Imports c.i.f. (in billion of CFAF)	105.5	100	97.2	89.8	80.1	131.9	152.4
Customs revenues (obligations)/ total imports (in percent)	15.3	14.7	14.9	14.9	12.9	9.3	12.4
Total tax revenue	23,019	25,204	22,155	22,024	18,733	25,779	37,199
Customs revenues (cash)/ tax revenue (in percent)	55.7	57.8	49.8	53.3	47.5	42.6	45.7
Recovery rate (in percent)	79.6	99.3	76.2	87.7	86.4	89.6	89.8

Source: Customs Directorate; and Fund estimates

1/ Autonomous Amortization Fund

2/ Collection entrusted to a private company (COTECNA) in 1995.

3/ Excluding COTONTCHAD's provisional payment.

Table 18. Chad: Customs Exemptions (1991–1995)

	1991	1992	1993	1994	1995
	(In billions of CFA francs)				
Total imports value (c.i.f.)	97.2	89.8	80.1	131.9	152.4
Non-exempted imports	63.8	55.1	44.0	131.9	103.2
Exempted imports	33.4	34.7	36.1	...	49.2
Customs taxes					
Non-exempted imports	14.5	13.4	10.3	12.2	18.9
Exempted imports (not to be paid)	16.6	17.0	13.7	13.8	14.5
<u>Memorandum items</u>					
Exempted imports/ total imports value (in percent)	34.4	38.6	45.1	...	32.3
Revenues lost from exempted imports/ actual customs taxes (in percent) ^{1/}	114.5	126.9	133.0	112.9	76.6

Source: Customs Directorate; and Fund estimates

^{1/} Assuming that customs taxes on exempted imports would have been fully integrated into the budget.

from 16 percent to 170 percent. 1/ In addition, the customs tariff and indirect tax system, consisting of an intricate set of duties and fees, was particularly complex. The level of tariffs and the complexity in their administration increased incentives for smuggling, 2/ which, in turn, worsened revenue performance, and distorted the allocation of resources to the detriment of trade operators, consumers, and ultimately the overall economy.

Against this background, the reform of the customs administration was considered as one of the key actions in the wake of the devaluation. However, concrete measures were only implemented in the second half of 1994. 3/ The authorities' efforts were reinforced by a technical expert posted in N'Djaména. A substantial improvement in customs revenues collection and administration, with the resultant efficiency gain in the allocation of market resources, was a crucial step to ensure fiscal consolidation and a lasting resumption of economic activity. The authorities also expected that a better performance of the customs administration would have a spillover effect on the other departments in charge of revenue collection in the Ministry of Finance.

Since June 1994, progress in the restructuring of customs administration, as well as in revenue collection performance, has been encouraging. In the second half of 1994, the monthly customs receipts were on average 35 percent higher than in the first six months. In 1995, aggregate customs receipts rose by 55 percent as compared with 1994 (about 80 percent, excluding petroleum taxes). This section describes the factors that explain such progress, including the underlying political factors, the measures undertaken to reform the customs administration, and the regional efforts to simplify and harmonize the tax and customs systems. It will also describe the remaining issues in this area and present the options available to the authorities.

2. Main elements of the reform

a. Political commitment to reform

For Chad, the success of the reform of customs administration hinged on a preliminary step: the elimination of political and military interference

1/ Because of widespread exemptions, the nominal rate of effective protection, measured as the ratio of customs revenues to total imports (c.i.f.), was much lower, at about 15 percent.

2/ Although difficult in essence to estimate, smuggling was particularly significant in the area of petroleum products, where the large difference between the official subsidized price in Nigeria and the price set by the Government in N'Djaména had encouraged smuggled imports.

3/ Following the January 1994 devaluation, a program, which was supported by the Fund, went quickly off track. However, in the second half of 1994, the authorities began implementing a comprehensive set of policy actions.

in customs administration and the restoration of a professional corps of customs officials. In the years preceding the 1994 reform, customs officials had been partly supplemented by paramilitary forces (including the presidential guard) to fulfill their duties, and, given the laxity introduced in the systems by the discretionary use of exemptions, there was a general lack of motivation of customs officials.

In early 1994, all civil or military groups not related to customs services were removed from the customs administration. Moreover, a decree issued by the Minister of Finance prohibited all discretionary customs duty exemptions. Furthermore, in mid-1994, an ad hoc committee on revenue collection was established to monitor the performance of customs services, to strengthen tax administration, and to encourage the collection of back taxes. The ad hoc committee--chaired by the Head of State, and including the Prime Minister, other key ministers, and the directors of the Ministry of Finance--held weekly meetings thereafter. The committee set revenue targets for the main services of the customs department and was empowered to reward or sanction customs officials and services in accordance with their individual performance. Such a direct commitment at the highest political level was decisive in restoring the authority and accountability of customs services. This committee is still active, thereby helping to ensure a sustained improvement in performance.

b. Reform of customs clearance procedures

Customs clearance procedures, notably the granting of various specific waivers such as temporary credits, temporary duty suspensions, and tax exemptions, were deemed inadequate to guarantee strict control on the taxation of imports. During the second half of 1994, the authorities took a set of measures to remedy these inadequacies.

The measures were geared, first, to ensuring that the assessment of duty obligations was fully collected by the Treasury. To that end, the mechanism whereby some importers were granted a temporary credit with later payments being made to the Treasury was abolished. In addition, importers with tax arrears (mainly unsettled temporary credits) were not allowed to clear their merchandise through customs before they settled their arrears. Second, the monitoring and control of exemptions granted through a system of temporary admission and fictitious warehouses was strengthened. 1/ A special division of the customs department was established to monitor and control these special regimes, and efforts to computerize their monitoring were undertaken. Under the regime of temporary admission, project-related imports were exempted for a period limited to 12 months (renewable), beyond which the good would be immediately taxed. As to the fictitious warehouse regime, only four intermediaries (mostly car importers) were allowed to use it. Third, to remedy the frequent undervaluation of import receipts, the

1/ The fictitious warehouse is a system whereby customs duties are paid by intermediaries only when the retail sale is made.

valuation basis for standard import values was readjusted to use world standard prices. The list of minimum values applied on all imports from Nigeria and Saudi Arabia, the bills of which seem to have been systematically undervalued, was updated in January 1995. The ex post control of the declared value of imported merchandise was also made systematic to ensure that it did not differ substantially from that of the valuation basis.

Given the increasing level of exempted goods, the authorities undertook a series of actions to prevent the abusive use of, and irregularities in, exemption procedures. Following the ministerial decree prohibiting all discretionary exemptions, a system of quotas was established to monitor and control exemptions granted to imports related to embassies, consulates, and international organizations. Under this system, import quotas were fixed at the beginning of the year on the basis of a statement by each diplomatic mission of its annual import needs. The authorities envisaged establishing appropriate mechanisms to improve the monitoring of other legal exemptions, notably exemptions granted for project-related imports. Furthermore, in the context of the UDEAC customs and tax reform (see paragraph 2.d below), they initiated a revision of the investment code and the renegotiation of bilateral agreements with companies so as to eliminate all full or partial exemptions from customs revenues originally provided in these arrangements.

For imports of petroleum products, the authorities were of the view that a specific solution was needed. Given the particular magnitude of smuggling of these products, not least because the retail prices of gasoline and diesel in Nigeria are substantially cheaper than in Chad, 1/ the authorities felt that a fully independent structure outside the customs department, focusing only on the collection of petroleum taxes and the control of all oil import flows, was the most appropriate solution. With the financial assistance of the World Bank, they entrusted the structure to a foreign private company (COTECNA) 2/ with full autonomy in the collection of taxes, and provided the necessary equipment in N'Gueli, the main crossing point for oil tankers. The company started operations in January 1995, but its performance during the course of the year did not warrant renewal of the contract in 1996 (see Section 3 below).

c. Modernization and reorganization of the customs department

In their reform program, the authorities stressed that the strengthening of the management, structure, and capacities of the customs services would also improve revenue collection performance. To this end, customs services in charge of tax collection were moved from N'Djaména to N'Gueli bridge, where the main road access to Chad is located--the bridge crosses the Chari River which forms the border with Cameroon. New offices

1/ Subsidization of domestic oil sales in Nigeria was partially eliminated in October 1994; nevertheless, the retail price of gasoline and diesel remained four and a half times cheaper than in N'Djaména.

2/ COTECNA is a subsidiary of the Société Générale de Surveillance (SGS).

were built in N'Gueli, as well as a specific area for customs clearance, which was fenced off and strictly restricted to customs officials, so that both customs clearance procedures and customs duties collection could be conducted at the same place. Customs officials were provided new uniforms that they were obliged to wear on duty. Some officials also benefited from additional training, partly provided by their own colleagues.

The setting of performance objectives and the system of incentives and sanctions were redefined with a view to emphasizing individual performance. In the last quarter of 1994, revenue targets began to be set on a weekly basis at the level of each customs subdivision, with an obligation to forward to headquarters a monthly detailed activity report, including, inter alia, the number of controls and seizures. If revenue targets were not met within a period of four months, individual sanctions against customs officials were imposed. Officials at fault were transferred, suspended, or prosecuted. Incentives to raise individual efficiency were strengthened by increasing from 10 percent to 25 percent the share of sales proceeds given to individual customs officials, and by raising to 10 percent the share distributed to customs officials of the increase over the previous year in customs revenues.

d. Implementation of the UDEAC reform 1/

The implementation of the UDEAC customs and tax reform in the course of 1994 and 1995 allowed for a significant rationalization and simplification of the customs tariff and indirect tax system in Chad. Initially, the goal of the reform was to establish a common market for the UDEAC member countries, including the establishment of a full-fledged customs union based on a free trade area--that is, the elimination of tariff and nontariff barriers within the subregion--and the harmonization of indirect taxation. The reform has also been, however, an instrument to simplify and rationalize the customs and indirect tax systems in the UDEAC zone, as well as to lower the average nominal protection rate.

In accordance with the UDEAC agreement signed in Bangui in June 1993, the provisions of the reform implied that in Chad, (i) a four-tier common external tariff structure (at rates of 5, 10, 35 and 50 percent) would replace a complex set of customs duties with multiple rates from 0 percent to 155 percent; (ii) a preferential tariff rate for intraregional trade, set initially at 20 percent to be phased out gradually by January 1, 1998, would

1/ UDEAC (Central African Economic and Customs Union) comprises the seven countries of the CFA franc zone in Central Africa (Cameroon, the Central African Republic, Chad, the Congo, Equatorial Guinea, and Gabon).

replace the regime of the single tax; 1/ and (iii) a turnover tax (TCA) with a normal rate at 15 percent and a reduced rate at 5 percent, would replace the single tax, the domestic production and consumption taxes, the domestic turnover tax, the turnover tax on imports, the transactions tax, and the proportional stamp tax. The UDEAC countries' customs officials agreed on the classification of goods into four tariff categories and a limited list of customs duty exempted goods. A restricted list of items either taxed at the reduced rate of the turnover tax or fully exempted was also adopted, as well as a list of items possibly subject to excise taxes. In addition, the bilateral tax preference agreements with private operators (conventions d'établissement) were to be renegotiated to eliminate the tax provisions contrary to the new UDEAC regime (notably the full or partial exemptions from customs duty payments). The latter condition was extended to any such provisions included in Chad's investment code.

Given the tightness of the financing situation, a general move toward lower customs duty rates in line with the UDEAC proposals was not initially considered possible in 1994. 2/ However, the authorities recognized that the UDEAC reform provided in one package many elements of simplification and transparency in customs taxation that were part of the overall customs reform program. The provisions of the reform were therefore gradually implemented in the course of 1994 and 1995: (i) on June 1, 1994, the customs department applied the new common external tariff, with the upper rates at 20 percent and 30 percent (instead of 35 percent and 50 percent)--a revision in harmony with the other UDEAC countries; (ii) on January 1, 1995, the intra-regional preferential tariff and the turnover tax entered into force; 3/ and finally (iii) on January 1, 1996, the common customs and indirect tax regime was applied to companies which were benefiting from the single tax, a tax preference agreement, or the specific provisions of the investment code.

1/ The single tax (taxe unique) was a production tax on the value of products sold in UDEAC countries; it was to be a substitute, for the companies concerned for the standard import duties and other indirect taxes on all materials used in the manufacturing process. However, the single tax, set at a low rate (10 percent) and extended to all products (whether sold in the UDEAC zone or not), turned out to be a privileged tax regime applied to some of the main Chadian companies.

2/ In accordance with the UDEAC regional agreement, the reform was to be completed in each individual country by December 31, 1995. Most countries, however, implemented the bulk of the reform measures, in particular the four-tiered lower tariff structure, in the wake of the devaluation in January 1994.

3/ The turnover tax was applied by the customs department in advance of the Tax Directorate, which introduced the turnover tax for domestic companies only on July 1, 1995, mainly because of lack of preparation.

e. Simplification of the external trade system

To reap further benefits from a simplified customs tariff system, the authorities also undertook the removal of the main existing nontariff barriers. Under the previous system, export and import licenses were compulsory for all trade operators and were granted through a cumbersome administrative process requiring no fewer than eight authorizations. On June 30, 1995, both export and import licensing requirements were eliminated, and a negative list of items requiring a special import authorization was established strictly on the grounds of security considerations. ^{1/}

The authorities have, however, maintained a few tariff barriers to protect their domestic market. As provided by the UDEAC reform, individual countries were authorized to resort to temporary surcharges on items from a restrictive list. In Chad, such surcharges were applied at a rate of 25 percent of the import value for items such as edible oil, sugar, soap, beer, and cigarettes. ^{2/}

Finally, the move toward a less distortionary allocation of resources in the economy was also supported by the decision to gradually eliminate all export taxes by the end of 1995. Export taxes had in particular some distortionary effects in the agricultural sector, by far the main contributor to exports in Chad, and notably in the main export areas such as cotton, livestock, and gum arabic.

