
NIGER

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1.

MAIN FEATURES OF THE ECONOMY*

Niger is a country of 1,267,000 square kilometers, one of the largest in West Africa. It is landlocked with about fourfifths of its territory in the Sahara desert. The climate is characterized by scarce rainfall and high temperatures. Precipitation ranges from about 800 mm per year in the extreme south (Gaya) to less than 100 mm in the north. Annual average temperatures range between 27 and 29 degrees centigrade across the different regions of the country.

Population in 1985 is estimated at 6.1 million inhabitants, growing at a rate of approximately 2.8 percent per year¹. Average population density is the lowest in West Africa, about 4.8 inhabitants per square kilometer. However, three-fourths of the population are concentrated in the more favourable areas of the south, where the average density is about 28 inhabitants per square kilometer. Two ethnic groups predominate, the Haoussa, accounting for about 50 percent of the total population, and the Zarma-Son-ghai-Dendi, with 24 percent. Other ethnic groups are the Peulh, that accounts for 10.5 percent of the population, the Touareg (including the Bella) with 9.5 percent, and the Kanouri-Boudouma, with 5.5 percent.

The estimated average GDP per capita for 1985 is the equivalent of 257 US dollars per year, one of the lowest in the continent². Table 1 shows selected indicators of the performance of the eco-

1. The population census of 1977 registered 5.1 million inhabitants. At the current growth rate, population will double in 25 years.

2. Estimate based on GDP at market prices (see Table 1), population figures reported above, and exchange rate conversion to US dollars (see Table 2).

nommy between 1978 and 1985. This performance is characterized by a period of rapid and sustained economic growth in the late 70s, followed by a crisis and a decline in the early 80s. Real GDP reached a peak in 1980, driven by the uranium boom, and several years of adequate rainfall that favored agricultural production. After 1980 real GDP declined steadily until 1984. A slight recovery was recorded in 1985. The annual growth rate of real GDP between 1981 and 1985 was negative 2.8 percent. As a consequence, per capita GDP declined during the period at an average annual rate of 5.5. percent.

The economic decline observed after 1980 is attributed to a drastic drop in uranium demand and prices that, together with the depreciation of the CFA franc, created a serious deterioration in the country's terms of trade (see Table 2). On the other hand, government capital expenditure had accelerated in the late 70's and did not slow down to the extent required by the post-1980 recession. Consequently, budget deficits have been consistently higher after 1980 than they were in the "boom" years. Stabilization efforts undertaken after 1983 are being supported by the IMF, by French exceptional assistance, by AID and by debt relief from the Paris and London Clubs (Toh, 1986). These efforts have induced a gradual reduction of government deficits, from about 11 percent of GDP in 1981 to less than 5 percent in 1985.

TABLE 1

National Income Indicators, 1978-1985

	1978	1979	1980	1981	1982	1983	1984	1985
Gross Domestic Product (billions of CFA francs)								
Rural Sector	166.1	188.7	228.1	269.3	299.5	311.5	268.2	332.1
Agriculture	87.3	96.5	120.8	154.0	156.6	159.7	153.1	207.5
Livestock	61.4	72.2	89.0	104.1	120.8	128.0	92.7	100.0
Forestry & Fish.	17.4	20.0	18.4	20.2	22.1	23.8	22.4	24.6
Mining	37.0	63.1	67.4	52.0	49.8	55.5	53.6	59.3
Industry & Energy	16.4	19.4	22.2	27.0	32.4	36.9	35.7	38.5
Construction & Public Works	17.1	24.6	32.1	26.6	24.8	23.9	19.2	23.7
Commerce, Transport & Services	84.1	103.2	125.5	147.6	159.1	169.0	161.9	171.6
Government	22.8	25.1	33.8	39.6	45.8	49.8	52.8	54.9
GDP at Factor Cost	343.5	424.1	509.1	562.1	611.4	646.6	591.4	680.1
Import Taxes & Duties	15.6	19.1	27.1	27.8	31.3	28.0	24.0	25.0
GDP at Current Market Prices	359.1	443.2	536.2	589.9	642.7	674.6	615.4	705.1
GDP at Constant 1976 Prices	268.2	307.6	327.0	323.9	321.4	313.0	262.7	280.1
Implicit GDP								
Deflator (1976 = 100)	133.9	144.1	164.0	182.1	199.9	215.5	234.3	251.3
Annual Growth Rates (percent)								
Real GDP	7.2	14.7	6.3	-0.9	-0.8	-2.6	-16.1	6.6
Real GDP/capita	4.5	11.1	3.6	-3.7	-3.5	-5.3	-18.9	3.8
GDP Deflator	16.0	7.6	13.8	11.0	9.8	7.8	8.7	7.5

Sources: Toh (1986), and IMF, International Financial Statistics (1985).

TABLE 2

Selected Economic Indicators, 1978-1985

	1978	1979	1980	1981	1982	1983	1984	1985
Trade and Payments								
Exports (mil. U\$)	290.7	487.1	578.2	486.7	370.5	376.8	326.1	294.7
Imports (mil. U\$)	410.0	628.5	794.1	662.8	520.4	424.3	340.5	411.9
Current account deficit (% of GDP)	7.5	6.8	8.5	8.1	7.7	2.7	1.0	7.5
Terms of Trade (1980 = 100)	88.2	97.5	100.0	63.5	63.0	62.3	57.7	60.6
Exchange rate (CFA/U\$)	225.7	212.7	211.3	271.7	328.6	381.1	437.0	449.3
Public finance								
Domestic revenue (% of GDP)	12.8	13.5	13.7	12.7	11.5	10.2	11.4	9.6
Expenditure (% of GDP)	16.5	16.7	19.7	23.6	18.5	17.4	16.4	14.4
Budget deficit (% of GDP)	3.7	3.2	6.0	10.9	7.0	7.2	5.0	4.8
Gross Fixed Investment (% of GDP)	25.3	25.5	25.5	22.0	18.7	13.5	13.3	14.9

Sources: Toh (1986), and IMF, International Financial Statistics (various issues).

The rural sector contributed on average with 45 percent of total gross domestic product in the period 1978-1985, with little variation during this period (see table A.1 in the Appendix). Since about 90 percent of the population lives in rural areas, it follows that average per capita productivity in the rural sector is less than one-tenth the per-capita productivity in the non-rural economy. For 1985, per capita rural GDP is estimated to be only 135 US dollars per year, as compared to approximately 1,361 US dollars per year in the non-rural sector.

In the rural sector, agriculture (crop production) accounts for over one-half of total rural output, whereas livestock contributed over one-third of rural GDP in the period 1978-1985. Livestock production experienced a sharp decline in 1984 (even in nominal terms) with respect to previous years, as a result of the serious drought of that year and the closure of the Nigerian border³.

Millet, sorghum and rice are the main food crops. Millet production accounts for 77 percent of total physical production of these cereals. Sorghum represents about 20 percent, and rice accounts for about 3 percent of total cereal production. Rice production has increased steadily since 1979 (see table A.2 in the Appendix). Rice and cotton were the only crops not seriously affected by the drought of 1984, due to the support of irrigation facilities.

Cowpeas (niébé) are considered both a food crop and a cash crop. The principal cash crops were traditionally groundnuts and cotton, but cowpeas have surpassed them in the volume of output and the value of production. Production and exports of vegetables, such as green beans and onions, have increased significantly since 1978, and are currently being favored by policies promoting "counter-seasonal" cultivation on irrigated areas.

3 Nigeria has been a very important market for livestock from Niger. Even though some clandestine trade is believed to continue, these transactions are not registered in the national accounts.

2.

MONETARY POLICY AND FINANCIAL DEVELOPMENT

Niger is a member of the West African Monetary Union ("Union Monétaire Ouest-Africaine", UMOA). All member countries of the UMOA — Benin, Burkina Faso, Ivory Coast, Mali, Niger, Senegal and Togo — share a common currency, the CFA franc, and the same central bank, the "Banque Centrale des Etats de l'Afrique de l'Ouest", BCEAO. France is represented on the Board of the BCEAO and supports the UMOA to maintain the free convertibility of the CFA franc into the French franc. This support is provided through overdraft facilities in the operations account that the BCEAO holds with the French Treasury. The BCEAO in turn is required to deposit 65 percent of its foreign-currency reserves in French francs in the operations account. The CFA franc is currently pegged to the French franc at a fixed exchange rate of 50 CFA francs to one French franc. Therefore, exchange policies in Niger and all other member countries of UMOA are automatically aligned with those adopted by France.

As a member of UMOA, Niger has a limited degree of autonomy in controlling its money supply and credit. The main tool of the UMOA for liquidity control in member countries is rediscounting by the BCEAO. The BCEAO sets annual targets for total central bank financing in each member state, taking into account production, prices, liquidity, the balance of payments target, the level of foreign reserves of each country, and the total foreign reserves of the area as a whole. The annual limits exclude seasonal credit for financing crops and agricultural exports. Within the fixed limits on BCEAO rediscounting established for each country, the country's National Credit Committee decides freely on specific credit

allocation. However, the proportion of a bank's total credit rediscounted with the BCEAO should not exceed 45 percent, and credit to governments is limited to a maximum of 20 percent of the previous year's officially recorded fiscal revenue. Rediscount rates are determined by the Board of the BCEAO.

The sectoral distribution of credit is influenced by imposing the prior approval of loans in excess of 30 million CFA francs, and by applying preferential rediscount rates to specific loans. These special lines of credit respond to the requirements of seasonal farming, small and medium-size enterprises, and small scale construction. Sectoral priorities are established by each government, and implemented by the BCEAO. In the case of Niger, the order of priority is: agriculture, Nigerien enterprises, industry and mining, construction, transport and commerce.

Despite these priorities, the rural sector (agriculture, forestry, and fisheries) is the economic activity with the lowest share in total credit to the private sector. As shown in Table 3, the average share of the rural sector in total private sector credit in the period 1980-1983 was only about 6 percent, whereas the sector's average contribution to non-government GDP in the same period was 51 percent. The ratio of institutional credit to GDP for the rural sector was only 2 percent in the period 1980-1983. Construction and Public Works, and Industry and Energy are the sectors with the highest credit-to-GDP ratios in this period. The financing of rural production will be further discussed later in this report.

2.1. MONETARY POLICY

The behavior of the major monetary aggregates between 1978 and 1985 is summarized in Table 4. The money supply shows a period of steady growth between 1978 and 1981, at an average rate of about 20 percent per year in nominal terms, more or less in line with the growth rate of nominal GDP. There was a severe contraction in the money supply in 1982, when it declined by almost 12

percent, followed by a year of almost no change. This behavior reflects the overall economic decline observed after 1980. The years 1984 and 1985 can be considered as an adjustment period. In 1984 the money supply overshoot its previous growth record, growing at over 22 percent in nominal terms, even though the economy was in even deeper recession than previous years. Two exogenous factors referred to in the previous section may help explain this loss of control of the money supply, the drought of 1984 and the depreciation of the CFA franc. Both phenomena may have forced a larger monetary expansion aimed at financing emergency relief and more expensive imports. Money grew less than 10 percent in 1985, as a consequence of the efforts to adjust to the target ceilings established under the IMF stand-by programs.

TABLE 3

*Sectoral Shares in GDP and in Total Private Sector Credit.
Averages for the Period 1980-1983*

Sector	Share in Non-government GDP at factor cost %	Share in Total Private Sector Credit %	Credit to GDP ratio %
Rural*	51.17	6.22	2.05
Mining	10.54	9.11	14.80
Industry & Energy	5.43	16.59	51.37
Construction & Public Works	5.07	15.58	52.92
Commerce, Transport & Services	27.80	52.50	31.86
All Non-government			16.89

* Agriculture, Forestry and Fisheries.

Sources: Table 1, and Ministère du Plan, Bulletin de Statistique (1984).

TABLE 4

Monetary Survey, 1978-1985

	1978	1979	1980	1981	1982	1983	1984	1985*
A. Monetary Aggregates in billions of CFA francs, as of December of each year								
Money Supply	54.20	64.51	77.93	94.07	82.98	82.69	101.02	110.21
Currency outside banks								
plus demand deposits	46.39	57.27	64.59	74.75	70.93	66.55	78.41	
Quasi-money	7.80	7.24	13.34	19.32	12.05	16.14	22.62	
Net Foreign Assets	20.00	18.69	8.72	18.64	-24.00	-18.59	-0.95	-3.43
Long-Term Foreign Borrowing	1.38	3.50	9.45	16.55	20.03	28.12	28.01	35.45
Domestic Credit	42.36	57.46	82.31	98.97	126.70	130.81	120.20	134.50
Net claims on government	-11.88	-18.36	-7.49	-2.89	16.34	17.86	22.01	26.90
Claims on private sector**	54.24	75.82	89.80	101.95	110.36	112.95	98.19	107.60
Other Items (net)	6.78	8.14	3.65	6.99	-0.31	1.41	-9.79	-6.38
B. Annual Percentage Change								
Money Supply		19.02	20.80	20.71	-11.79	-0.35	22.18	9.09
Currency outside banks								
plus demand deposits		23.45	12.78	15.73	-5.11	-6.18	17.82	
Quasi-money		-7.18	84.25	44.87	-37.63	33.94	40.15	
Net Foreign Assets		-6.55	-53.34	113.76	-228.76	22.54	94.89	-155.79
Long-Term Foreign Borrowing		153.62	170.00	75.13	21.03	40.39	-0.39	25.85
Domestic Credit		35.65	43.25	20.24	28.02	3.24	-8.11	11.90
Net claims on government		-54.55	40.80	60.21	648.32	9.30	23.24	22.22
Claims on private sector		39.79	18.57	13.40	8.25	2.35	-13.07	9.58
Other Items (net)		20.06	-55.16	91.51	-104.43	554.84	-794.33	34.83

* Projections (Toh, 1986, and this study).

** Includes other financial institutions.

Source: IMF, International Financial Statistics (1985 yearbook, and April 1986).

The growth pattern of domestic credit shows three distinct periods. First, two years of rapid growth (1979 and 1980) at an annual average of almost 40 percent, that can be associated with the growth in the money supply observed in this same period. This was followed by two years of moderate growth of domestic credit, at an average rate of 24 percent per year, and subsequently by a drastic contraction of credit growth in the period 1983-1985. The average annual percentage change of domestic credit during these three years was only 2.3 percent, which amounts to a reduction of approximately 5 percent per year in real terms.

It is important to highlight the changes in the distribution of domestic credit that occurred during the period covered by Table 4.

The major feature here was the change in the net position of the government, from creditor to debtor, in 1982. Even though this change of sign in the net claims on government occurs in 1982 (panel A in Table 4), the trend in this direction indeed started in 1980, when the net creditor position of the government starts declining very rapidly, i.e., the net claims on government start increasing dramatically (panel B in Table 4). The average annual increase of net claims on government between 1980 and 1982 was about 250 percent. This trend changed rather drastically in the sub-period 1983-1985, during which the annual increase in net credit to government averaged 18 percent. This slow-down is a consequence of the adoption of IMF-induced austerity measures since 1983. A result of the observed growth in credit to the government is that the share of the private sector in total domestic credit declined from over 100 percent until 1981 to about 80 percent in 1985.

This reversal in the net credit position of the government has been attributed to two major factors. First, it was due to balance of payments disequilibria, caused by large trade deficits in 1980 and 1981, increasing debt servicing, and a decline in non-monetary capital inflows in 1982. Second, the reversal grew out of increasing government deficits resulting from a stagnation of government revenue, and growing extrabudgetary capital spending under the five-year development plan undertaken in 1979 (Toh, 1986). These phenomena had consequences in the composition of the sources of funds for the banking system, and particularly in the magnitudes of foreign borrowing. Prior to 1981, treasury and public-sector deposits with public banks⁴ provided an important part of the banking system's liquidity base. This had allowed the banks to limit their recourse to Central Bank rediscounting and foreign borrowing as sources of funds. However, the withdrawal of deposits by public enterprises in 1981-1982 forced the banks to rely upon Cen-

4 The "Banque de Développement de la République du Niger" (BDRN), and the "Caisse Nationale de Crédit Agricole" (CNCA).

tral Bank rediscount and foreign borrowing to finance the increasing demand for credit from the government. This increased credit demand can be traced back to financial difficulties of public enterprises, primarily official marketing agencies, and the pre-financing of government extrabudgetary investment projects (Toh, 1986). Both short-term and long-term foreign borrowing increased substantially after 1980, leading to a negative net foreign assets position (see Table 4, panel A), and a sustained growth in long-term foreign liabilities.