3. Recent developments and next steps of the reform

While the 1994 results were affected by the particularly poor performance of the first half of the year (the reform had not yet started), the implementation of the customs reform was successful in 1995. Customs duty receipts rose by 72 percent in 1995, and revenues from the turnover tax on imports were three and a half times higher than in 1994. Revenues from fines and penalties were 13 times higher than the average amount during the period 1989-93. The ratio of customs revenues (obligations) to total imports increased by 3 percentage points to 12.4 percent, a striking performance given that, in the meantime, the nominal protection fell for non-exempted imports to a range varying from 11 percent to 51 percent (excluding temporary surcharges). ^{3/} As mentioned earlier, the political involvement of the authorities in the conduct of the reform and its monitoring was the prerequisite for such an improvement; other contributing

^{1/} Only sulphur and other explosives have been incorporated so far in this list.

^{2/} A minimum fee varying from CFAF 80 to CFAF 100 may be applied on each item. The temporary surcharge on sugar, which had never been applied, has been removed.

^{3/} According to early indications provided by the customs department, customs revenue targets were exceeded in the first quarter of 1996.

factors were the revision of the incentive system to reward customs officials' individual performances, as well as the simplification and harmonization of the customs tariff and indirect tax system under the new UDEAC regime. The latter, which had been defined prior to the design of the scheme to reform the customs department, provided useful policy guidance for the Chadian authorities, so that more time could be spent on technical and organizational changes within the customs department.

The authorities intend to continue their efforts to remove the remaining obstacles to the improvement of the functioning of the customs administration. 1/ First, customs exemptions in Chad, albeit declining, remained at one third of the value of imports (c.i.f.) in 1995. Such a slow decline, notwithstanding the measures undertaken in 1994-95, may be explained in 1995 by the relative rise of imports for public procurements related to projects that are legally exempted (Table 19). In 1996, the removal of exemptions granted through preferential agreements with companies is expected to have a downward effect on the average level of exemptions. Nonetheless, the current broad scope of exemptions, although granted on legal grounds, continues to require that further measures be undertaken to prevent abuse in resorting to exceptional regulations. Therefore, further progress is needed in the monitoring and control of exemptions. To that end, the authorities have indicated their intention to establish new mechanisms to eliminate as much as possible the granting of exemptions at the level of the customs

Figure 2 Sources of Customs Exemptions
(In billions of CFA francs)

1/ The weak coordination between the customs and the treasury departments remains an obstacle. In 1995, as mentioned in Table 2, the difference between the assessment of customs revenues obligations by the customs department and the customs revenues actually recovered by the treasury department was on the order of CFAF 2 billion (no less than 10 percent of the latter revenues). This difference is essentially explained by delays in the recovery of the single tax (which is not recovered by the customs department) and discrepancies in the reclassification of revenues according to their source. In 1996, given the elimination of the single tax, the difference should theoretically be minor under the current customs clearance procedures in Chad, since no customs clearance is obtained without settlement of all tax obligations.

Table 19. Chad: Sources of Customs Exemptions

(In billions of CFA francs)

	1994	1995
Embassies and consulates	1.1	0.9
International and nongovernmental organizations	2.1	1.5
Foreign military bases	2.5	3.2
Technical assistance and projects <u>1/</u>	5.1	3.1
Public procurements	1.9	3.0
Oil exploration	1.1	1.2
Others	--	1.3
Total	13.8	14.1

Source: Customs Directorate

1/ Including military assistance.

department and to transfer this role to the treasury department. Specific procedures will be defined to control ex post the legality of granting such exemptions, and to reimburse, if and when necessary, the beneficiaries that had paid duties at the border.

In this connection, the authorities set up in early 1996 a duty drawback mechanism for imports of petroleum products. All petroleum imports are now subject to customs duties at the border; those duties are credited to a special account and reimbursed following a verification of the legality of the claimed exemptions. In the case of STEE's oil imports, ^{1/} which are fully tax exempted since January 1994, oil tankers must be de-stocked at the STEE under the supervision of customs officials prior to customs duties reimbursement. Moreover, the authorities are considering establishing a mechanism to control exemptions granted for imports related to projects and public procurement. Under the envisaged system, these imports will be integrated into the budget all-tax-included. Finally, the authorities are also considering strengthening the monitoring of exemptions in specific cases such as military assistance or oil exploration. ^{2/}

The collection of petroleum revenues remains another important structural issue. Efforts undertaken in this area have not been successful, since petroleum revenues fell by 16 percent in 1995. In this context, the contract with the private company COTECNA, the annual cost of which represented a substantial percentage of the revenues collected, was not extended at the end of 1995. Among the factors explaining this weak outcome was the lack of close cooperation between the customs department and COTECNA; in particular, COTECNA had to rely on the customs services to control smuggling, except at the border point in N'Gueli. To replace COTECNA, the authorities set up, in early 1996, an autonomous public structure (Bureau de la Fiscalité Pétrolière), funded by a fixed share of the petroleum revenues collected, and with a government-approved budget. The structure, the personnel of which consists mostly of customs officials on secondment from the customs department, is also in charge of fighting smuggling along the border. The authorities indicated that the structure will be judged on its revenue performance by the end of the year; if the revenue performance is not satisfactory, they will consider whether the collection of petroleum taxes should be reintegrated within the customs department.

With respect to customs clearance procedures, the accent will need to be on the reinforcement of the monitoring and control process. Exceptional regimes, such as temporary admission and fictitious warehousing, require efficient data management to permit strict monitoring. Minimum values applied to imports from Nigeria and Saudi Arabia are still low and will need to be gradually readjusted upward. In the same vein, the update of the

^{1/} The STEE is the public company supplying power and water in Chad.

^{2/} The UDEAC agreement provides that exemptions are granted only for imports of professional equipment and supplies.

valuation basis could be more frequent. These measures would benefit from appropriate computerized applications allowing for standard database management. More advanced computerization would also be helpful in rehabilitating the collection of statistics by the customs department. The compilation of statistics on external trade is currently carried out by the statistics department of the Ministry of Planning based on the receipts forwarded by the customs department. More complete information is needed on a regular basis, and, to this end, an enhanced coordination between the customs department, the statistics department and the Central Bank (national agency of the BEAC) could be envisaged. It is also expected that, given the increase of the statistical tax by 1 percentage point to 2 percent, additional means will be allocated to the improvement of statistics on external trade developments.

III. Electricity and Oil in Chad - Current Issues and Prospects

Electricity, and to some extent petroleum products, are currently expensive factors of production, owing to the high transportation and distribution costs that stem from the fact that Chad is a large, sparsely populated, landlocked country. In addition, management inefficiencies are raising costs, particularly in the electricity sector. Since high energy costs are an obstacle to Chad's private sector development, every effort should be made to lower them and to improve efficiency. However, the outlook for Chad's energy sector may change dramatically in a few years, with the possible advent of domestic oil production. Such a development would substantially reduce the cost of energy in Chad, and dramatically alter the budgetary and balance of payments picture.

The purpose of the present section is to describe the current status of Chad's interrelated electricity and oil sectors and analyze how they may evolve over the next few years.

1. Overview of Chad's electricity and oil sector

Being a poor country with a very small mining and manufacturing base, Chad has a low energy consumption per capita. ^{1/} It is estimated that 90 percent of energy production comes from locally produced wood and charcoal, mainly for noncommercial use. Chad has no hydroelectric power and little potential in this area, while solar and wind energy generation is negligible; thus, the bulk of energy consumed by the modern sector is

^{1/} The World Bank estimates per capita energy consumption at one fifth of the sub-Saharan African average. The 1991 census showed that only 2 percent of Chadian households have access to electricity, markedly less than in sub-Saharan Africa on average.

derived from imported oil. Chad's petroleum product imports are currently estimated at about 120,000 cubic meters a year, of which about one fourth is fuel oil used in electricity production. 1/

The price of electricity is among the highest in Africa, 2/ in part because of management inefficiencies in the electricity-producing company, STEE, a public enterprise owned by the Chadian Government (81.3 percent) and the Caisse Française de Développement (18.7 percent). Despite recent efforts to remedy the situation, and notwithstanding high sales prices, STEE is currently a loss-making undertaking, as average variable costs of electricity production exceed average sales prices. 3/ Rehabilitating STEE to restore profitability and allow it to expand output and invest in additional capacity is thus an essential element of Chad's adjustment and growth strategy.

The oil imports sector functions in a fairly liberal mode, as private Chadian businesses and informal traders compete with international companies. International companies supply about one fourth of the domestic demand for gasoline and fuel oil from regional refineries, mainly in Cameroon, at world market prices. Local companies, as well as informal traders, buy oil in the retail distribution sector of Nigeria, where it is available below world prices. There is fraud in oil imports, which entails a loss of fiscal revenues. Gasoline imported fraudulently is reportedly being sold at some 30 percent below the official price. To a certain extent, Chad's private sector is thus benefiting from Nigeria's below-market oil-pricing policy. The Chadian Government is, however, committed to eliminating fraud in oil imports, and Nigeria's domestic oil prices may eventually move closer to world prices. Both factors imply an eventual increase in the actual cost of oil products to Chad's private sector. 4/

A consortium of international oil companies has located exploitable oil deposits in the center and in the southern part of the country, and preparations for their exploitation are well under way. The Sedigui oil field, north of N'Djaména, although relatively small in size, could potentially supply the local market in all products through a pipeline to a new small-scale refinery in N'Djaména. A joint venture (SEERAT) between the Chadian Government and the consortium was set up to that end in 1990. STEE

1/ Chad's domestic demand for oil products is not known with precision, owing to high volumes of fraudulent imports.

2/ The average rate per kwh was US\$0.25 in 1995. Most sub-Saharan African countries charge less (for instance, CAR: \$0.13; Guinea: \$0.19). The average rate in OECD countries is about \$0.13 per kwh.

3/ According to STEE's cost calculations, water provision is breaking even, although the price of water has been kept unchanged since 1984 for social reasons. Cost allocation between water and electricity production is approximate, however.

4/ Nigeria's oil prices were lifted substantially in November 1993 and in October 1994.

may build an electricity power plant close to the refinery, which would use the latter's heavy fuel oil. Depending on the cost of the project, as well as on Nigeria's oil policy, Sedigui's output could replace the bulk of oil imports and contribute to lowering energy costs. It would have positive fiscal revenue implications as well. However, this favorable prospect does not diminish the immediate need to improve STEE's performance. The oil fields in the south of the country (Doba region) are much larger and are targeted for exports; however, this export potential cannot be realized without a very long pipeline through Cameroon. By its size, this project, which may be completed near 2000, could have a radical impact on Chad's economy and finances.

2. Electricity

Electricity output has been stagnating since 1991, although underlying demand appears to be strong. STEE has no incentive to meet excess demand, as average variable costs exceed marginal revenue, notwithstanding rate increases in the aftermath of the CFA franc devaluation and some improvements in the company's management. Since STEE is reluctant to increase rates further, and investment is hampered by the company's poor balance sheet, its prospects are rather uncertain. However, the company's outlook is likely to improve dramatically if the Sedigui oil field is put into production.

a. Supply

Electricity on the public power grid is being provided by STEE. 1/ STEE supplies water as well. Five cities are currently supplied with electrical power (N'Djaména, Abéché, Moundou, Sarh, and Faya). 2/

As there is no integrated grid in Chad, each of the five centers has its own plant, each of them using light fuel oil. The capital city, N'Djaména, is by far the largest supplier and consumer of electric power, accounting for 86 percent of production in 1995. Total effective capacity is currently 28.3 megawatts (MW), including 21.7 MW in N'Djaména (Table 20). 3/ Following rapid growth between 1982 and 1990, reflecting investment in new capacity, gross production has peaked near 86 gigawatt-hours (Gwh) since 1991 (Table 21), and net supply (gross production, less STEE's self-consumption for electricity generation and water pumping)--near

1/ Self-production by businesses, including SONASUT Sahr, COTONTCHAD Moundou, and individuals, is estimated to account for about one third of total electricity supply. Few data are available on this subsector.

2/ Six more cities are supplied with water.

3/ Plant size in Chad is small: 40 MW is considered a cost-efficient fuel oil plant size.

83 Gwh (Table 22). The same pattern holds for N'Djaména alone, where the annual peak load has remained constant since 1991, at some 16.6 MW (Table 23). ^{1/}

b. Demand

Total demand kept pace with the growth of production in the 1980s, with increased use by households and by the Government (Table 24). ^{2/} Moreover, underlying demand by households appears to remain strong, ^{3/} and points to additional capacity needs (Table 25). Management and financial difficulties at STEE are nevertheless hampering investment (see Section 2.g below). In N'Djaména, the peak load since 1991 represents about 76 percent of effective capacity (Table 26), a level that is considered technically too high, as it may entail power cuts during generator maintenance periods. Far from encouraging electricity use, STEE is therefore trying to restrain demand, by selectively reducing the number of customers and through the electricity rate structure. These efforts, however, do not seem to have had a significant impact on global demand so far.

c. Pricing structure and cost

STEE's rate structure is fairly elaborate, comprising five categories of users and three to four step rates (Table 27). Prior to the January 1994 devaluation of the CFA franc, STEE's rate structure promoted consumption somewhat, with rates declining slightly in the higher tranches and with the first step rate for domestic use being preferential. Following the devaluation of the CFA franc, electricity rates were raised in several stages. An initial rate adjustment took place in April 1994, when the rate structure was lifted by 15-30 percent according to type of use and step rate; rates were again raised in January 1995 by 15 percent and in June 1995, by 10 percent.