In summary, the overall monetary picture in the first five years of the 80's differs substantially from the situation observed in the late 70's. Prior to 1980, the country had a positive net foreign assets position, the government was in a net creditor position *vis à vis* the rest of the economy, domestic credit and money were growing steadily. After 1980, the net foreign assets position has become negative, the government is in a net debtor position, while efforts are been made to stabilize the growth of credit and money in the economy.

2.2 FINANCIAL DEVELOPMENT

The usual financial deepening indicators are summarized in Table 5 for the period 1970 to 1985. In this 16-year period the ratio of total money (i.e., currency *plus* deposit money) over GDP almost doubled, following a rather unstable path that can be attributed to the erratic fluctuations of the nominal money supply. Despite this deepening process observed over the last 16 years, Niger's financial sector is still very underdeveloped, as compared to other low-income countries.

The period covered in Table 5 can be divided into three sub-periods: 1970-1975, 1976-1981 and 1982-1985. During the first sub-period the Deposit-to-GDP ratio (row 3 in Table 5) grew at a faster rate than the Domestic credit-to-GDP ratio (row 4 in Table 5), i.e., deposit money was growing faster than domestic credit. The oppo-

TABLE 5
Financial Deepening Indicators, 1970-1985

Indicator	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
1. Total Money as % of GDP	8.65	10.64	9.48	12.09	12.78	14.14	12.57	13.03	14.97	14.57	14.75	15.74	12.70	11.86	16.42	15.63
2. Currency in Circulation as % of GDP	4.38	5.03	4.54	5.20	5.90	5.98	5.76	5.14	5.45	6.16	5.88	5.83	5.40	4.52	4.99	—
3. Deposit Money as % of GDP	4.26	5.21	4.94	6.90	6.87	8.17	6.80	7.89	9.52	8.41	8.87	9.91	7.30	7.34	11.41	—
4. Domestic Credit as % of GDP	7.56	6.25	5.30	7.06	8.69	10.81	6.97	5.63	11.69	12.98	15.56	16.55	19.39	18.04	19.46	19.08
5. Change in Net Foreign Liabilities as % of GDP	—	-3.10	-15.0	-0.80	0.70	-0.30	-3.30	-1.70	1.10	0.90	3.20	-0.30	7.10	0.60	-3.40	3.51
6. Change in Total Money (Nominal) %	—	26.45	6.27	20.22	31.03	9.80	31.10	28.70	44.00	19.02	20.81	20.70	-11.79	-0.35	22.18	9.09
7. Change in Total Money (Real) % *	—	22.45	-3.62	8.47	27.67	0.71	7.49	5.43	33.97	11.68	10.56	-2.20	-23.43	-2.84	13.81	9.32
8. Change in Total Money (Real) % **	—	—	—	—	—	—	14.80	13.30	28.00	11.42	7.01	9.70	-21.59	-8.16	13.48	1.59
9. Inflation Rate % *	—	4.0	9.89	11.75	3.36	9.09	23.61	23.27	10.03	7.34	10.25	22.90	11.64	-2.48	8.37	-0.23
10. Inflation Rate % **	—	—	—	—	—	—	16.30	15.40	16.00	7.60	13.80	11.00	9.80	7.80	8.70	7.50

* Computed using the Consumer Price Index for African families, annual averages.

** Computed using the implicit GDP deflator.

Sources: BCEAO, Bulletin Statistique (various issues). - IMF, International Financial Statistics (various issues). - Table 4, this report.

site holds for the second sub-period. This implies a relatively better performance in the first sub-period in that there was a larger contribution of financial processes in the working of the economy. During this sub-period, banks were servicing credit demand by drawing primarily upon deposit mobilization from the public, rather than by refinancing from the Central Bank.

During the second sub-period, 1976-1981, credit deepening seems to have been somewhat forced by the Central Bank. Rediscounting from the Central Bank substituted for the mobilization of resources from the general public as a source of funding for credit. These years correspond to the period of rapid economic growth driven by uranium production and exports. Domestic credit as a proportion of GDP grew almost three-fold, whereas the deposit-to-GDP ratio stagnated after 1978. The overall increase in net foreign liabilities observed during this sub-period helped inflate nominal financial variables as a proportion of nominal GDP, as Niger drew upon foreign borrowing to finance more of its domestic activity.

The last sub-period, 1982-1985 is characterized by drastic contractionary monetary measures, associated with overall economic recession. As a consequence, financial deepening ratios (total-money/GDP, and deposit-money/GDP) fell in 1982 and 1983 with respect to previous years, and then increased in 1984. This increase was due to the deep recession observed that year, and to the monetary expansion induced by emergency relief and the depreciation of the currency. Domestic credit as a proportion of GDP remained more or less constant in this last sub-period.

It is difficult to draw conclusions about the behavior of financial variables in real terms. As is clear in rows 7 and 8 in Table 5, this behavior is very sensitive to the choice of a deflator, thus making conclusions conditional upon the index chosen to correct for inflation.

The behavior of interest rates, as indicated earlier, is fully determined by the policies established by the UMOA for the CFA-franc currency area. Three sets of interest rates are important to consider here. First, there are the rediscount rates established by

the BCEAO, along with margin regulations, that determine the range of lending rates authorized to banks. Second, there is the structure of interest rates to be paid on deposits, and third, the set of interest rates prevailing in the UMOA's money market.

Figure 1 shows the behavior of rediscount rates over the last ten years. Between 1975 and 1981 the normal rediscount rate ("taux d'escompte normal", TEN), and the preferential rediscount rate ("taux d'escompte préférentiel", TEP) remained constant at 8 percent and 5 percent respectively. Both rates increased by two and a half points in April 1980, and were raised again by two points in April 1982. The most recent rate adjustment by the BCEAO, in December 1984, lowered the normal rediscount rate to 10.5 percent, and the preferential rate to 8 percent. This preferential rate applies to crop financing, to small and medium-size domestic firms with overall outstanding debts of less than 30 million CFA francs, and to first home construction for residents of UMOA member countries.

The BCEAO regulates the rates applicable to different types of loans by setting limits to the margins that can be added to the relevant rediscount rate. The current structure of nominal lending rates derived from these BCEAO regulations is reported in Table 6, along with the structure of rates prevailing in 1982-1984. At present, lending rates range between a minimum of 9 percent and a maximum of 15.5 percent. Other commissions and value-date mechanisms that can increase the effective interest rate charged on loans are also regulated by the BCEAO. The current lending rates reported in Table 6 imply a range of real interest rates on loans from 1.5 percent to 8 percent, as compared to a range of 2.2 to 8.7 percent in the period 1982-1984⁵.

The interest rates authorized for deposits also experienced a drop in December 1984, in line with the adjustment of rediscount rates. Table 7 summarizes the structure of nominal interest rates on