As a result of the recent rate increases, Chad's rate structure is geared toward reducing high and/or peak demand. The lowest step rate for limited domestic use was raised the least (15 percent in total), while the rate for medium voltage during peak hours was raised the most (83 percent in total). Moreover, the structure of rates for domestic use is now U-shaped, as a result of a large increase in the highest tranche. Revenue also played a role in the structuring of rates, as STEE considers that increasing rates too steeply in the lowest domestic tranche would spur fraud as well as collection difficulties.

^{1/} The peak load occurs in April-May, before the rainy season starts.

^{2/} Annual per capita consumption of electricity is very low (less than 20 kwh compared with about 200 kwh for sub-Saharan Africa).

^{3/} According to STEE, a number of would-be customers are on a waiting list.

Overall, the average sale price per kwh increased by 21.4 percent in 1995, following an average increase on the order of 15 percent in 1994, less on average than the CPI (41.3 percent in 1994 and 9.5 percent in 1995) (Table 28). Moreover, taking into account the electricity bills actually paid by private customers (see Section 2.e below), the actual cost of electricity may not have risen on average as much as nominal rates in 1994 and 1995. Tentative calculations show that, while the quantity billed to private customers increased by 27.3 percent between 1993 and 1995, the amounts collected appear to have increased by less than 40 percent, thus implying an actual rise in users' unit costs of about 10 percent. This could explain in part why total electricity demand appears to have been fairly insensitive to the rate increases over the past several years.

Concerning costs, taxation of fuel oil purchased by STEE was lowered from CFAF 46 a liter to zero after the devaluation. Costs nevertheless soared in 1994, mainly as a result of higher purchase price for fuel oil (from about CFAF 190/liter to about CFAF 250-260), end of the increased purchase value of other input and equipment.

Fuel oil accounts for about 60 percent of STEE's total production cost. Variable costs are therefore a very important element of STEE's total electricity production costs. 1/ According to STEE's provisional accounts, in 1994 the average variable cost per kwh was CFAF 121, compared with the average sale price of CFAF 104, and the marginal cost was higher than average variable costs, as peak demand is met by using the technically least efficient equipment. Thanks to rate increases and better management, in particular closer control of billing, the average variable loss is estimated to have been reduced to CFAF 5 per kwh in 1995. Notwithstanding this improvement, faced with a negative margin on average variable costs and increasing marginal costs on the installed equipment, STEE currently has no incentive to expand electricity supply.

d. Operating losses

Operating losses, which had risen from CFAF 1.2 billion in 1991 to more than CFAF 2.1 billion in 1993, were reduced to CFAF 1.4 billion in 1994 (nonaudited accounts) and to CFAF 0.9 billion in 1995 (provisional estimate), due to the rate increases mentioned above, and to cost-reduction measures, which are outlined below. STEE is targeting operating equilibrium

1/ STEE does not appear to be particularly capital intensive by international standards of electric utilities. In 1993 fixed assets were about twice the value of annual sales of electricity and water. The economic literature on public utilities in the United States suggests that the capital/output ratio as a minimum is equal to 4, as opposed to less than 1 in most of manufacturing.

in 1996. However, since accumulated losses are estimated at CFAF 7.8 billion at end-1995, STEE's financial situation remains a matter of concern.

e. Main sources of inefficiencies at STEE

Different types of inefficiencies explain STEE's poor financial performance. First, the difference between net electricity supply and billing reflects technical loss in the distribution system, as well as deficiencies in the billing of customers and fraud. STEE estimates the 1995 technical loss rate in the distribution system at 8-10 percent of net supply, whereas nontechnical loss is estimated at 12-14 percent of net supply in 1995.

Second, a major additional weakness in STEE's management is the difference between billing and the recovery of amounts due from public and private customers. Uncollected bills of private customers ran as high as 18 percent of sales in 1995 (Table 29). A large stock of private customers' unpaid bills has accumulated, most of which will be very difficult to recover. At end-1993, gross unpaid bills amounted to CFAF 9.1 billion, for which CFAF 5.4 billion was retained. While audited balance sheets for 1994 and 1995 are not yet available, these amounts are bound to have increased, as the collection rate stayed well below 100 percent in those years.

Third, as regards the Government, arrears are accumulating as a result of inadequate budgetary allocations and liquidity shortages. According to STEE's accounts, unpaid electricity and water consumption by the Government amounted to some CFAF 4.8 billion at end-1993. STEE was reporting bills of CFAF 5.9 billion due by the Government at end-1994 and CFAF 6.7 billion at end-1995.

f. Cost reduction efforts

As regards technical loss, a gradual rehabilitation of the distribution system in N'Djaména brought the loss rate from 15 percent at the beginning of the 1990s to 8-10 percent in 1995. STEE is planning further improvements, among other things, by laying underground cables.

Nontechnical loss was significantly reduced in N'Djaména in 1994 and 1995. The ratio of electricity sales to net supply went up from 64 percent in 1993 to about 80 percent in 1995, due to a number of actions aimed at improving customer management, including replacing malfunctioning meters, cutting off supply to customers in arrears, and streamlining the billing department. In 1996 STEE's strategy is to concentrate on improving billing outside N'Djaména.

However, as indicated in above, the actual collection of bills due did not keep pace with increased sales to private customers, resulting in a drop in the bill collection rate from 93 percent in 1993 to 72 percent in 1995. Since private customers account for about 80 percent of sales, the targeted improvement in STEE's cash flow was severely reduced. STEE's response was

to cut off delinquent private customers, thereby contributing to the goal of reducing electricity supply. Reflecting this strategy, the number of electricity customers, which had risen rapidly up to 1994, leveled off in 1995. Nevertheless, it appears that the issue of defaulting customers remains largely unresolved.

As far as arrears due by private customers are concerned, to the extent feasible, STEE is accepting payment by installments. As noted above, however, a large portion of these arrears will never be recovered, although they are still on STEE's books.

In regard to government arrears, settlement of cross-debt was the option followed. Following an audit completed jointly by STEE, the Treasury, and the Tax Directorate in 1995, unpaid bills during 1989-93 ^{1/} were netted against unpaid taxes owed by STEE during the same period. ^{2/} The balance--CFAF 496 million in favor of STEE--was carried over in 1994 and 1995. According to STEE's books, in 1994 and 1995 (up to October), the Government's total water and electricity consumption was about CFAF 4.7 billion. Taking into account external budgetary aid allocated to STEE (CFAF 2.5 billion), and STEE's unpaid taxes, claims by STEE on the Government increased by about CFAF 1.6 billion in 1995 to a total of CFAF 2.1 billion at end-1995. Although the Chadian Treasury's estimates of STEE's taxes due at end-1995 were about CFAF 500 million higher than STEE's estimates, it is clear that large government arrears vis-à-vis STEE are accumulating.

With regard to the reduction of operating costs, STEE reports a trend toward lower costs of fuel oil through competitive bidding, owing to greater aggressiveness of some bidders, which may reflect an improved market perception of the company's creditworthiness. STEE is expecting that the cost of fuel oil will go down in 1996 to CFAF 235 a liter, and possibly even lower, from CFAF 250 in 1995. If this trend is confirmed, it would go some way toward attaining operating equilibrium in 1996.

A more drastic measure would be to switch from using light fuel oil to heavy fuel, as recommended by the World Bank. Heavy fuel is indeed markedly cheaper (reportedly about CFAF 100 a liter, including transport costs), and available in ample supply, notably in Nigeria. Such a change, however, would entail a technical conversion of the generators. Therefore, that issue cannot be separated from the broader issue of STEE's investment strategy, which will be considered, with the help of external consultants in the course of 1996. It is expected that a financial restructuring plan will also be proposed, which may involve recapitalizing the company, as STEE's heavy indebtedness is hampering investment.

^{1/} Reciprocal arrears prior to 1989 were canceled by mutual agreement.

^{2/} Decree 256/MFI/DG/DTCP/95 of November 4, 1995.

g. Medium-term investment projects

Despite the current high electricity rates, STEE's view is that there remains, among solvent customers, some excess demand for electricity at the going rates. However, STEE is reluctant to increase electricity rates further. 1/ Since the plants are operating near full capacity at peak loads, meeting excess demand implies increasing capacity, while lowering costs. An increase in capacity (at least in N'Djaména) may be possible through two options: building an additional power plant (with a capacity near 12 MW) in N'Djaména, and/or connecting Chad with Cameroon's Lagdo hydroelectric plant (420 kilometers south of N'Djaména).

STEE's preferred option appears to be the building of an additional plant that would use heavy fuel, which would be produced by a refinery that may be built in the next few years to exploit the Sedigui oil field north of N'Djaména (see Section 3 on oil). STEE's preference stems in part from security of supply considerations. It is expected that the economic feasibility of this option will be examined soon, with a view to reaching conclusions by late 1996. Based on previous estimates, the Government hopes that the Sedigui operation will roughly halve STEE's fuel bill and allow for a drastic decrease in electricity rates. Based on an estimated cost of the new generating plant on the order of CFAF 10 billion, this project would move STEE toward a more capital-intensive cost structure. STEE's future rate structure may then exhibit decreasing step rates, a feature more favorable to large consumers than the present rate grid.

A study of the Lagdo option was made in 1993, which confirmed the economic viability of the project. It could constitute an alternative to the Sedigui refinery project, if the latter was abandoned. At a later stage, both options could be combined as Chad's market grows. However, it would require negotiations with Cameroon, which have not been initiated.

3. Petroleum products

Chad's existing liberal oil import system appears to ensure a generally uninterrupted oil supply. However, storage capacity is underutilized, leading to temporary market imbalances when there are supply or demand shocks. Also, though the authorities appear committed to tightening customs control, there has been a significant volume of fraudulent imports, entailing thereby large budgetary revenue losses. In turn, average market prices are lower than official prices, in particular for gasoline, reflecting tax evasion on illegal imports. In the next few years, the exploitation of the small Sedigui oil field, if it materializes, may lead to a reduction in domestic energy prices and possibly to the elimination of fraudulent imports. In addition, the prospective substantial crude oil exports from the large Doba oil field may dramatically change the structure

1/ One reason that STEE has cited is the need to avoid increasing fraud incentives.

of Chad's economy early in the next century, as crude oil could become the country's largest export, with a concomitant surge in budgetary revenues. However, since the detailed arrangements underpinning these projects have yet to be finalized, a comprehensive assessment of their impact on Chad's economy and budget is premature.

a. Chad's market in petroleum products

(1) Domestic demand

Total domestic demand for oil products in Chad is not known with great accuracy because of a large and variable volume of unrecorded fraudulent imports. However, in 1995, demand, including fraudulent imports, was estimated at some 120,000 cubic meters, of which 70,000 cubic meters are fuel oil (about 14 liters per capita per annum) and 25,000 cubic meters are gasoline (about 5 liters per capita) (Table 30). The market for oil products is projected to grow by about 3.5 percent a year, and possibly faster if STEE expands and if propane partially replaces wood and charcoal. Projections for 2005 show a gasoline demand of 35,000 cubic meters, a demand for light fuel oil of about 100,000 cubic meters, and a potential demand for heavy fuel of 24,000 cubic meters. Demand for jet fuel, currently estimated at 21,000 cubic meters, is closely linked to certain military operations and is therefore difficult to project.

(2) Supply

Oil imports are currently estimated to come in about equal parts from neighboring producers Cameroon and Nigeria. MOBIL, SHELL, and TOTAL, are organized in the Groupement Professionnel du Pétrole (GPP), and import mainly fuel oil, jet fuel, and gasoline, mostly from Cameroon (Table 12). Some 15 local companies import mainly fuel oil and gasoline from Nigeria, while informal traders import gasoline from Nigeria, often evading taxes. Although the number of importing firms is fairly high, the market is not purely competitive, as 30-40 percent of sales are concentrated in the GPP's three companies, while the remainder is spread over a much larger number of businesses.

The present liberal organization of imports appears to be working well in normal circumstances. Nevertheless, it has been criticized for being too sensitive to disruptions in supplying countries. GPP's storage capacity, while globally adequate (22,000 cubic meters, or about two months of consumption), is largely underutilized. It represents about six months of GPP's own sales, which is very large, while local importing companies and informal traders keep their stocks on trucks, given the high cost of accessing GPP's storage facilities. An alternative import organization has therefore been advocated by international companies, whereby oil imports would be entrusted to a monopoly, as is the case for sugar. Reflecting this view, the existing convention on the prospective refinery (the SEERAT convention; see paragraph 3.b.(1)), provides for such a monopoly to be

entrusted to SEERAT at some point in the future. It is doubtful, however, that the setting up of a monopoly as such would reduce fraudulent imports.

Fraudulent imports are reported to be significant for gasoline, accounting for about 40 percent of all imports--both reported and unreported--while they are estimated to be low in fuel oil. 1/ Fraudulent imports, while remaining substantial, are likely to have declined since 1993. Evidence of such a decline was first seen during the first half of 1994, when GPP's market share increased, reflecting temporary disturbances in oil imports brought about by changes in Nigeria's oil pricing policy. In addition, the large increases in Nigeria's domestic oil prices in November 1993 and in October 1994, the CFA franc devaluation in January 1994, and the accompanying lowering of import taxes on oil (see below) appear to have reduced permanently the incentive to import through the retail distribution network of Nigeria. Finally, GPP's margin over costs, as reflected in the official price structure (imports ex Cameroon), increased nearly threefold between October 1993 and end-1995, while the c.i.f. value less than doubled, thus strengthening GPP's profitability.

(3) Pricing of oil products

Maximum authorized retail prices of gasoline, fuel oil, and lighting oil are published by the Ministry of Commerce. They are currently set at CFAF 390/liter for gasoline (about US\$0.80), CFAF 340/liter for fuel oil, and CFAF 260/liter for lighting oil (N'Djaména prices) (Table 32). Official prices tend to reflect the costs of GPP firms, whose operating costs appear to be high (32 percent of c.i.f. value in N'Djaména for gasoline). Reflecting lower supply costs, local companies are reported to sell somewhat below official prices, 2/ while fraudulently imported gasoline is reportedly sold at prices that are 15-30 percent cheaper than the official retail price.

Taxation on petroleum products consists of a specific tax levied at customs, differentiated by product. Following the devaluation of the CFA franc early in 1994, taxes were lowered from CFAF 141 to CFAF 112 per liter for gasoline (to about 53 percent of current c.i.f. price), from CFAF 127 to CFAF 62 for fuel oil (to about 30 percent of c.i.f. prices), and were abolished on lighting fuel (previously CFAF 70). Moreover, the taxation of STEE's fuel oil was removed. With regard to fraud, the Chadian authorities have taken steps in 1994 to improve border controls, and early 1996, they

1/ However, as fuel oil consumed by STEE is exempted from taxation, there appear to be large quantities of fuel oil that benefit from STEE's exemption, and then are sold in the domestic market.

2/ In early 1996, retail prices in Nigeria are reported to be currently about CFAF 66 a liter for gasoline at the parallel naira exchange rate. The purchase price of GPP firms, as reflected in the official price structure, is CFAF 85 a liter (ex refinery - Cameroon).

introduced new administrative procedures, with a view to combatting fraud more effectively, especially in exempted fuel oil. There are early signs of success.

b. Prospects for Chad's oil production

(1) The Sedigui refinery project

Sedigui's oil field reserves north of N'Djaména are estimated at 12-15 million barrels, allowing a production of 2,000 barrels a day (about 100,000 tons a year) at a minimum over a 7-year period, and probably over 15 years. In view of its relatively small size and its location, exporting from the field would not be profitable. However, its potential output in terms of both quantity and quality would cover most of Chad's current domestic demand. 1/

Assuming the project goes forward, exploitation might start at the turn of the century, with full output possibly attained soon thereafter. 2/ The existing convention (1988) between the Chadian Government and an international oil consortium sets the framework for field exploitation, crude oil pipeline transportation to N'Djaména (350 km), and the building of a small-scale refinery in N'Djaména. The pipeline and the refinery would be built and operated by the Société d'Etude et d'Exploitation de la Raffinerie du Tchad (SEERAT), established in 1990, and currently owned by the Chadian Government (49 percent) and the consortium (51 percent). 3/ The project is currently estimated to cost about US\$70 million, subject to confirmation by a detailed engineering study.

According to the existing convention, the consortium would supply the refinery with crude oil at an agreed price of US\$8-US\$10 a barrel. 4/ The convention grants SEERAT a monopoly on oil imports, which would put an end to the present liberal market structure. There are no indications at this stage where crude oil supply would come from after Sedigui's reserves are exhausted (around 2015). The economic viability of the project has yet to be confirmed, and the convention may be amended before the decision is taken to implement it.

Limiting competition in the oil sector in order to protect the refinery's market share may not be necessary if available estimates of

1/ It is expected that there would be a surplus in gasoline and a deficit in light fuel oil.

2/ Preparatory studies were financed by IDA with a US\$11.5 million project loan.

3/ In 1993, the authorities asked the consortium to take a majority share.

4/ Given the size and the remoteness of the Sedigui field, there is no option but to sell its oil to the refinery; hence, the price per barrel is below the world market price.

production costs are confirmed, which show the project to be viable in a competitive environment. 1/ Moreover, assuming taxation per liter is lowered somewhat from present levels, the currently projected pump price of Sedigui products could successfully compete with illegal imports. In such a scenario, Chad's economy would enjoy lower oil product prices, while tax revenues may increase somewhat, owing to the widening of the tax base following the elimination of fraudulent imports. Any increase in domestic oil prices from current levels in Nigeria would further enhance the viability of the project.

As indicated, STEE is contemplating building an electric power plant close to the refinery, which would use its output of heavy fuel oil and supply electric power to it. 2/ The authorities are hoping STEE would be able to buy heavy fuel oil from SEERAT at a price below CFAF 100 a liter.

(2) The Doba oil field project

The same consortium that is part of the SEERAT convention discovered substantial oil reserves in the Doba region in southwestern Chad. Probable reserves are estimated to be about 1 billion barrels, which would allow for exports on the international market for 25 years, through a pipeline from Doba to Cameroon's coast, where maritime facilities would be built. If the project is implemented, oil production might possibly start around 2000-2002. Full capacity (230,000-300,000 barrels a day) might be reached by 2015.

The total cost is currently estimated at about US\$2.8 billion, of which US\$1.6 billion would be for the pipeline and the maritime facilities. It is envisaged that a Chadian company with minority government ownership would be set up, which would operate the Chadian portion of the pipeline.

Given the size of the Doba project, its implementation would bring about a large change in Chad's economic structure. Chad's oil exports may exceed CFAF 700 billion by 2015, possibly exceeding traditional exports early in the next century. The project would bring Chad's budget substantial new sources of revenue (royalties, taxes). However, a quantification of budgetary revenues is not possible at this stage, as negotiations between the Chadian Government and the consortium are under way.

1/ Containing these costs is crucial to the success of the project.

2/ Output of heavy fuel is projected to be larger than the new electric generating unit needs. However, existing STEE's equipment may easily be converted to heavy fuel, while other end-users may be interested in the switch as well.

Table 20. Chad: Equipment of STEE's Electrical Power Plants

Unit	Year	Theoretical Power KW	Effective Power KW	Rotations/ Minutes	Total Hours Used 12/31/95	Remarks
<u>N'Djaména</u>						
G1-Pielstick PC2.1V12	1967	3,800	3,300	500	110,719	Obsolete 2000
G3-SGCM PC1. V12.400	1963	2,600	2,000	428	121,032	Obsolete 1998
G4-Pielstick PC2.2V12	1972	4,100	3,500	500	119,885	Obsolete 2005
G5-Pielstick PC2.1V12	1965	3,450	3,300	500	117,741	Obsolete 2001
G6-Pielstick PC2.2V12	1985	4,400	3,600	500	58,213	
G7- GMT - 12V	1992	4,320	3,600	750	12,793	
GM1- AGO UD45.V16.240	1989	1,690	1,200	1,000	23,987	
GM2- ACO UD45.	1989	1,690	1,200	1,000	24,527	
Total, N'Djaména		26,050	21,700			
<u>SARH</u>						
G1-SACM AGO G16VS240		1,500	1,200	1,000	14,989 <u>1/</u>	
G2-SACM AGO G16VS240		1,500	1,200	1,000	20,568 <u>1/</u>	
G3-SACM AGO G16VS240		1,600	1,280	1,000	4,526 <u>1/</u>	
G4-SACM AGO G16VS240		1,600	1,280	1,000	5,437 <u>1/</u>	
Total, SARH		6,200	4,960			
<u>MOUNDOU</u>						
G1-SACM MGO V12ASH		300	240	1,000	23,181 <u>1/</u>	
G2-SACM MGO V12ASH		300	240	1,000	36,656 <u>1/</u>	
G3-SACM MGO V12ASH		300	240	1,000	29,790 <u>1/</u>	
G4-SACM MGO V16ASH		512	410	1,000	11,501 <u>1/</u>	
Total, MOUNDOU		1,412	1,130			
<u>ABECHE</u>						
G1-Mercedes OM401		100	100	1,500		
G3-Mercedes OM401		100	100	1,500		
G4-Poyaud A81505		160	120	1,000		
G5-Poyaud AG150SCR		190	130	1,000		
Total, ABECHE		550	450			
FAYA		64	50			
Total, STEE		34,276	28,290			

Source: Electricity and Water Company (STEE).

1/ 12/31/94.

Table 21. Chad: STEE – Gross Electricity Production, 1991–95

(In gigawatt–hours)

	1991	1992	1993	1994	1995
N'Djamena	72.198	70.935	73.541	73.035	76.221
Abeche	0.924	1.066	1.011	0.948	0.978
Moundou	5.182	5.496	5.588	5.241	5.439
Sarh	8.840	6.162	5.698	5.389	6.436
Bongor	--	--	--	--	--
Faya	--	0.077	0.098	0.111	0.054
Total	87.144	83.737	85.936	84.723	89.128

Source: Electricity and Water Company (STEE).

Table 22. Chad: STEE – Net Electricity Supply, 1991–95 ^{1/}

(In gigawatt-hours)

	1991	1992	1993	1994	1995
N'Djamena	70.019	68.869	71.281	68.635	71.719
Abeche	0.903	1.010	0.951	0.901	0.927
Moundou	4.941	5.168	5.303	4.971	5.138
Sarh	8.743	6.067	5.573	5.261	6.312
Bongor	--	--	--	--	--
Faya	--	0.077	0.098	0.111	0.054
Total	84.606	81.192	83.207	79.879	84.149

Source: Electricity and Water Company (STEE).

^{1/} Gross production less STEE's own consumption.

Table 23. Chad: Electricity Production in N'Djaména, 1970-95

Year	Peak Load (Mw)	Gross Production (Mwh)	Net Supply (Mwh)	Self-Consumption 1/	Consumption of diesel oil (in tons)	Specific Consumption (g/kwh)
1970	6.7	30,570				
1971	8.3	35,445			8,579	280.6
1972	8.7	38,271			9,821	277.1
1973	9.3	42,566			11,359	296.8
1974	9.5	42,479			12,262	288.1
1975	9.6	41,152			11,771	277.1
1976	9	39,921			11,475	278.8
1977	9.55	41,892			11,356	284.5
1978	11.15	45,880			11,789	281.4
1979	8.4	31,049			13,184	287.4
1980	9.48	13,034				
1981	3.4	13,981				
1982	3.97	21,483				
1983	5.6	28,085			7,981	284.2
1984	8.35	40,152			10,928	272.2
1985	9.35	42,882	41,814	2.49	11,724	273.4
1986	11.1	48,255	47,015	2.57	13,035	270.1
1987	13	55,378	53,993	2.50	14,709	265.6
1988	13.55	58,753	57,473	2.18	15,927	271.1
1989	14.5	61,353	59,534	2.96	16,993	277.0
1990	16.25	73,857	71,706	2.91	19,781	272.0
1991	16.50	72,198	70,019	3.02	20,000	237.3
1992	16.50	70,935	68,869	2.91	20,152	238.6
1993	16.85	73,541	71,281	3.07	20,225	230.9
1994	16.5	73,035	68,635	6.02	20,131	231.53
1995	16.73	76,221	71,719	5.91	21,327	235.04

Source: Electricity and Water Company (STEE).

1/ In percent of gross production.

Table 24. Chad: STEE – Electricity Sales, 1991–95 ^{1/}

(In gigawatt-hours)

	1991	1992	1993	1994	1995 Est.
N'Djamena	46.121	43.424	45.462	54.200	57.020
Abeche	0.474	0.635	0.655	0.684	0.551
Moundou	3.667	3.737	3.737	3.636	3.443
Sarh	7.244	3.983	3.674	3.342	4.327
Bongor	--	--	--	--	--
Faya	0.028	0.031	0.027	0.037	0.026
Total	57.534	51.809	53.555	61.899	65.367
Of which : Private customers	(46.211)	(40.663)	(41.144)	(48.423)	(52.363)
Government	(11.323)	(11.146)	(12.411)	(13.476)	(13.004)

Sources: Electricity and Water Company (STEE); and Fund staff estimates.

^{1/} Excluding STEE's own consumption.

Table 25. Chad: Number of Electricity Users, 1989-95

		1989	1990	1991	1992	1993	1994	1995 Prov.
N'Djaména	Total	6,767	7,532	7,920	8,622	8,709	9,014	9,060
	Low tension	6,707	7,469	7,850	8,554	8,641	8,944	8,989
	Medium/high tension	60	63	70	68	67	70	71
Sarh	Total	651	638	595	633	675	609	750
	Low tension	642	629	586	624	667	601	743
	Medium/high tension	9	9	9	9	8	8	7
Moundou	Total	422	484	560	515	524	707	723
	Low tension	415	477	553	508	517	698	717
	Medium/high tension	7	7	7	7	7	9	6
Abéché	Total	268	284	288	366	381	374	390
	Low tension	267	282	286	364	379	372	388
	Medium/high tension	1	2	2	2	2	2	2
Faya	Low tension	26	45	40	35	36	64	65
	Total	8,134	8,983	9,403	10,171	10,324	10,768	10,988
	Low tension	8,057	8,902	9,315	10,085	10,240	10,679	10,902
TOTAL	Medium/high tension	77	81	88	86	84	89	86

Source: Electricity and Water Company (STEE).