5. Estimates obtained using the average inflation rate of the implicit GDP deflator.

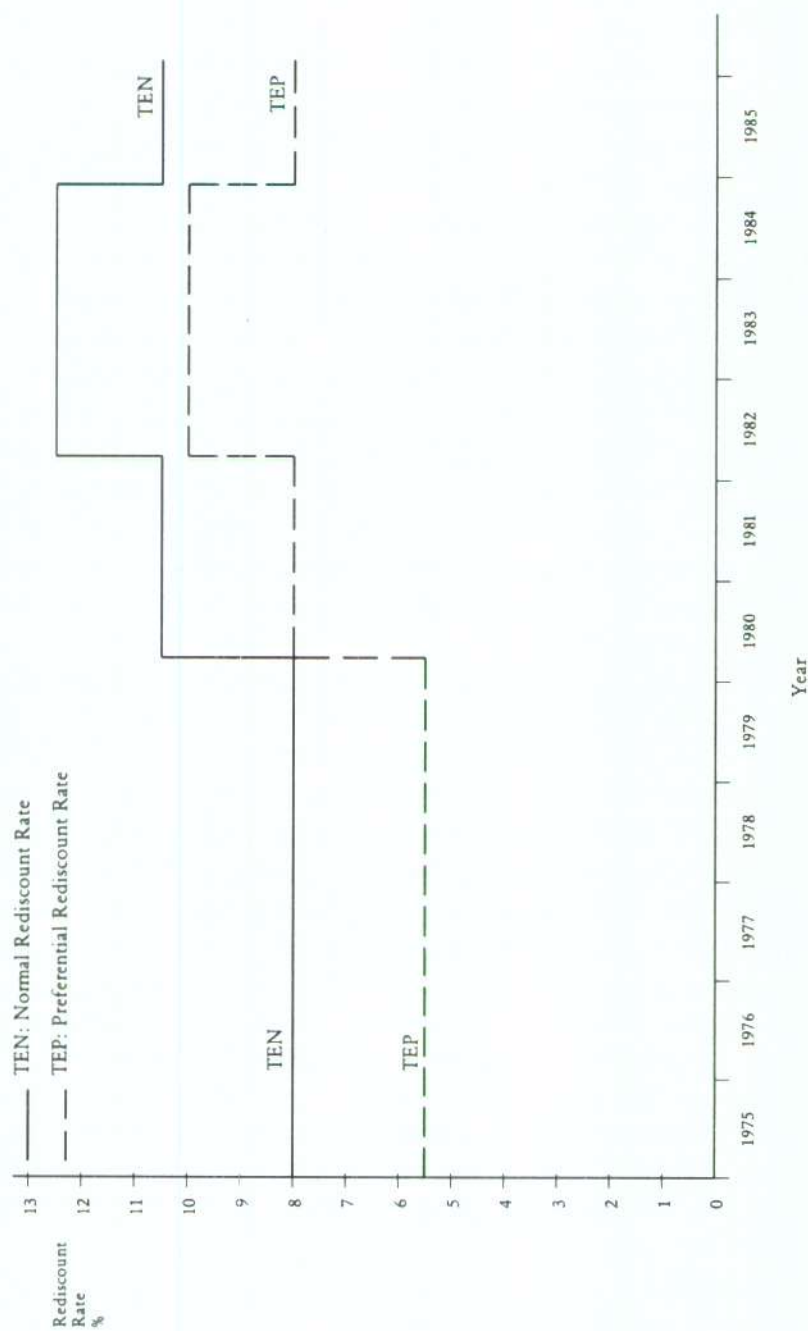
FIGURE 1: *Rediscount Rates, 1975-1985*

TABLE 6

BCEAO Regulations and Lending Rates, 1982-1985

Line of Credit	Regulation		Range of Loan Rates %	
	Rediscount rate %	Margin %	1982-1984	1985-present
Short and Medium-Term Loans				
Seasonal crop financing and agr. exports	TEP ^a	1 - 2	11 - 12	9 - 10
Small and medium-sized domestic firms with overall outstanding debt less than CFA F 30 million	TEP	1 - 3	11 - 13	9 - 11
First home construction for UMOA residents, loans less than CFA F 1.5 million	TEP	1 - 3	11 - 13	9 - 11
Other short and medium-term	TEN ^b	0 - 5	12.5 - 17.5	10.5 - 15.5
Long-Term Loans				
Small and medium-sized domestic firms with overall outstanding debt less than CFA F 30 million and residual maturity less than 10 years	TEP	1 - 3	11 - 13	9 - 11
First home construction for UMOA residents, less than CFA F 1.5 million and residual maturity less than 10 years	TEP	1 - 3	11 - 13	9 - 11
Other long-term	TEN	0 - 5	12.5 - 17.5	10.5 - 15.5
Overall Range			11 - 17.5	9 - 15.5

Source: BCEAO

a. TEP: Preferential rediscount rate ("taux d'escompte préférentiel"), see text.

b. TEN: Normal rediscount rate ("taux d'escompte normal"), see text.

private deposits for the years 1982 through 1985⁶. The rate reduction in this case was one percentage point across the board, except for demand deposits where the obligation to pay interest was lifted for two years, starting in January 1985. In real terms, the rates reported in Table 7 imply a range between -1.25 percent and 2 percent in 1985, not considering demand deposits. In the period 1982-

6 BCEAO regulations establish that interest rates on public sector deposits are determined by agreement between the contracting parties. In Niger, these rates tend to follow the general regulations on private sector deposits.

1984, the range of real interest rates on deposits was -1.5 to 1.7 percent. In summary, BCEAO regulations and Niger's inflation rates have resulted in a structure of real lending rates and real deposit rates more or less stable over the last 4 years. The interest costs of borrowed funds have been positive in real terms. The real returns on bank deposits implied by the authorized rates have been positive for savings deposits and certain categories of time deposits. This statement, however, may not apply to effective returns received by depositors, since this depends on the effective rate paid by banks, and on the transaction costs of holding deposit accounts. It can be expected that only large, long-term time deposits are receiving a positive real rate of return under the current conditions.

TABLE 7

Interest-Rate Regulations on Private Deposits

Type of Deposit	Size of Account CFA francs							
	Up to 200,000		200,001 to 500,000		500,001 to 2,000,000		more than 2,000,000	
	1982-1984 %	1985 %	1982-1984 %	1985 %	1982-1984 %	1985 %	1982-1984 %	1985 %
Demand Deposits *	0	0	4.5 fixed	—	5.0 fixed	—	5.0 min.	—
Time Deposits								
Less than 6 months	7.25 fixed	6.25 fixed	7.75 fixed	6.75 fixed	8.25 fixed	7.25 fixed	8.25 min.	7.25 min.
6 months to less than 1 year	8.25 fixed	7.25 fixed	8.75 fixed	7.75 fixed	9.50 fixed	8.50 fixed	9.50 min.	8.50 min.
1 year or more	9.25 min.	8.25 min.	10.00 min.	9.00 min.	10.50 min.	9.50 min.	10.50 min.	9.50 min.
Savings Deposits	9.50	8.50	(Maximum size of account established by each member country. In Niger: 5 million CFA for individuals).					

Source: BCEAO

* Obligation to pay interest on demand deposits was suspended for two years, starting January 1985.

Finally, the other set of interest rates of importance is the one prevailing in the UMOA's money market. The creation of the UMOA's money market in 1975 responded to the objective of providing the BCEAO with another instrument of monetary control. Also, it is expected that the access to this money market will induce the banks in the union to keep their excess reserves within the currency area, thus reducing capital flight from the UMOA countries. Even though interest rates in this market should reflect demand and supply, "this generally is not the case. Interest rates are set by the BCEAO, absorbing any excess supply or demand of funds at the administrative set rates" (Toh, 1984, pp. 33). The average annual interest rates in the money market are reported in Table 8 for the period 1975-1985. The behavior of these rates over time has followed closely the shifts in the rediscount rates set by the BCEAO discussed above.

It is not clear if the existence of the money market has been effective in preventing capital flight from the UMOA region. However, it is clear from Table 8 that the structure of money market rates do offer banks an interesting alternative to lending at preferential rates. For example, the range of interest rates authorized to be charged on preferential lines of credit is currently 9 to 11 percent (see Table 6). To the extent that there is at least some uncertainty of repayment involved in these loans, a 3-month deposit in the money market with a certain return of 11 percent appears as a more attractive use of the banks' liquidity. This mechanism may have allowed banks to reduce the size of their loan portfolio in the recession years, without seriously compromising their viability.

In summary, this section has shown that financial deepening has occurred in Niger over the last 16 years, at a rather unsteady pace. The deepening trend has become particularly unclear after 1980, due to monetary contraction and economic recession. The following section will discuss with more detail the performance of financial institutions during this period.

TABLE 8

Average Annual Interest Rates in the Money Market, 1975-1985

Year	Overnight		One-month		Three-month	
	Deposits %	Advances %	Deposits %	Advances %	Deposits %	Advances %
1975	7.000	7.125	—	—	—	—
1976	6.875	7.125	—	—	—	—
1977	7.000	7.250	—	—	—	—
1978	7.250	7.500	7.063	7.313	7.125	7.375
1979	6.938	7.188	7.063	7.313	7.313	7.563
1980	10.250	10.531	10.375	10.625	10.625	10.875
1981	14.500	14.813	14.625	14.875	14.875	15.125
1982	14.000	14.333	14.125	14.375	14.375	14.625
1983	11.500	11.813	11.625	12.875	11.875	12.125
1984	11.125	11.406	11.250	11.500	11.800	11.750
1985	10.625	10.875	10.750	11.000	11.000	11.250

Source: Toh (1986).

3.

PERFORMANCE OF FINANCIAL INSTITUTIONS

The banking system of Niger is comprised of nine banks, in addition to the BCEAO. Three of these institutions are considered public development banks, the "Crédit du Niger" (CN), the "Banque de Développement de la République du Niger" (BDRN), and the "Caisse Nationale de Crédit Agricole" (CNCA). The other six banks are private commercial institutions, the "Banque Internationale pour le Commerce et l'Industrie du Niger" (BICIN), the "Banque Lybienne Nigérienne pour le Commerce Extérieur et le Développement" (BALINEX), the Citibank, the "Banque Internationale pour l'Afrique Occidentale" (BIAO), the "Massraf Faysal Al Islami-Niger" (MFIN), and the Bank of Credit and Commerce International (BCCI). Table 9 shows some of the main characteristics of the Nigerien banking system.