Table 26. Chad: STEE – Ratio of Electricity Sales to Net Supply, 1991–95

(In percent)

	1991	1992	1993	1994	<u>1995</u> <u>Est.</u>
N'Djamena	65.9	63.1	63.8	79.0	79.5
Abeche	52.5	62.9	68.9	75.9	59.4
Moundou	74.2	72.3	70.5	73.1	67.0
Sarh	82.9	65.6	65.9	63.5	68.6
Bongor	--	--	--	--	--
Faya	--	39.9	27.4	33.2	48.9
Total	68.0	63.8	64.4	77.5	77.7

Sources: Electricity and Water Company (STEE); and Fund staff estimates.

Table 27. Chad: Electricity and Water Company (STEE), 1984-95

Evolution of rates for Electricity Use (Kwh) and Water Consumption (cubic meters), in CFA Francs

	10/84- 12/89	01/90- 03/94		04/94- 12/94 1/	01/95- 05/95	As of 06/95
I. Electricity						
I.1 Low Tension						
I.1.a Domestic use						
1st tranche (30 kwh)	90	72	1st tranche (30 kwh)	83	83	83
2nd tranche (30 h x kw.d.) 2/	168	134	2nd tranche (60 h x kw.d.)	155	178	197
3rd tranche (30 h x kw.d.)	158	126	3rd tranche (60 h x kw.d.)	146	161	177
4th tranche	154	123	4th tranche	143	165	201
I.1.b. Large customers						
1st tranche (30 kwh)	90	72	1st tranche (30 kwh)	84	84	84
2nd tranche (30 h x kw.d.)	168	134	2nd tranche (60 h x kw.d.)	163	187	205
3rd tranche (30 h x kw.d.)	158	126	3rd tranche (60 h x kw.d.)	153	169	186
4th tranche	154	123	4th tranche	150	173	211
I.1.c. Industrial use						
1st tranche (30 h x kw.d.)	160	128	1st tranche (60 h x kw.d.)	156	180	194
2nd tranche	142	113	2nd tranche	138	145	155
I.1.d. Public lighting						
	142	113		138	138	138
I.2 Medium/High Tension						
1.2.a General rate						
	84	58		75	90	99
1.2.b Preferential rate						
(7H00-9H30/15H30-21H00)	84	58		75	90	108
(9H30-13H30) peak	156	109		140	168	200
(21H00-7H00) trough	65	45		58	70	84
1.2.c Fixed fee						
	4,280	4,280		5,595	6,714	8,055
1.2.d Additional tax						
for nonindustrial use/kwh	57	39		50	60	72
II. Water						
1st tranche (1 to 14 m3)	105	105		105	105	105
2nd tranche (15 to 1,000 m3)	230	230		230	230	230
3rd tranche	110	110		110	110	110

Source: Electricity and Water Company (STEE).

1/ After devaluation of CFAF.

2/ Kw.d. = kilowatts of demand.

Table 28. Chad: STEE – Average Cost of Electricity, 1994–95

	<u>1994</u> Prel.	<u>1995</u> Prov. 1/
Gross electricity production (Gwh)	84.723	84.747
Net electricity supply (Gwh)	79.879	79.726
Sales, including self-consumption (Gwh)	66.991	70.159
Sales, including self-consumption (in millions of CFAF)	6,936.957	8,818.678
Average sale price per kwh (CFAF)	103.5	125.7
Cost calculations (in millions of CFAF)		
Total direct production costs	6,775.813	8,950.527
Of which: fuel oil and other inputs	(6,366.743)	(7,040.228)
depreciation	(42.809)	(1,297.950)
Distribution costs	169.901	529.598
Of which: depreciation	(...)	(234.714)
Allocated administrative costs	3,618.894	2,106.089
Of which: depreciation and reserves	2,441.403	876.030
Total	10,564.607	11,586.214
Excluding depreciation	8,080.396	9,177.519
<u>Memorandum items</u>	<u>(In CFAF per kwh)</u>	
Unit cost of net electricity supply	132.3	145.3
Unit cost of electricity sales	157.7	165.1
Excluding depreciation and reserves	120.6	130.8
Loss per unit of electricity supply	-28.7	-19.6
Loss per unit of electricity sales	-54.2	-39.4
Excluding depreciation and reserves	-17.1	-5.1

Source: Electricity and Water Company (STEE).

1/ January–October.

**Table 29. Chad: STEE – Collection of Bills Due from Private Customers
(Electricity and Water), 1991–95**

(In millions of CFAF francs and in percent)

	<u>Billing</u>		<u>Collection</u>		<u>Collection rate</u>	
	(Of which N'Djamena)		(Of which N'Djamena)		(Of which N'Djamena)	
1991	5,961.2	4,871.7	4,870.0	4,109.6	81.7	84.4
1992	5,650.7	4,742.8	4,906.2	4,114.5	86.8	86.8
1993	5,631.3	4,747.4	5,221.6	4,427.0	92.7	93.3
1994	7,954.0	6,928.7	6,197.7	5,323.1	77.9	76.8
1995 ^{1/}	8,258.4	7,390.3	5,975.7	5,294.7	72.4	71.6

Source: Electricity and Water Company (STEE).

^{1/} Excluding November–December.

Table 30. Chad: Origin of Petroleum Imports by Products, 1995 1/

	Cameroon	Nigeria	<u>Fraud</u> Est.	Total
GPL	300			300
Gasoline	8,000	7,000	10,000	25,000
Lighting oil	1,000	2,000		3,000
Jet A1	21,000			21,000
Fuel oil	18,000	49,000	3,000	70,000
Total	48,400	56,100	13,000	119,300

Source: Chadian authorities.

1/ In cubic meters.

Table 31. Chad: GPP Sales, 1986-94 1/

	1986	1988	1990	1992	1993	1994
GPL	--	106	138	248	261	170
Gasoline	3,441	4,442	5,754	3,789	4,394	6,674
Lighting oil	246	75	18	422	74	213
Jet A1	40,067	54,321	43,526	24,681	21,630	12,604
Fuel oil	19,182	11,480	35,825	10,430	13,637	17,894
Total	62,936	70,424	85,261	39,590	39,996	37,555

Source: Chadian authorities.

1/ In cubic meters.

Table 32. Chad: Petroleum Products – Internal Cost Structure of Oil Products ^{1/}

(In CFAF francs per liter)

	Gasoline ^{2/}	Fuel oil	Lighting oil
Price ex-refinery	85 [65]	82	84
Transportation and other costs	128 [66]	127	127
CIF value	213 [131]	209	211
Storage costs	16 [n.a.]	10	11
Overhead costs	35 [n.a.]	35	35
Tax ^{3/}	112 [141]	62	--
Total cost	377 [n.a.]	317	257
Net margin	13 [n.a.]	23	3
Retail price	390 [290]	340	260
Memorandum item:			
Gross margin, including storage and overhead costs	65 [18]	69	49

Source: Electricity and Water Company.

^{1/} As of September 19, 1995. Cameroon origin.

^{2/} Between brackets: as of October 1993.

^{3/} Specific tax per liter.

Table I. Chad: Cost Structure of Cotton Processing and Marketing, 1990/91-1994/95 ^{1/}

(In CFA francs per kilogram)

	1990/91	1991/92	1992/93	1993/94	1994/95
Producer price for raw cotton ^{2/}	88.4	87.8	79.7	89.2	119.9
Producer price in equivalent of ginned cotton ^{3/}	232.5	226.2	206.0	228.0	307.0
Internal transportation, insurance, and other outlays	27.3	26.7	27.2	43.3	41.4
Ginning ^{4/}	107.2	101.9	113.8	177.4	131.9
Financial charges	28.7	41.8	50.9	58.9	32.9
Transportation, insurance, and other outlays	65.7	53.2	54.2	76.9	101.2
Export taxes	0.0	0.0	0.0	0.0	0.0
Total average export cost (f.o.b. Douala)	461.4	449.8	452.1	584.5	614.4
Freight and insurance	26.5	30.6	21.5	47.2	67.1
Total average export cost (c.i.f. Douala)	487.9	480.4	473.6	631.7	681.5

Sources: Data provided by the Chadian authorities; and staff estimates.

^{1/} Marketing year, starting in November.

^{2/} Weighted average producer prices for white and yellow cotton.

^{3/} Fiber equivalent of raw (unginned) cotton prices and costs.

^{4/} Includes provisions for depreciation.

Table II. Chad: Meat Production, 1991-95

	1991	1992	1993	1994	1995
<u>(In thousands of head)</u>					
Animals slaughtered					
Cattle	98.0	99.5	75.4	99.9	100.2
Of which: N'Djaména	(--)	(65.6)	(74.6)	(67.5)	(70.9)
Sheep and goats	173.3	178.1	69.2	185.7	181.5
Of which: N'Djaména	(--)	(78.6)	(68.9)	(65.6)	(68.7)
Others ^{1/}	2.1	3.0	0.9	4.5	2.3
Total	273.4	280.6	145.5	290.1	284.0
<u>(In thousands of metric tons)</u>					
Total for N'Djaména	9.4	9.7	11.0	15.6	15.6

Sources: Data provided by the Chadian authorities; and staff estimates.

^{1/} Includes pigs, horses, and camels.

Table III. Chad: Industrial Production, 1991-95

	1991	1992	1993	1994	1995
	<u>(In thousands of hectoliters)</u>				
Beer	144.4	129.4	117.1	107.7	95
Edible oil	77.8	87.9	70.2	86.9	117
	<u>(In millions of packs)</u>				
Cigarettes	23.8	20.7	24.9	25.4	28
	<u>(In millions of meters)</u>				
Textiles	1.9	--	--	0.2	0.2
	<u>(In thousands of metric tons)</u>				
Sugar	27.1	25.8	25.2	26.7	26

Sources: Data provided by the Chadian authorities; and staff estimates.

Table IV. Chad: Central Government Employment, 1991-95 ^{1/}

	1991	1992	1993	1994	1995
Presidency	1,077	1,130	1,197	1,002	1,311
Services linked to the Presidency ^{1/}	203	199	232	318	346
Office of the Prime Minister	38	50	44	...	...
National Advisory Council (CNC)	65	60	55	102	106
Planning and Cooperation	218	196	225	220	203
Information and Culture	498	389	470	481	412
Foreign Affairs ^{2/}	173	174	163	498	467
Finance and Computing Services	1,627	1,567	1,774	1,825	1,919
Civil Service	275	259	237	231	173
Justice	613	675	846	960	916
Interior	4,359	4,500	3,676	4,566	4,673
National Defense ^{3/}	873	335	1,038	246	489
Education	8,517	8,289	8,545	8,464	9,032
Health	3,302	3,648	3,880	3,350	2,936
Women condition	--	--	--	--	526
Agriculture	1,573	1,523	1,176	2,202	2,343
Livestock	860	822	870	891	900
Tourism	1,232	1,088	1,004	--	--
Commerce and Industry	159	268	154	298	274
Mines and Energy	281	328	325	346	221
Public Works	446	433	450	476	363
Post and Telecommunications	67	73	73	--	--
Other	...	961	529	538	--
Total	26,456	26,967	26,963	26,696	27,610

Sources: Data provided by the Chadian authorities; and staff estimates.

^{1/} For 1994 and 1995, including the Prime Minister's office.

^{2/} Excludes embassy personnel.

^{3/} Excludes military personnel.

Table V. Chad: Summary Accounts of the Central Bank, 1991-95

(In millions of CFA francs; end of period)

	1991	1992	1993		1994	1995
			Act.	Adjust. 1/		
Foreign assets	32,045	23,180	12,756	25,188	59,538	90,112
Gold	1,018	1,020	1,281	2,562	2,289	2,108
Foreign exchange	30,885	22,049	11,357	22,390	57,030	87,784
IMF	142	111	118	236	219	220
SDRs	41	7	3	6	1	16
Reserve position	101	104	113	226	218	204
Claims on Government	14,624	31,519	33,787	41,964	48,475	49,705
Direct advances 2/	6,688	7,652	7,653	7,653	7,653	6,042
Rehabilitation of the banking sector 3/	--	15,758	17,957	17,957	17,958	19,650
Counterpart of IMF purchases	7,936	8,109	8,177	16,354	22,864	24,013
Claims on commercial banks	14,229	9,834	5,882	5,882	500	1,000
Short-term	12,886	9,534	5,669	5,669	500	1,000
Medium- and long-term	1,343	300	213	213	--	--
Total assets = Total liabilities	60,898	64,533	52,425	73,034	108,513	140,817
Reserve money	50,474	47,856	38,254	38,254	64,083	89,313
Of which: currency outside banks	49,624	47,128	35,838	35,838	56,298	76,562
Bank reserves	670	606	1,975	1,975	6,403	10,076
Other reserves	180	122	441	441	1,382	2,675
Short term foreign liabilities	11,289	9,788	8,321	(16,642)	23,268	24,230
Of which: use of Fund credit (net)	(7,936)	(8,109)	(8,177)	(16,354)	22,864	24,013
Medium and long-term liabilities	--	--	--	--	--	--
Government deposits	282	444	542	542	3,610	10,784
Of which: CAA and Treasury	(29)	(54)	(542)	(542)	3,610	10,784
Other items (net)	(1,147)	6,445	5,308	17,596	17,552	16,490
Of which: SDR allocations	(3,486)	(3,562)	(3,810)	(7,620)	7,343	6,853

Sources: Data provided by the BEAC.

1/ Adjusted for effects of the January 12, 1994 devaluation of the CFA franc.

2/ Includes short- and medium-term advances to the Treasury as well as compulsory withdrawals.

3/ Consolidation of the BEAC rediscounts to commercial banks into claims on the Government.

Table VI. Chad: Summary Accounts of the Commercial Banks, 1991-95

(In millions of CFA francs; end of period)

	1991	1992	1993		1994	1995
			Act.	Adjust. 1/		
Reserves 2/	670	606	1,975	1,975	6403	10,076
Foreign assets	5,284	5,773	2,519	5,038	5931	4,858
Claims on Government 3/	4,311	5,564	3,148	3,148	1,920	1,945
Claims on private sector	45,855	33,930	28,080	28,080	31,276	35,440
Short-term	37,160	30,013	24,275	24,275	27416	31,217
Medium-term	8,490	3,265	3,267	3,267	3351	3,676
Long-term	205	652	538	538	509	547
Total assets = Total liabilities	56,120	45,873	35,722	38,241	45,530	52,319
Demand deposits	14,742	9,798	8,946	8,946	18490	20,441
Time deposits	2,633	3,561	2,203	2,203	2863	7,872
Short-term foreign liabilities	2,305	3,144	4,776	9,552	6347	2,815
Long-term foreign liabilities	585	1,059	206	412	729	92
Government deposits	12,664	8,433	6,528	6,528	4906	10,837
Of which: CAA and Treasury	(1,266)	(644)	(590)	(590)	3478	3,647
Credit from the Central Bank	14,229	9,834	5,882	5,882	500	1,000
Other items (net)	8,962	10,044	7,181	4,718	11,695	9,262
<u>Memorandum items:</u>						
Claims on COTONTCHAD	16,340	7,660	5,108	5,108	1,000	...
Bank reserves as a percentage of deposits	3.9	4.5	15.9	15.9	30.0	35.6

Sources: Data provided by the BEAC.

1/ Adjusted for effects of the January 12, 1994 devaluation of the CFA franc.

2/ Includes cash and bank deposits at the BEAC.

3/ Government includes the Treasury, CAA and other public administration (excluding CCP).

Table VII. Chad: Claims of the Banking System on Government, 1991-95

(In millions of CFA francs; end of period)

	1991	1992	1993		1994	1995
			Act	Adjust. 1/		
Banking system (net)	9,107	31,205	35,804	43,981	47,942	36,277
Claims	22,053	40,082	36,936	45,113	56,458	57,898
Liabilities	12,946	8,877	1,132	1,132	8,516	21,621
Central Bank (net)	14,342	31,075	33,246	41,423	44,865	38,921
Claims	14,624	31,519	33,788	41,965	48,475	49,705
Direct advances	6,688	7,652	7,653	7,653	7,653	6,042
Advances on current account	5,177	6,041	6,042	6,042	6,042	6,042
Compulsory withdrawal	1,303	1,611	1,611	1,611	1,611	--
Medium-term advances	208	--	--	--	--	--
Counterpart of use of IMF resources	7,936	8,109	8,177	16,354	22,864	24,013
Rehabilitation of the banking system	--	15,758	17,958	17,958	17,958	19,650
Liabilities	282	444	542	542	3,610	10,784
Deposits	170	332	430	430	3,498	10,672
Currency held by Treasury	112	112	112	112	112	112
Commercial banks (net)	(8,353)	(2,869)	2,558	2,558	(1,558)	(1,702)
Claims 2/	4,311	5,564	3,148	3,148	1,920	1,945
Of which: rediscounted government bonds	(22)	(22)	(22)	(22)	(22)	(165)
Liabilities	12,664	8,433	590	590	3,478	3,647
Postal System (net)	3,118	2,999	3,038	5,841	5,842	5,842
Postal debt	2,803	2,803	2,803	5,606	5,606	5,606
Postal checking deposits	315	196	235	235	236	236

Source: Data provided by the BEAC.

1/ Adjusted for effects of the January 12, 1994 devaluation of the CFA franc.

2/ Includes commercial banks' deposits with the postal checking system.

Table VIII. Chad: Credit to the Private Sector, 1991-95

	1991	1992	1993	1994	1995
<u>(In millions of CFA francs)</u>					
Claims on the private sector	45,855	33,930	28,080	31,276	35,440
COTONTCHAD <u>1/</u>	16,340	7,660	5,108	5,976	4,900
Consolidated loans <u>2/</u>	13,287	--	--	--	--
Crop credit	8,420	7,660	5,108	5,976	4,900
Other	29,515	26,270	22,972	25,300	30,540
 <u>Memorandum items:</u>					
<u>(In percent of total)</u>					
COTONTCHAD	35.6	22.6	18.2	19.1	13.8
Other	64.4	77.4	81.8	80.9	86.2
 <u>(Annual percentage change)</u>					
Claims on the private sector	21.6	-26.0	-17.2	11.4	13.3
COTONTCHAD	7.3	-53.1	-33.3	17.0	-18.0
Other	31.2	-11.0	-12.6	10.1	20.7

Source: Data provided by BEAC and COTONTCHAD.

1/ COTONTCHAD : the cotton sector parastatal.

2/ In April 1992, rediscounted bank loans to COTONTCHAD were consolidated into a long-term loan to the Government for an amount of CFAF 13,287 million, or about 74 percent of total consolidation (CFAF 17,957 million)

Table IX. Check: Sectoral Distribution of Bank Credit to the Private Sector, 1991-95 1/

(in millions of CFA francs and in percent of total; end of period)

	1991		1992		1993		1994		1995	
	Value	Percent	Value	Percent	Value	Percent	Value	Percent	Value	Percent
(Short-term credits)										
Agriculture	465	0.9	284	0.8	185	0.6	182	0.7	148	0.4
Food processing	921	1.9	2,661	7.5	2,000	6.3	1,349	4.9	2,068	6.0
Textile Manufacturing	1,496	3.1	1,574	4.5	723	2.3	723	2.6	177	0.5
Other manufacturing	595	1.2	443	1.3	488	1.5	568	2.1	988	2.9
Public utilities	152	0.3	85	0.2	145	0.4	163	0.6	314	0.9
Public works and construction	1,152	2.4	808	2.3	929	2.9	948	3.4	1,602	4.7
Commerce (retail and wholesale)	10,102	20.9	10,176	28.9	9,100	28.5	8,581	31.1	11,233	32.8
Fuel imports and distribution	2,216	4.5	1,730	4.9	2,614	8.2	1,838	6.7	1,977	5.8
Cotton export activities	25,724	53.3	11,399	32.3	7,714	24.1	7,005	25.4	7,579	22.1
Transportation	843	1.7	742	2.1	1,064	3.3	747	2.7	1,002	2.9
Services	1,690	3.5	2,020	5.7	2,722	8.5	2,246	8.1	3,182	9.3
Unallocated	2,936	6.1	3,340	9.5	4,276	13.4	3,214	11.7	3,961	11.6
Total	48,292	100.0	35,257	100.0	31,960	100.0	27,564	100.0	34,231	100.0
(Medium- and long-term credits)										
Agriculture	230	1.8	3	--	10	0.1	20	0.2	20	0.2
Food processing	1,892	15.0	1,836	20.7	1,701	17.8	1,412	15.2	1,118	11.9
Textile Manufacturing	762	6.0	776	8.8	475	5.0	473	5.1	432	4.6
Other manufacturing	396	3.1	289	3.3	327	3.4	491	5.3	545	5.8
Public utilities	107	0.8	--	--	--	--	93	1.0	107	1.1
Public works and construction	56	0.4	146	1.6	118	1.2	52	0.6	84	0.9
Commerce (retail and wholesale)	1,038	8.2	1,047	11.8	1,174	12.3	1,418	15.2	1,622	17.3
Fuel imports and distribution	51	0.4	39	0.4	--	--	35	0.4	--	--
Cotton export activities	4,836	38.3	228	2.6	228	2.4	222	2.4	222	2.4
Transportation	268	2.1	394	4.4	514	5.4	414	4.5	637	6.8
Services	605	4.8	945	10.7	2,147	22.4	2,063	22.2	1,719	18.3
Unallocated	2,391	18.9	3,160	35.7	2,875	30.0	2,607	28.0	2,878	30.7
Total	12,632	100.0	8,863	100.0	9,569	100.0	9,300	100.0	9,384	100.0
Memorandum items:										
Total credit	60,924	100.0	44,120	100.0	41,529	100.0	36,864	100.0	43,615	100.0
Of which:										
Short-term credit	48,292	79.3	35,257	79.9	31,960	77.0	27,564	74.8	34,231	78.5
Medium- and long-term credit	12,632	20.7	8,863	20.1	9,569	23.0	9,300	25.2	9,384	21.5

Sources: Data provided by the BEAC; and staff estimates.

1/ As reported to the Centrale des Risques. Includes credit granted by BDT, which are not taken into account in the monetary survey.

Table X. Chad: Structure of Interest Rates, 1991-95

(in percent per annum)

	1991	1992	1993	1994								1995					
	End-December			Jan.14- June 19	June 20- June 30	July 1- July 24	July 25- Sept.11	Sep. 12- Oct. 23	Oct.23- Nov. 15	Nov.15- Dec.9- Dec. 9	Dec.31	Jan. 1 Mar. 13	Mar. 13- June 29	June 29- July 5	July 5- Sept. 25	Sep. 25- Dec. 7	Dec. 7- Dec.31
Central Bank																	
Base discount rate 1/	10.75	12.00	11.50	14.00	12.50	12.50	11.00	10.50	9.50	8.50	7.75	7.75	8.00	8.75	8.75	8.00	8.60
Penalty rate	16.00	16.00	18.00	22.00	20.00	20.00	20.00	20.00	15.00	15.00	15.00	15.00	15.00	15.00	15.50	15.50	15.50
Lending rates to the Treasury																	
Within statutory ceiling	7.50	9.50	11.00	11.00	11.00	11.00	11.00	10.50	9.50	8.50	7.75	7.75	7.75	7.75	8.00	8.00	8.00
Outside statutory ceiling	8.50	10.50	12.00	12.00	12.00	12.00	12.00	12.00	11.00	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50
Commercial banks 2/																	
Maximum lending rate	18.25	17.50	17.50	19.00	17.00	17.00	17.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
Minimum deposit rate	7.50	7.50	7.75	9.00	8.00	8.00	8.00	7.50	7.50	7.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50
Special deposits rate 3/																	
Treasury	7.00	9.00	10.50	10.50	10.50	6.50	5.50	5.00	4.50	3.50	4.00	4.00	4.20	4.50	4.50	4.50	4.50
Banks	9.75	9.75	9.75	9.75	9.75	6.50	5.50	5.00	4.50	3.50	4.00	4.00	4.20	4.50	4.50	4.50	4.50

Source : Data provided by the BEAC.

1/ The money market was introduced in the BEAC area on July 1, 1994. The base discount rate is now the weekly auction rate, set by the Governor. For shorter refinancing (2 to 7 days), primary banks may resort to repurchase agreements, which rate is fixed in a range between 1.5 and 2 percent above the weekly auction rate.

2/ Regulatory rates applicable to the activities of commercial banks and fixed by the central bank. Introduced in October 1990.

3/ Deposits to the central bank.

Table XI. Chad: Foreign Trade Indices, 1991-95

(1990=100)

	1991	1992	1993	1994	1995
Export prices					
Ginned cotton	98.8	87.8	83.3	174.1	210.2
Percentage change	-1.2	-11.1	-5.2	109.0	20.8
Cattle	100.1	90.9	68.3	95.6	150.3
Percentage change	0.1	-9.1	-24.9	40.0	57.1
Export price index	102.5	93.3	92.2	178.0	218.1
Percentage change	2.5	-9.0	-1.1	93.0	22.5
Import price index	81.8	79.6	82.9	166.1	165.5
Percentage change	-18.2	-2.6	4.1	100.3	-0.3
Terms of trade	125.3	117.1	111.2	107.2	131.8
Percentage change	25.3	-6.6	-5.0	-3.7	22.9
Export volume indices					
Ginned cotton	104.3	110.5	74.6	64.1	102.7
Percentage change	4.3	6.0	-32.5	-14.1	60.2
Cattle	100.9	92.2	115.2	149.8	118.9
Percentage change	0.9	-8.7	25.0	30.0	-20.6
Export volume index	101.1	98.2	88.5	88.7	100.1
Percentage change	1.1	-3.0	-9.8	0.2	12.8
Import volume index	121.4	112.5	99.2	81.3	94.3
Percentage change	21.4	-7.3	-11.8	-18.0	15.9

Sources: Data provided by the BEAC; and staff estimates.

Table XII. Chad: Service Balance, 1991-95

(In billions of CFA francs)

	1991	1992	1993	1994	1995
Services (net)	-50.68	-51.51	-54.51	-68.37	-72.84
Credit	11.24	11.72	13.40	21.89	26.18
Debit	-61.91	-63.23	-67.90	-90.26	-99.03
Nonfactor services (net)	-49.97	-52.26	-51.17	-63.18	-68.14
Credit	8.72	7.07	12.23	17.18	21.18
Shipment and insurance	0.25	0.15	0.38	0.74	1.20
Other transportation	1.01	0.43	0.68	1.20	1.70
Travel	1.89	2.07	1.71	5.26	7.89
Official services	3.54	3.39	8.21	8.09	8.20
Other private services	2.03	1.03	1.26	1.89	2.20
Debit	-58.68	-59.33	-63.40	-80.36	-89.33
Shipment and insurance	-26.45	-23.17	-22.23	-34.30	-41.14
Other transportation	-2.59	-1.86	-1.30	-2.52	-2.77
Travel	-17.83	-21.15	-25.11	-14.15	-16.35
Official services	-0.98	-1.87	-2.66	-5.13	-5.07
Other private services	-10.84	-11.29	-12.11	-24.26	-23.99
Factor services (net)	-0.71	0.75	-3.34	-5.19	-4.70
Credit	2.52	4.65	1.16	4.71	5.00
Earnings on investments	2.52	4.65	1.16	4.71	5.00
Debit	-3.23	-3.90	-4.50	-9.90	-9.70
Scheduled interests	-3.20	-3.10	-3.70	-6.50	-6.30
Of which: IMF	-0.32	-0.07	-0.18	-0.64	-0.69
Other	-0.03	-0.80	-0.80	-3.40	-3.40

Sources: Data provided by the BEAC; and staff estimates.