TABLE 9

Selected Features of the Banking System, 1985

Bank	Established (year)	Government Share in Ownership %	Number of Permanent Branches	Private Deposits %	Market Shares ^a Total Loans %	Total Assets %
Public Development Banks						
CN	1958	45.4	1	—	—	—
BDRN	1961	37.0	11	50.0	63.3	44.0
CNCA	1967	100.0	5	—	12.5	9.1
Private Commercial Banks						
BICIN	1978	0	1	16.4	8.3	6.9
BALINEX	1978	50.0	1	3.1	4.1	3.0
Citibank	1979	0	1	0.3 ^b	0.2 ^b	0.9
BIAO	1979	0	5	30.0	15.8	17.0
MFIN	1983	0	1	—	—	—
BCCI	1984	0	1	—	—	—

Sources: BCEAO and banks' balance-sheets.

^a Market shares (end of 1985) are approximate due to differences in classification of deposits and loans across banks.^b 1982 estimates.

Among the banks controlled by the government, the CN provides financing for small equipment and real estate, mainly to public employees. The BDRN is in fact a multi-service bank dealing in all areas of credit activity, taking on equity participations, and providing deposit and payment services, among other typical banking services. The CNCA specializes in financing agriculture and other rural economic activities. Except for BALINEX, there is no government participation in the ownership of commercial banks. All other commercial banks are controlled by foreign capital.

Other government-controlled, non-bank financial institutions are the following:

- (i) the "Caisse Nationale D'Epargne" (CNE) mobilizes deposits (about 1 billion CFA francs as of November 1985) through the Post Office branch network. This institution will be dealt with

- in more detail later;
- (ii) the "Caisse de Prêts aux Collectivités Territoriales (CPCT), whose function is to provide loans to local governments (total assets 1.5 billion CFA francs as of September 1982);
 - (iii) the "Fond d'Intervention en Faveur des Petites et Moyennes Entreprises Nigériennes" (FIPMEN), that provides guarantees, interest subsidies, risk capital and consulting services to small and medium-sized business firms with at least 80 percent Nigerien ownership. FIPMEN was established in 1983, and operates through the "Office de Promotion de l'Entreprise Nigérienne" (OPEN);
 - (iv) the "Société Nigérienne de Crédit Automobile" (SONICA), that provided car financing until its dissolution in 1985.

As shown in Table 9, the branch network of the Nigerien banking system is extremely limited. There are only 27 bank branches in the country, of which about one third are located in the capital city. This represents approximately one bank branch for every 226 thousand inhabitants, undoubtedly one of the lowest ratios in the world. One of the poorest countries in Asia, Bangladesh has a ratio of one branch for about 25 thousand people, while one of the poorest countries in Latin America, Honduras, has one bank branch for every 15 thousand inhabitants. This degree of underdevelopment of the banking system is not unusual in Sub-Saharan Africa however, since the size of the banking system in relation to the size of the population appears to be even smaller in Mali⁷.

Only three banks have a relatively more developed branch network, the BDRN, the BIAO, and the CNCA. Among all banks, the BDRN has the dominant market share both in loans and deposits. The second largest bank is the BIAO, followed by the BICIN. The CNCA has no deposit collection activity, but ranks

7 The ratio implicit in the figures reported by Masini (1985) is one branch per 288.5 thousand inhabitants.

third in the market share of total loans. However, there is some degree of segmentation in the loan market. The BDRN has about 30 percent of its loan portfolio in the public sector, whereas commercial banks serve mainly the financial needs of private commercial firms. The CNCA on the other hand, is fully specialized in financing economic activities in rural areas, and a number of parastatals associated with rural activities.

The overall rate of growth of the Nigerien banking system decreased considerably during the last few years for which data are available. Total assets and liabilities increased 26 percent in 1982, 10.6 percent in 1981, and only 5.2 percent in 1983. The larger commercial banks and the CNCA reported an overall decrease in absolute size for 1984.

The composition of assets and liabilities in the Nigerien banking system is reported in Table 10 for the years 1980 through 1983. The structure of the sources of funds of the banking system (panel B in Table 10) is characterized by some negative trends. There was a marked decrease of private sector deposits during the period covered by Table 10. As discussed in a previous section, this fall in private sector deposits, accompanied by the government liquidity crisis and the withdrawal of public-sector deposits, induced a very sharp increase in Central Bank credit, and in foreign borrowing. This heavier reliance upon Central Bank credit weakens incentives towards the development of the banking system. Also, the share of permanent funds in total liabilities showed a slightly decreasing trend in a system that was undergoing a serious recession. Unless fresh risk capital is invested in banks, this negative trend cannot be reversed, given the fact that all the largest banks reported net losses in 1984⁸. The prospects for an expansion of banking activity are therefore unpromising.

On the asset side, illustrated in panel A of Table 10, the most

8 An exception to this was the CNCA, but loan-loss data and revenue accounting in this institution are questionable.

TABLE 10

Composition of Assets and Liabilities of the Banking System, 1980-1983

	1980 %	1981 %	Year 1982 %	1983 %
A. Assets				
Reserves	2.83	3.73	2.46	3.46
Foreign Loans	3.98	2.61	1.61	3.46
Credit to Government	7.76	11.26	12.69	12.17
Credit to Non-government	65.47	59.18	57.63	57.38
Other Assets	20.88	23.16	25.55	23.52
Total Assets	100.00	100.00	100.00	100.00
B. Liabilities				
Private Sector Deposits	34.00	34.42	24.96	25.41
Government Deposits	13.27	10.13	8.19	7.79
Central Bank Credit	10.07	13.27	16.44	16.96
Foreign Liabilities	21.40	16.88	28.01	27.75
Permanent Funds	9.62	8.83	8.89	9.11
Other Liabilities	11.63	16.41	13.50	12.93
Total Liabilities	100.00	100.00	100.00	100.00

Source: Ministère du Plan, Bulletin de Statistique (1984).

striking feature is the fall in the share of credit to the non-government economy, accompanied by an increase in the share of credit to the government in total assets. This can be partially explained by a contraction in non-government economic activity. At the same time, the decline in the share of credit to the non-government sector may reflect the "crowding out" of other financial assets in the banks' portfolios by rigid government financing demands, in a period of monetary restraint.

Consideration should also be given to the fact that over 30 percent of the bank credit to non-government sectors goes to public or semi-public enterprises operating in these areas. Thus a large proportion of the Nigerien banking system is involved in lending activity to borrowers that usually do not meet normal credit-worthiness criteria. The effect of this situation on the development of the banking system is well known. If the lending risk is still

borne by the banks, they are likely to suffer serious financial difficulties and/or a sharp scaling down of their activity. If the risk is passed on to other lenders of last resort, more explicitly to the government budget, then banks will turn into mere administrative entities of the government. In this case, they will gradually lose the prerogatives of an independent firm, and will have little need for developing the banking skills required for institutional viability.

The Nigerien banking system appears to be headed in this unpromising direction of financial contraction or shallowing. The BDRN, which was called upon since its creation to bear fully the weight of supporting government sponsored accelerated industrial development objectives, suffers today the consequences of these policies. Its bad-debt ratio is about 50 percent, it has difficulties attracting resources, operates with poor administrative procedures, an inflated personnel roster and superfluous fixed investment. A restructuring process is underway in the BDRN, but unless an appropriate system of incentives and sanctions is established, and current constraints on proper banking practices are removed, there is little likelihood of improvement.

The case of the CNCA has some special features that are dealt with in a later section of this report. However, in brief, the CNCA shares a common feature of public financial institutions, namely, the constant abuse of these institutions as conduits for debt financing of government current expenditures for public enterprises.

The BCEAO reported an increase of doubtful loans of 76.5 percent in 1983, and a further increase of 76.7 percent in 1984 for the banking system as a whole. This is probably the result of several negative factors affecting the Nigerien economy after the end of the uranium boom. However, it also seems likely that the UMOA and the domestic authorities in Niger have no pronounced concern for financial institution building. Thus, policies affecting financial institutions in Niger tend to neglect the need for financial viability. Measures are taken when bank difficulties arise, but these measures are ex-post remedies for short-term crises. Intelli-

gent precautionary actions to prevent the deterioration of the banks' portfolios are not taken to meet long-run objectives of healthy financial deepening.

The loan portfolio of the banking system is heavily concentrated in commerce, construction, and industry. These three sectors accounted for 76 percent of bank lending to non-government sectors in 1983 (see Table 11). Commerce alone received 46.4 percent of total credit to non-government sectors in 1983, and about 53 percent of total short-term lending this same year. As indicated in a previous section, the rural sector (agriculture, forestry, and fishing) has the smallest share in institutional lending to non-government activities. This sector's share was 6.5 percent in 1978, grew to 8.3 percent in 1982, and then fell to 4 percent in 1983.

Most lending to non-government sectors has been short-term. In fact, the term structure of the loan portfolio has tended to shorten in the period covered by Table 11. Short-term credit was between 69 and 73 percent of total lending in the years 1979 through 1981. Its share increased to almost 77 percent in 1982, and then to 83 percent in 1983. This shortening of the term structure of the loan portfolio was even more drastic for the rural sector. Short-term lending to agriculture, forestry and fishing represented 92 percent of the loans received by this sector in 1983.

TABLE II

Distribution of Credit to Non-government Sectors, 1979-1983.
End-of-Period Balances in Millions of CFA Francs

Term/sector	Year					
	1978	1979	1980	1981	1982	1983
Short-term						
Rural ^a	2,327	3,244	3,084	3,488	5,844	3,740
Mining	2,780	3,947	4,101	1,565	3,823	4,007
Industry	3,001	4,636	8,733	8,094	11,692	9,627
Construction	4,027	4,560	8,445	12,603	11,892	13,420
Transport	2,501	3,690	5,498	6,491	6,902	7,368
Commerce	16,335	24,418	25,910	28,856	36,106	44,802
Services	204	1,502	1,959	1,234	1,199	1,289
Financial Inst.	399	—	—	—	—	—
Other	2,588	10	—	—	—	—
Total short-term	34,612	46,007	57,730	62,331	77,458	83,533
of which, public %						
semi-public enterp.	8,099	13,779	18,560	22,259	27,793	25,272
Medium-term						
Rural	734	1,010	1,392	2,299	2,506	326
Mining	6,649	8,470	5,251	6,572	5,029	2,907
Industry	1,156	4,305	5,469	5,627	6,000	5,273
Construction	1,607	2,750	3,034	3,390	2,625	1,437
Transport	910	1,723	1,772	1,482	1,040	938
Commerce	789	852	1,636	2,142	2,494	2,519
Services	241	678	730	917	1,053	1,062
Financial Inst.	15	—	—	—	—	—
Other	724	—	—	—	—	—
Total medium-term	12,825	19,788	19,284	22,429	20,747	14,462
of which, public &						
semi-public enterp.	2,451	5,719	7,019	7,223	7,340	4,233
Long-term ^b						
Industry	56	47	—	—	—	—
Construction	25	—	—	—	—	—
Transport	173	—	1,058	1,487	1,568	1,428
Commerce	—	783	25	25	20	15
Services	29	155	310	274	1,095	1,119
Total long-term	283	985	1,393	1,786	2,694	2,562
of which, public &						
semi-public enterp.	222	817	1,090	1,506	1,583	1,458
Total Credit	47,720	66,780	78,407	86,546	100,899	100,557
of which, public &						
semi-public enterp.	10,772	20,315	26,669	30,988	36,716	30,963

Source: Ministère du Plan, Bulletin de Statistique (various issues).

^a Agriculture, Forestry and Fishing.

^b Sectors without long-term credit excluded

A final note on the portfolio composition of the banking system is the participation of public and semi-public enterprises. Their share of total non-government credit from the banking system has been above 30 percent since 1979, reaching a maximum of 36.4 percent in 1982. Furthermore, these public and semi-public enterprises have practically monopolized long-term credit. About 80 percent of long-term lending went to these firms between 1979 and 1981. This share decreased to 59 and 57 percent in 1982 and 1983 respectively.

This section has complemented the discussion of financial development carried out in section 2. The banking system of Niger has been increasingly servicing the government and the parastatals at the expense of the private sector. Reliance upon central bank funds and foreign borrowing has increased, while private sector deposits have declined. The loan portfolio of the banking system shows a clear urban bias, in detriment of the rural sector. The economic recession of the first part of the 80's has affected the profitability of banking, increased the level of delinquency in the loan portfolios, and increased the risk associated with banking activities. As a consequence, banks have reduced their scale of operations, shortened their term structures, and accentuated the urban bias of their loan portfolios. The rural sector has been particularly affected in this process. Not surprisingly, as the following section will show, informal finance plays a role far more important than institutional financial services in rural areas.

4.

RURAL CREDIT OUTSIDE FINANCIAL INSTITUTIONS

This section reviews, first, the characteristics of the non-financial institutions and programs involved in or associated with agricultural credit. These correspond to public agencies that complement the functions of the CNCA on the one hand, and to special programs carried out under the sponsorship of foreign donors, on the other hand. Secondly, the role of informal (non-institutional) finance is documented and discussed, based on the findings of a recent field survey carried out by Ohio State University⁹.

4.1 NON-FINANCIAL INSTITUTIONS AND PROGRAMS
IN AGRICULTURAL CREDIT

Two non-financial institutions stand out in the institutional credit network of rural Niger. The first is the "Union Nationale de Coopératives" (UNC)¹⁰, whose major role is the promotion and organization of cooperatives. The second is the "Centrale d'Approvisionnement" (CA), the institution responsible for supplying inputs to farmers. The roles and functions of these two key non-financial institutions involved in agricultural credit are outlined below.

The UNCC (now the UNC) was created in 1962 with the purpose of providing administrative support to cooperatives. These

9 See Cuevas (1986), for a detailed report of preliminary findings.

10 Formerly the "Union Nationale de Crédit et de la Coopération" (UNCC).

cooperatives had evolved from the "Sociétés Mutuelles de Développement Rural" (SMDR), pre-cooperative organizations developed under the French colonial administration. These SMDRs were organized under mandatory membership around the production of peanuts, grain storage, and as a training ground for local leadership¹¹.

A major objective of the UNCC was to provide greater central control of cooperatives, in an effort to reduce the corruption that allegedly existed at the local level. Local units were to report directly to the central headquarters of the UNCC. This management scheme continued even after 1965 when cooperatives were converted to locally-managed voluntary membership groups. "The UNCC agents continued to set the rules and make the critical decisions. Membership was compulsory for all those who wanted to market peanuts" (Hemmings, p.1). The cooperative statute of 1978 provided greater autonomy to peasant cooperatives, however, membership rules are still defined by national statute. Cooperatives must still work with UNC (former UNCC) agents, and must use a standardized set of organizational and accounting forms.

The basic unit of the cooperative structure is the "Groupe-mutualiste Villageois" (GM), based at the village-level. Membership is open to all villagers, and in practice is automatic. A cooperative is comprised of five to ten GMs, and is designed to provide marketing services for the GM farmers. Delegates from the cooperatives comprise the "Union Locale de Coopératives" (ULC), at the canton level. Higher level cooperative structures exist at the arrondissement level ("Union Sous-Régionale de Coopératives", USRC), and the departmental level ("Union Régionale de Coopératives", URC). Finally, the UNC at the national level is formed by delegates from the regional organizations. Administratively, UNC agents exist at the canton and arrondissement levels, reporting directly to central UNC office in Niamey.

11 This historical sketch of the UNC is based on Hemmings (1984).

The duties of UNC field agents are many and diverse. They include in principle record-keeping responsibilities for credit allocation, loan-repayment collection, supervision of input delivery and cooperative marketing, training in cooperative formation and agricultural production techniques. In practice, they play a major role in credit allocation and input distribution, through their work with cooperative leaders. However, they have little contact with individual credit beneficiaries, due to logistical constraints. Their record keeping of loans, input delivery, and loan collection are carried out poorly, if at all. The Ohio State University is currently surveying the institutional credit network at the cooperative, UNC, and CNCA levels. Their upcoming report to USAID (September 1986) will document in detail the workings of these institutions and organizations in the credit system.