Table XIII. Chad: Transfers, 1991-95

(In billions of CFA francs)

	1991	1992	1993	1994	1995
Transfers (net)	26.28	24.79	11.06	28.78	27.92
Credit	39.07	38.70	25.89	44.38	42.91
Debit	-12.79	-13.91	-14.83	-15.60	-14.99
Private Transfers	-5.57	-9.15	-10.02	-8.70	-7.99
Credit	5.67	3.49	3.59	5.40	5.40
Debit	-11.24	-12.64	-13.60	-14.10	-13.39
Of which: wage remittances	(-11.04)	(-12.41)	(-13.33)	(-11.90)	(-11.90)
Public transfers	28.79	28.72	17.59	34.26	32.31
Credit	30.33	29.98	18.81	35.76	33.91
Budgetary aid	15.16	8.09	3.65	17.85	14.39
Food aid	2.90	1.01	1.20	5.00	5.12
Other ^{1/}	15.34	26.11	17.45	16.13	18.00
Debit	-1.55	-1.27	-1.22	-1.50	-1.60

Sources: Data provided by the BEAC; and staff estimates.

^{1/} Including military aid and technical assistance.

Table XIV. Chad: Exchange Rates, 1991-95

(Quarterly averages)

	CFAF/US\$		CFAF/SDR		Nominal effective rate 2/ Index	Real effective rate 3/ Index
	Rate	Index 1/	Rate	Index 1/		
1991						
First quarter	260.5	95.7	368.5	99.7	106.7	103.3
Second quarter	294.0	108.0	393.3	106.5	104.0	103.4
Third quarter	296.4	108.9	396.2	107.2	105.9	101.2
Fourth quarter	277.6	102.0	384.4	104.1	107.2	100.1
1992						
First quarter	275.5	101.2	382.5	103.5	115.7	102.8
Second quarter	272.0	99.9	378.1	102.3	122.5	101.8
Third quarter	248.0	91.1	360.2	97.5	127.1	102.6
Fourth quarter	263.2	96.7	369.4	100.0	128.0	100.2
1993						
First quarter	277.3	101.9	381.7	103.3	133.4	98.6
Second quarter	272.9	100.2	385.5	104.4	136.9	89.2
Third quarter	290.6	106.7	407.8	110.4	135.2	88.8
Fourth quarter	291.8	107.2	406.6	110.1	137.9	91.6
1994						
First quarter	586.2	215.3	813.4	220.2	51.7	44.6
Second quarter	568.8	208.9	805.1	217.9	51.9	54.2
Third quarter	535.4	196.6	780.8	211.3	52.5	54.9
Fourth quarter	530.5	194.9	778.1	210.6	52.6	54.1
1995						
First quarter	516.9	189.9	771.7	208.9	56.1	55.1
Second quarter	491.8	180.6	770.2	208.5	57.7	54.6
Third quarter	494.9	181.8	738.9	200.0	58.5	55.8
Fourth quarter	493.0	181.1	736.0	199.2	59.0	59.2

Source: IMF, International Financial Statistics; and Information Notice System.

1/ January 1990=100.

2/ Nominal trade-weighted index reported in the Fund's Information Notice System, including Nigeria with a weight moving from 10 percent in 1985 to 25 percent in 1993, and reduced to 15 percent in 1994-95. An increase denotes an appreciation.

3/ Based on the consumer price index for N'Djaména.

(Amounts expressed in CFA francs)

Tax	Nature of Tax	Exemptions and Deductions	Rates
1. <u>Tax on net income and profits</u>			
1.1 Tax on net income and profits of companies			
1.1.1 Tax on companies (IS) (General Tax Code, Art. 115 to 135)	<p>Annual tax on the profits of legal entities exercising an industrial, commercial, agricultural, or noncommercial activity. Capital gains from transfers are considered part of gross profits with the exception of transfers at the close of operations, only a fraction of which are included, proportional to length of operation (50 percent if transfer is after five years). Possibility of exemption for capital gains if they are reinvested.</p> <p>Profits are declared within three months of the year-end and the tax must be paid voluntarily in the month following the filing of the return.</p>	<p>Agricultural production and consumption cooperatives; agricultural associations; teaching and professional training associations and cooperatives. Exemption during the first five years of operations for new enterprises eligible under one of the Investment Code schemes.</p>	<p>- 45 percent on purchase-resale without processing; banks, insurance, credit, forwarding agents; brokers and business agents; leasing of equipment and funds; - 45 percent for other activities; - 25 percent for property income and income from investments earned by a nonprofit organization.</p>
1.1.2 Minimum tax (General Tax Code, Art. 183 to 186)	<p>Levied as a nonrefundable installment on the tax on profits. Based on turnover in the current year.</p>	Same as 1.1.1	- Unified rate of 1.5 percent for all taxpayers.

Chad: Summary of the Tax System, 1995 (continued)

(Amounts expressed in CFA francs)

Tax	Nature of Tax	Exemptions and Deductions	Rates
1.2 Personal income tax (IRPP)	<p>Based on net annual income received or earned, whatever its source. Principle of taxation by household. Gross income is calculated by adding together income from the different categories. Net income is obtained after deduction of deficits from previous years and interest on borrowing for capital investment as well as maintenance payments.</p> <p>The tax return must be filed by March 1 of each year. Income is assessed according to rules established for each category. There are seven categories of income: (1) wages and salaries, pensions and annuities; (2) property income; (3) investment income; (4) industrial and commercial profits; (5) professional income; (6) remuneration of directors with a majority shareholding; and (7) income from abroad.</p>	<p>The tax situation is taken into account by applying the family splits system (1 split for the husband, 1 split for the wife and 1/2 split per dependent child up to a maximum of 5 splits per family). Moreover, the following reductions apply:</p> <ul style="list-style-type: none"> - the assessment is reduced by 20 percent for income per split not exceeding CFAF 300,000; - the 20 percent reduction of the assessment is reduced by 1 point per CFAF 1,000 for income per split between CFAF 300,000 and 310,000; - the assessment is reduced by 10 percent for income per split between CFAF 310,000 and 600,000; - the 10 percent reduction applicable to the assessment is decreased by 1 point per CFAF 1,000 for income per split between CFAF 600,000 and 610,000. 	<p>Graduated schedule from 20 percent to 65 percent.</p> <p>Rate per split:</p> <ul style="list-style-type: none"> - CFAF 1 to 300,000 20 percent - 300,001 to 800,000 25 percent - 800,001 to 1,000,000 30 percent - 1,000,001 to 1,500,000 40 percent - 1,500,001 to 2,000,000 45 percent - 2,000,001 to 3,000,000 50 percent - 3,000,001 to 6,000,000 55 percent - 6,000,000 and above 60 percent
1.2.1 Wages, salaries, pensions and annuities (General Tax Code, Art. 37 to 41)	<p>The tax base consists of total gross remuneration and consideration in cash, plus consideration in kind, assessed at 15 percent for free housing.</p>	<p>From the amount obtained are deducted withholdings by the employer for the creation of pension funds and social security withholdings. The amount thus obtained is subject to a standard abatement of 40 percent.</p>	<p>The tax is obtained by applying the IRPP scale after deduction of a tax credit of 4 percent of net taxable income in the form of wages and salaries. It is withheld at source by the employer and forwarded to the Treasury in the first 20 days of the following month. The amount withheld is an installment on tax ultimately payable.</p>

Chad: Summary of the Tax System, 1995 (continued)

(Amounts expressed in CFA francs)

Tax	Nature of Tax	Exemptions and Deductions	Rates
1.2.2 Property income (General Tax Code, Art. 12 and 13)	The tax base consists of gross income from developed and undeveloped property that is not included as part of the profits of an industrial, commercial, artisanal, or agricultural enterprise, or noncommercial profession.	Net income is obtained by reducing gross income by 30 percent for management, insurance, repair, maintenance, and amortization costs. Owner-occupied premises are exempt.	Withheld at source when the lessee is a person or legal entity, whether or not it is subject to the tax on companies, in the amount of: - 15 percent of the rent if the beneficiary resides in Chad; - 20 percent if the beneficiary does not reside in Chad. The amount withheld is credited against the properly income tax and is paid monthly.
1.2.3 Income from investment capital (General Tax Code, Art. 51 to 68)	The tax base consists of income from securities, shares, shares in the form of bonds (<u>parts obligatoires</u>), directors' fees and remuneration, income from claims), security and other deposits, investments. Gross income is obtained by adding all the amounts collected and the related tax liabilities or tax credits.		Unified withholding rate at source of 20 percent.
1.2.4 Industrial and commercial income			

Chad: Summary of the Tax System, 1995 (continued)

(Amounts expressed in CFA francs)

Tax	Nature of Tax	Exemptions and Deductions	Rates
1.2.4.1 Industrial and commercial profits (BIC) (General Tax Code, Art. 14 to 35)	<p>Levied as an installment on personal income tax and tax on companies. Gross income consists of net profits received or payable from industrial, commercial, artisanal, and agricultural activities exercised by individuals. Capital gains from transfers are normally considered to be profits. However, in the case of a complete transfer, 50 percent of the capital gains are deducted if the transfer takes place within five years of creation and 25 percent if the transfer takes place after five years. Possibility of exemption for capital gains depending on the use thereof. The profits are determined on the basis of:</p> <p>(1) estimated profits for taxpayers with an annual turnover of less than CFAF 60 million (sales and farming) or CFAF 15 million (other activities); (2) actual profits for taxpayers with an annual turnover higher than the amounts indicated in (1) and taxpayers who choose to be taxed in this way.</p>	<p>Taxable profits are reduced by a standard abatement of 20 percent for activities other than:</p> <ul style="list-style-type: none"> - purchase/resale; - insurance, banking, credit, freight forwarding; - brokers, business agents; - leasing of equipment or funds. 	<p>Unified withholding rate of 1.5 percent.</p>
1.2.4.2 Source deductions for wholesale purchases and sales (Ordinance No. 1 of 1/11/92)	<p>Levied on purchases from and sales to wholesalers. Deducted from the IRPP payable on total income; no refunds made. Extended to importers and government suppliers. Applies as turnover tax on services.</p>	<p>Purchasing companies subject to the tax on companies are exempt.</p>	<p>2 percent on the invoiced amount. 15 percent of the invoiced amount for services.</p>

Chad: Summary of the Tax System, 1995 (continued)

(Amounts expressed in CFA francs)

Tax	Nature of Tax	Exemptions and Deductions	Rates
1.2.4.3 Minimum tax	IRPP installment payable but not refundable. Based on turnover in the current year. Monthly payment is based on turnover in the previous month. Does not apply to taxpayers taxed on the basis of their actual profits.	Lump-sum taxpayers are not subject to the minimum tax. However, their business license is increased as an installment on the IRPP.	Unified withholding rate of 1.5 percent.
1.2.5 Noncommercial profits (BNC) (General Tax Code, Art. 42 to 50)	Gross income consists of net profits from a professional activity, position, or office, or a profitable operation not forming part of another income category. Income is calculated on the basis of either: - actual profits; or - estimated profits.	Only 80 percent of the profits identified are taxable.	Withholding rate of 20 percent levied as an installment on personal income tax on residents. 25 percent of income is withheld at source from taxpayers without a permanent professional office in Chad, in discharge of the IRPP.
1.2.6 Remuneration of directors with majority shareholding and directors of limited partnerships (General Tax Code, Art. 36)	The tax base consists of the wages, standard reimbursements of expenses, and any other remuneration deductible from company profits.	The deduction of professional expenses may not exceed 15 percent of the amounts collected.	
1.2.7 Income received outside Chad	Taxed in its entirety in Chad unless otherwise indicated in international conventions. If so, the "effective rate" rule applies.		
1.2.8 Tax on capital gains from transfers of land	Affects capital gains realized by individuals or legal entities on transfers of developed or underdeveloped land acquired less than seven years earlier. This tax has been abandoned in practice.	Capital gains = transfer price - (110 percent of the cost of the land + (cost of construction).	25 percent.
1.3 Miscellaneous			

Chad: Summary of the Tax System, 1995 (continued)

(Amounts expressed in CFA francs)