There are currently about 1,200 cooperatives in Niger, made up of some 10,000 GMs, 80 percent of which were created after 1974, and more than one-third of which were formed after 1982 (see table A.3 in the Appendix). Their leadership performs a very important role in the allocation and distribution of agricultural credit. They bear a large proportion of the transaction costs associated with lending and borrowing in the institutional credit network. The work by OSU referred to above should provide reliable estimates of the magnitudes and distribution of these transaction costs.

The operations of the "Centrale d'Approvisionnement" (CA) are financed with credit from the CNCA, and with direct subsidies from the "Fonds National d'Investissement" (FNI), and the "Caisse de Stabilisation des Prix et de Péréquation du Niger" (CSPPN). Input delivery to farmers is undertaken through cooperatives, with the assistance of UNC agents. Farmers either pay for inputs in cash, or inputs are delivered against a signed loan agreement between a cooperative member and the CNCA. The CNCA then credits the CA's account and debits the cooperative's account¹².

12 An extensive treatment of CA's input supply operations is found in Zalla, Barokas, and Hemmings (1984).

The main suppliers of agricultural implements to the CA are cooperative manufacturers located at Tahoua, Dosso and Zinder. Fertilizers were normally purchased from merchants importing from Nigeria until the border closure in April 1984. Commercial imports that had been discontinued in 1981 have resumed after this date. Additional stocks of fertilizers are provided by donors, usually as grants. Chemical products and spraying equipment are purchased abroad.

The direct subsidies that the CA receives from the FNI and CSPPN do not cover its operating expenses. Until 1983, the CA's operating deficits were being financed with a line of credit from the CNCA, that in fact amounts to an additional (indirect) subsidy. Average levels of total (direct and indirect) subsidy to the CA, and thus to input users, ranged between 37 and 51 percent of total delivered costs to farmers. Individual input subsidy levels were estimated between 30 percent (urea) and 77 percent (most soil preparation equipment) in 1983, with a weighted average of 48 percent of the delivered costs of inputs.

At present, both USAID, through conditionality clauses in its Agricultural Sector Development Grant, and the World Bank under its Structural Adjustment Program, are supporting a reduction in the levels of subsidy applied to farm inputs. The main components of the policy adjustments being pursued are: a maximum subsidy of any input of 50 percent of its full delivered cost, a restructuring of the CA, and a reformulation of input pricing procedures by the Ministry of Agriculture and Livestock (formerly the Ministry of Rural Development). These policy reforms have been gradually undertaken over the last two years.

Productivity Projects exist or have existed in several areas of Niger, with the sponsorship of different donor agencies, notably the World Bank, the "Fonds Européen de Développement" (FED), and more recently USAID. Of those currently in operation, the Maradi project (World Bank, FED) and the Niamey project (USAID) are the most important. A large World Bank livestock development project in Zinder was practically discontinued in

1984. A common objective of all Productivity Projects (PPs) is the inducement of the adoption of improved inputs and agricultural techniques. In all cases, the operations of these PPs imply large subsidies to the project beneficiaries, under the form of technical assistance, training, and project administration.

Most of these projects have usually operated through the CNCA under a system of advances and prefinancing, that are subsequently reimbursed to the CNCA by the donor agency funding the project. Outstanding balances of these PPs with the CNCA as of December 1985 amounted to about 1.1 billion CFA francs¹³. Recently however, there is a tendency for the productivity projects to abandon this mechanism. Instead, the donors are now using the branches of the CNCA merely as a window for their liquidity management. An example is the Niamey Productivity Project, funded by USAID, that always carries a creditor position with the CNCA.

New project initiatives continue to rely upon the so called "stop gap" mechanisms to channel funds to rural beneficiaries, given the precarious situation of the CNCA. This highly segmented credit delivery system is likely to remain in place until a restructuring of the institutional credit system is attained.

An interesting experiment is currently underway to induce commercial banks to take on an agricultural clientele. The Cooperative League of the United States (CLUSA) has signed an agreement with the largest private commercial bank in Niger, the BIAO, under which a guarantee deposit (supplied by USAID) is made at BIAO against loans made to cooperatives. The credit risk is covered 100 percent by the guarantee fund, while BIAO provides only administrative services in exchange for a 5 percent net spread. CLUSA is in charge of selecting the cooperative beneficiaries of these loans, and responsible for defining the amounts and maturi-

¹³ These debtor balances were approximately 1.6 billion CFA francs as of September 1983, according to CNCA-Paris (1984).

ties of the loans. At the same time, CLUSA is engaged in intensive technical assistance and training of a growing number of cooperative officials. The emphasis is on management of marketing services provided by the cooperatives to their members. The CLUSA staff is comprised of four specialists and twelve trainers based in rural villages.

Loans under the CLUSA-BIAO scheme are granted at 2 percentage points less than the normal rates of interest (currently about 13 percent). The BIAO must undertake, along with CLUSA, intensive recovery efforts and in any case wait six months after a loan has been declared in arrears before availing itself of the guarantee. The end-use of the loans is to be decided by the cooperatives themselves. Current priorities are crop marketing and small shops.

As of January 1986, three cooperatives of the Niamey department had received loans from the BIAO under this arrangement. The average amount of these loans was 3 million CFA francs, with a one year maturity. The program expects to reach a volume of 2 to 3 million US dollars of outstanding loans (600 to 900 million CFA francs). After a two-year experiment, the BIAO will decide whether to take a 30 percent risk on new loans to cooperatives, releasing part of the guarantee fund which will then be devoted to increase the capital base of the cooperatives.

4.2 INFORMAL FINANCE IN RURAL AREAS¹⁴

Access to institutional credit is indeed very limited in the rural areas of Niger. The findings of a recent survey carried out by the Ohio State University indicate that about one-half of the cases in a random sample of rural households had not obtained a single loan

¹⁴ This section relies upon Cuevas (1986). The OSU survey referred to here was undertaken in July-August 1985.

in the last five years. Fifty-four percent of the households obtained at least one loan during that period, and only four percent had "regular" access to credit, since they received five or more loans over this same period. The average access rate was 22.4 percent, i.e., in an average year 22.4 percent of the farmers obtained an institutional loan. This proportion however includes a large number of small seed-loans (primarily millet) granted in recent years. Other types of loans were equipment and input loans, often under the form of a "technology package", oxen, and cattle. A reduced number of loans in cash was reported by some of the respondents.

The average amount of these institutional loans was approximately 16 thousand CFA francs, or about 10 percent of the household's average agricultural income¹⁵. An estimate of the overall ratio of agricultural credit to agricultural output can be obtained by multiplying the credit access rate (22.4 percent) by the average credit-to-income ratio found for the households receiving loans (9.95 percent). The estimated ratio of agricultural credit to agricultural output is 2.23 percent, a proportion very similar to the ratio of rural credit to rural GDP reported previously in Table 3, calculated from official macro-economic statistics.

Given the low significance of institutional credit documented above, it was not surprising to find that informal financial transactions play a very important role in the financing of rural households. A vast majority of the heads of households (84 percent) had obtained loans or assistance from at least one source in the 12-month period preceding the interview.

The most important source of loans or assistance was relatives. Over fifty percent of households in the sample had received aid from this source. Friends and neighbors were mentioned as sources of assistance in 30 percent of the cases. About one-fifth of

¹⁵ Average agricultural income was estimated at about 160 thousand CFA francs per household, for the year preceding the interview. Given the average family size documented in the survey and the exchange rate prevailing in 1985, this estimate represents the equivalent of 65 US dollars per capita per year.

the heads of households included traders and merchants among their sources of informal loans or assistance. Finally, one-half of the respondents indicated other miscellaneous sources of assistance¹⁶.

The predominant form of informal borrowing was in grains, primarily millet and sorghum. Almost seventy percent of the respondents that received some assistance received loans in grain. About 48 percent had obtained help in cash, and 10 percent of the household heads indicated other forms of informal borrowing, including different types of livestock¹⁷.

The average amount of informal loans and assistance obtained by heads of households was estimated in about 31 thousand CFA francs, i.e., an amount twice as large as the average amount of an institutional loan. Table 12 summarizes the findings of the study with respect to access and magnitudes of formal and informal borrowing by rural households. Overall, the average randomly selected rural household borrowed a total of 30 thousand CFA francs in the year preceding the survey. This amount represents about 19 percent of the household's average agricultural income.