Tax	Nature of Tax	Exemptions and Deductions	Rates
1.3.1 Contribution to Fonds d'Intervention Rurale (FIR)	Payable by all individuals subject to head tax or IRPP.	- individuals subject to the head tax: CFAF 200. - individuals subject to the IRPP: CFAF 480, in 12 monthly installments of CFAF 40.	
2. <u>Social Security</u>			
2.1 Family benefits	Employer is responsible for contribution.	Monthly salary ceiling = CFAF 130,000.	General scheme: 6 percent, including 0.1 percent to the manpower office; Domestic employees: CFAF 1,200 per month per employee.
2.2 Industrial accidents	As above.	As above.	General scheme: 2.5 percent (increased to 4 percent in case of violation of safety regulations).
2.3 Retirement	Contribution shared by employer and employee.	As above.	Employer = 4 percent. Employee = 2 percent.
3. <u>Payroll taxes</u>			
3.1 Lump-sum tax payable by employers and those paying an allowance (General Tax Code, Art. 174 to 177)	The tax is based on total gross remuneration, consideration in kind, allowances, and lump-sum reimbursements. Paid by private sector employers.		7.5 percent of gross taxable total.
3.2 Apprenticeship tax (General Tax Code, Art. 58 to 173)	Payable by any person subject to the BIC, BNC, and IS, on total wages, salaries and compensation.	Total or partial exemption possible with justification of measures taken to promote apprenticeships.	1.2 percent.
4. <u>Property taxes</u>			
4.1 Real estate			
4.1.1 Real estate taxes			

Chad: Summary of the Tax System, 1995 (continued)

(Amounts expressed in CFA francs)

Tax	Nature of Tax	Exemptions and Deductions	Rates
4.1.1.1 Tax on improved property (General Tax Code, Art. 678 to 690)	Annual tax on buildings and facilities or fixed equipment of industrial enterprises as well as land assigned to industrial or commercial use, levied on behalf of municipalities with financial autonomy. Calculated on the rental value assessed over five years by the direct taxes unit.	Abatement of 30 percent of the rental value for depreciation and maintenance costs. Temporary exemption for new construction: - five years for residential buildings; - two years for others. However, the exemption is removed for rental building and apartments when the rental value exceeds 15 percent of the market value.	12 percent of the rental value in N'Djamena; 11 percent elsewhere. Exemption on self inhabited property.
4.1.1.2 Tax on unimproved property (General Tax Code, Art. 691 to 704)	Annual tax on unimproved land in urban areas and land in rural areas. Based on the following rental value: - urban areas = 10 percent of value established over five years by the Tax Directorate; - rural areas = value is established arbitrarily at CFAF 50,000 per hectare. Collected on behalf of autonomous local authorities.	Temporary exemption of three to eight years for land newly put in use for farming or stockraising. Permanent exemption for land belonging to the Central Government or local authorities. Standard abatement of 20 percent of the rental value.	20 percent of rental value in N'Djamena; 21 percent elsewhere.
4.1.2 Tax on recreational land, unimproved or insufficiently improved land, building lots (General Tax Code Art. 187 to 197)	Levied by the State on such land within the municipalities of N'Djamena, Sarh, and Moundou. In practice, this tax is no longer applied.		Recreational land: - N'Djamena - CFAF 20 per m2. - Sarh and Moundou - CFAF 15 per m2. Unimproved or insufficiently improved land: - N'Djamena - CFAF 40 per m2. - Sarh and Moundou - CFAF 30 per m2. Building lots: - CFAF 10 to 30 per m2.

Chad: Summary of the Tax System, 1995 (continued)

(Amounts expressed in CFA francs)

Tax	Nature of Tax	Exemptions and Deductions	Rates
4.1.3	Tax on rental value of professional premises (General Tax Code, Art. 764 to 768)	Levied on behalf of local authorities under same conditions as the business license, on industrial and commercial premises used to exercise an activity requiring a business license.	Annual rent: - less than 60,000 - exempt - from 60,001 to 120,000 - 6 percent - from 120,001 to 300,000 - 9 percent - from 300,001 to 600,000 - 12 percent - more than 600,000 - 15 percent
4.1.4	Mining taxes	Levied on quarrying activities.	Lump-sum taxes ranging between CFAF 200 and CFAF 1500 per cubic meter.
4.4	Estate duties and gift taxes (General Tax Code, Art. 269 to 285)	Levied on the net value of the assets transferred <u>causa mortis</u> or <u>inter vivos</u> in Chad.	Abatement of CFAF 5 million per living child or deceased child with heirs or per dependent elder. Rate varies according to relationship of the inheritor or beneficiary to the deceased or donor.
4.5	Transfer taxes		
4.5.1	Taxes on the creation or merger of companies (General Tax Code, Art. 260)	Levied on the capital of new companies and companies created by mergers. Increase in capital, transfers of shares, and transfers of securities.	3 percent on new companies and increases in capital. 5 percent on increases from profits and reserves.
4.5.2	Property transfer taxes (General Tax Code, Art. 391 et seq.)	Levied on the sale, lease, or exchange of buildings.	5 percent of verbal leases. 10 percent for sales and exchanges of buildings. 6 percent for registered auction sales.
4.5.3	Taxes on transfer of movable property	Levied on the sale and lease of movable property.	Rate varies from 3 percent to 6 percent depending on nature of operation.
4.5.4	Taxes on other operations	Levied on some transactions, in particular transfers of claims, goodwill, government contracts.	10 percent.
4.5.5	Land Registry	Duties levied upon the registration of real property rights.	2 percent.
5.	<u>Taxes on goods and services</u>		
5.1	General sales tax		

Chad: Summary of the Tax System, 1995 (continued)

(Amounts expressed in CFA francs)

Tax	Nature of Tax	Exemptions and Deductions	Rates
5.1.1 Turnover tax	<p>Levied on activities exercised by individuals and companies, including public entities. Levied on production, manufacturing, tailoring and processing activities, services, sales for on-the-spot consumption, and professional activities not expressly exempted. Levied also on imports.</p> <p>The taxable turnover consists of gross sales or receipts. The tax owed on sales made each month must be declared and paid by the 20th of the following month. A lump-sum system is applicable under the same conditions as the lump-sum BIC. The turnover tax replaces the single tax previously levied on certain products. An additional excise tax is levied on cigarettes (15 percent) and alcohols (16 percent).</p>	<p><u>Exemptions:</u> Retail or wholesale purchase-resale of products or goods subject to or exempt from the turnover tax on imports. Operations involving products or goods intended for export. Operations involving agricultural, forestry, livestock, or fishing products. Operations subject to the tax on insurance. Medical and paramedical sector. Religious, cultural, and social activities.</p> <p><u>Deduction:</u> TCA levied on intermediary goods and services for activities subject to the tax.</p>	<p>A general rate of 15 percent is applied to the price including tax. A reduced rate of 6 percent is applied to sales of agriculture and food processing, consumer essentials (bread, rice, oil, milk, meat, etc).</p>

Chad: Summary of the Tax System, 1995 (continued)

(Amounts expressed in CFA francs)

Tax	Nature of Tax	Exemptions and Deductions	Rates
5.1.2 Unit taxes (Ordinance No. 21 of 10/1/86)	Levied on behalf of the Autonomous Amortization Fund (CAA) on some production and service operations included in a restrictive list. Assessed and collected directly by the CAA. A specific or ad valorem rate is used.		Cotton oil = CFAP 30 per liter. Peanut oil = CFAP 50 per liter. Soap = CFAP 3 per kg. Bottled beverages = CFAP 25 per liter. Beer = CFAP 85 per liter. Imported wines = CFAP 150 per liter. Whisky and other hard liquors = CFAP 700 per liter. Champagne = CFAP 1,500 per liter. Imported beer = CFAP 200 per liter. Mineral water = CFAP 60 per liter. Exported local products = CFAP 25 per kg. Tchadipeint products = CFAP 50 per kg. Textiles (STT) = CFAP 30 per m. Water and electricity = 1 percent of invoice. Entertainment = 10 percent of receipts. Imports of vehicles = 5 percent of invoice. Cigarettes = CFAP 20 per packet.
5.1.3 Tax on livestock sales (General Tax Code, Art. 153 to 157)	Levied on livestock sales. Paid by purchasers to market officials by means of tickets supplied by the Tax Administration.		Rate varies according to category of livestock from CFAP 200 (sheep and goats) to CFAP 2,000 (horses and camels).
5.2 Tax on petroleum products (Ordinance No. 11 bis of 7/31/87)	Assessed by Customs; collected by the Treasury. The tax is distributed according to a distribution key for each product among the State Budget, Retirement Fund.	Petroleum by-products and derivatives are exempt (e.g., lubricants, heavy fuel oil, petroleum gas, vaseline, paraffin, petroleum wax, bitumen and bitumen blends, petroleum spirits, petroleum coke).	High-octane gasoline = CFAP 112 per liter. Gasoline = CFAP 112 per liter. Kerosene = CFAP -- per liter. Blends = CFAP -- per liter. Gas oil = CFAP 62 per liter except for the public utility STEE, which is exempt.
5.3 Tax on insurance contracts (General Tax Code, Art. 449 et seq.)	Levied on insurance contracts. Paid by the companies quarterly.		Life insurance = 1 percent. Marine insurance = 5 percent. Auto insurance = 15 percent. Fire insurance = 25 percent.

Chad: Summary of the Tax System, 1995 (continued)

(Amounts expressed in CFA francs)

Tax	Nature of Tax	Exemptions and Deductions	Rates
5.4 Tax on the use of movable and immovable property or on the authorization to engage in activities			
5.4.1 Business license and license tax			
5.4.1.1 Business license tax (General Tax Code, Art. 705 to 739)	Annual tax levied on behalf of the autonomous local authorities, or, in their absence, the Central Government on individuals or companies involved in commercial, industrial, or professional activities that are not expressly exempted.	New industries may be exempt for the first five years of operation.	The contribution has two components: (1) a fixed duty ranging from CFAF 2,000 to CFAF 292,000; (2) if appropriate, a variable tax according to the number of wage earners and the physical resources used. The duties are increased by 2 percent to 7 percent for the Chamber of Commerce and by 3 percent to 10 percent for the National Social Security Fund.
5.4.1.2 License tax (General Code, Art. 744 to 746)	Annual tax levied on behalf of the autonomous local authorities, or, in their absence, the Central Government, on all beverage vendors.		Rate varies from CFAF 2,000 to CFAF 165,000 depending on the value of the beverage, on whether or not it is consumed on the premises, and on whether or not it is imported.
5.4.2 Motor vehicles			
5.4.2.1 Motor vehicle use tax (General Tax Code, Art. 646 to 652)	Tax levied on motor vehicle registration, reregistration, transfer of ownership, and similar operations.	Government, embassy, and NGO vehicles.	Fixed rate ranging from CFAF 8,000 to 53,000, depending on the vehicle and its engine size.
5.4.2.2 Motor vehicle use tax (General Tax Code, Art. 653 to 663)	Annual tax payable by vehicle owner.	As above.	Fixed rate ranging from CFAF 3,300 to CFAF 115,500 depending on the vehicle, engine size and, for commercial vehicles, the payload.

Chad: Summary of the Tax System, 1995 (continued)

(Amounts expressed in CFA francs)

Tax	Nature of Tax	Exemptions and Deductions	Rates
5.5 Tax on international and domestic air travels.	Tax levied on passengers of international and domestic flights.	Civil servants on official missions, minors, sanitary evacuees.	International flights: - Nationals: CFAF 3,000 - Foreigners: CFAF 5,000 Domestic flights: CFAF 500
6. <u>Duties and taxes on foreign trade</u>			
6.1 Taxes on imports			
6.1.1 Common external tariff	Applied to all imports from non-UDEAC countries.	Exemptions on four products: flour, rice, millet, and medicine. - Imported products intended for inter-governmental agencies and offices and in general those intended for public services are also admitted tax free. - Imported goods financed by a grant or a loan.	Imports are classified into 4 categories: Cat. 1: Basic commodities: 5 percent ad valorem. Cat. 2: Raw materials and capital goods: 10 percent ad valorem. Cat. 3: Intermediate goods: 20 percent ad valorem. Cat. 4: Consumer goods: 30 percent ad valorem.
6.1.2 Turnover tax on imports	This tax is levied on all imported products, whatever their origin or source. The taxable base is the c.i.f. customs value, increased by the customs duty and entry tax.	- Imported products intended for inter-governmental agencies and offices and in general those intended for public services are also admitted tax free. - Imported goods financed by a grant or a loan.	The rate applicable since January 1, 1990 is 10 percent.
6.1.3 Temporary surcharge	Levied on various imports. Nine (9) items are concerned: gross palm oil, refined palm oil, gross cotton seed oil, refined cottonseed oil, sugar, malt beer, cigarettes (2), alcohol, soap.	n.a.	Single rate of 25 percent or minimum of collection by products.

Chad: Summary of the Tax System, 1994 (concluded)

(Amounts expressed in CFA francs)

Tax	Nature of Tax	Exemptions and Deductions	Rates
6.1.4	Statistical tax	Levied on all operations requiring a detailed declaration. Based on the c.i.f. value of the goods.	n.a.
			The rate is 1.0 percent with a minimum of CFAF 500 collected per declaration.
6.1.5	Storage and custody tax	Levied on goods that have not been declared in detail within the legal deadline (15 days) or that remain in bond for other reasons.	n.a.
			CFAF 30 per day and per 50 kg or fraction thereof.
6.2	Export taxes and duties		n.a.
6.2.1	Export duty	Levied on animal products (livestock, skins) and vegetable products (oilseeds and arabic gum). Based on the standard or f.o.b. value.	Products other than those indicated under "Nature of Tax."
			3 percent to 8 percent of f.o.b. value.
6.2.2	Turnover tax on exports	Based on the standard or f.o.b. value of the goods. (livestock, arabic gum)	n.a.
			3 percent.
6.2.3	Statistical tax	Collected on all export operations. Based on the f.o.b. value of goods.	n.a.
			The rate is 1.0 percent with a minimum of CFAF 500 collected per declaration.