TABLE 12

Institutional and Non-Institutional Borrowing by Rural Households

Source	Access % of Households	Average Amount CFA	Expected Borrowing CFA	Percent of Agricultural Income	Share of Each Source %
Institutional	22.4	15,916	3,565	2.2	11.8
Non-Institutional	83.9	31,757	26,651	16.7	88.2
Total			30,216	18.9	100.0

Source: Cuevas (1986), based on OSU survey 1985.

16 The sum of the percentages exceeds 100 percent due to the existence of multiple sources of loans or assistance for many households.

17 This time the sum exceeds 100 percent because some informal borrowing included more than one form.

The OSU study also found that a large number of heads of households had provided informal loans or assistance to other members of the rural community. Two-thirds of the respondents had provided some kind of help to others during the twelve months preceding the survey. Beneficiaries of this assistance were primarily relatives. Half of the loans or assistance were provided in kind, about 22 percent in cash and 28 percent in a combination of both.

In summary, informal transactions between rural households are a very important mechanism of transmission and reallocation of liquidity. In a twelve-month period, more than eighty percent of the rural households received some sort of loan or assistance, whereas at least two-thirds of the same households engaged in some form of informal lending or provision of assistance to others. Cash transactions were important, even though in-kind transactions (primarily grains) were predominant. This should not be surprising since in-kind transactions are likely to be the least costly type of transaction at the village level. Informal borrowing and lending may explain an important part of the use of temporary surpluses generated in rural activities.

5.

INFRASTRUCTURE FOR RURAL DEVELOPMENT
AND PRICING POLICIES

The institutional infrastructure associated with rural development in Niger relates primarily to input supply, marketing of agricultural commodities, and irrigation development. Other less developed areas of support to rural activities are agricultural research ("Institut de Recherche Agricole du Niger", INRAN), and extension and promotion ("Service de l'Agriculture", the UNC, and the "Service de l'Animation"). Given their direct connections with the credit network, the institutions involved in farm input delivery (the CA and UNC) were described and analyzed in the previous section. Therefore, this section will present an overview of the institutional infrastructure associated with the marketing of agricultural products, and with irrigation development. A discussion of pricing policies for major crops is presented at the end of the section.

5.1 AGRICULTURAL MARKETING¹⁸

A dualistic food grain marketing system exists in Niger. Several parastatals coexist with private traders throughout the country for the marketing of millet, sorghum, rice, cowpeas, and peanuts. The "Office des Produits Vivriers du Niger" (OPVN) is the official cereal marketing agency, in charge of organizing the marketing

¹⁸ This section draws upon material in Zalla, Barokas, Hemmings (1984), and the *Joint Program Assessment of Grain Marketing in Niger* (1983).

system, maintaining reserve stocks, and managing food aid. The OPVN carries out a grain purchasing campaign every year, through cooperatives and local officials. Purchasing and selling prices are established by decree each year just prior to the harvest.

The marketed proportion of millet and sorghum, the main food staples, is relatively small. Estimates of this proportion vary between 10 and 35 percent of total production. Of the marketed output, OPVN purchases "between 18 and 63 percent, depending on the source of the estimate and the year" (Zalla, Barokas, Hemmings, p. 35). However, the OPVN is in charge of all food aid imports, and commercial grain imports. This gives the agency a stronger regulatory power than that implied by its participation in domestic purchases.

Two other parastatals participate in the marketing of agricultural products. The "Société Nationale d'Arachide" (SONARA) is in charge of the marketing of peanuts and cowpeas. It operates in a way very similar to that of the OPVN, dealing with two traditional export crops. "Riz du Niger" (RINI) is responsible for rice marketing. RINI is indeed an intermediary between the OPVN and rice producers. It is in charge of processing the rice it purchases from farmers and then sells to the OPVN at prices established by the latter.

Private traders operate parallel to the official marketing system in all commodities referred to above. According to Zalla, Barokas and Hemmings (1984) private markets have many structural characteristics of perfectly competitive markets. There is no evidence however about the magnitudes and competitiveness of trade margins in the different stages of the marketing chain. Nevertheless, some public officials tend to believe that collusion and other distortions predominate in private markets in rural areas.

5.2 IRRIGATION DEVELOPMENT

The development of irrigated areas is a natural concern in

Niger, where rainfall is scarce and highly unstable. Official estimates of potentially irrigated land are on the order of 200 thousand hectares¹⁹. The realization of this potential, along with the adoption of improved techniques could increase agricultural production dramatically.

According to a USAID report, as of 1984, less than 9 thousand hectares had been developed for irrigation. Irrigated land had been falling out of production about half as fast as it was being added, thus net additions to the total area under irrigation were limited. This report attributes this lack of success to technical design and management problems. Management problems appeared to stem from a lack of a sense of private ownership on the part of the farmers, compromising maintenance, and from the competing demand for labor by non-irrigated farming in peak seasons.

The "Office National des Aménagements Hydro-Agricoles" (ONAHA) is the parastatal in charge of managing the majority of the irrigated perimeters. It provides machinery services, maintenance of the irrigation equipment, and performs input supply and extension services. Farmers are required to pay for these services at harvest time. The usual way of collecting these payments was through the requirement that farmers sell to RINI at the official prices.

ONAHA has been training cooperative members in the management of irrigated perimeters, with the purpose of gradually transferring maintenance responsibilities to the farmers. At the same time, different donor agencies are devoting efforts to rehabilitate or develop new irrigated areas.

5.3 PRICING POLICIES

Official prices are established each year by the Council of

¹⁹ Estimates reported in USAID (1984). The drought of 1984 may have modified the magnitude or at least the reliability of these estimates.

Ministers, under the advice of an inter-ministerial committee. These are the prices implemented by the marketing parastatals, described above, during their purchasing campaigns. During these campaigns (normally 4 to 9 months), private trading is technically illegal.

The official producer prices for the major agricultural commodities in recent years are reported in Table 13. The Joint Program Assessment of Grain Marketing (Government of Niger and USAID, 1983) indicated that until 1982 official prices were substantially and consistently below the prices paid to procedures in

TABLE 13

Official Producer Prices of Selected Agricultural Commodities, 1979/80 - 1984/85

Commodity	Crop Year					
	1979- -1980	1980- -1981	1981- -1982	1982- -1983	1983- -1984	1984- -1985
	Prices in CFA francs per kilogram					
Millet	40	50	70	80	80	100
Sorghum	40	50	60	70	70	100
Rice (paddy)	55	55	70	85	85	85
Cowpeas	45	45	90	85	90	120
Peanuts (unshelled)	75	75	85	100	100	100
Cotton	62	62	80	120	120	120

Sources: BCEAO, Statistiques Economiques et Monetaires, (Nov. 1985);
Zalla, Barokas, Hemmings (1984);
Ministère de l'Agriculture et l'Elevage (unpublished materials).

the parallel private market. Table 14 shows the ratios of official to open (parallel) market prices for the four main food crops. Until 1982, official producer prices were on average between 53 and 61 percent of open market prices depending on the crop. Starting in the 1982/83 season, however, pricing policies for these crops became more aggressive, as seen in Table 14. Official prices were as high or slightly higher than private market prices for millet and sorghum. The corresponding ratios for rice and cowpeas, although improved after 1982 with respect to previous years, still remain

well below the parity level.

Most observers believe that production of millet and sorghum in Niger are inelastic to prices. Since official prices are announced just prior to harvest, it cannot be expected that they will have any effect on production decisions. In fact, official prices are intended to reflect demand and supply conditions at the time of harvest rather than serve as incentives to increase production. However, several studies cited in Zalla, Barokas and Hemmings (1984) have found a positive and significant supply response of millet and sorghum to relative prices.

At present, policy reforms are being implemented in order to liberalize grain marketing and pricing policies. These policies involve reducing the role of official marketing agencies in grain trade, rationalization of food reserves, and improving market information, and drawing private traders into the official grain marketing chain through a bid and tender system.

TABLE 14

Official Producer Prices as a Proportion of Open Market Producer Prices of Major Food Crops^a, 1979/80 - 1983/84

Crop	Crop Year				
	1979- -1980 %	1980- -1981 %	1981- -1982 %	1982- -1983 %	1983- -1984 ^b %
Millet	70	51	63	102	104
Sorghum	63	46	65	95	97
Rice	55	47	56	72	75
Cowpeas	64	36	59	62	69

Source: Joint Program Assessment of Grain Marketing in Niger (1983). Open market prices were calculated assuming a 65% mark-up from farmgate to the crop-year average retail price in Niamey.

^a (Official price / Open market price) * 100.

^b Calculated in this study using data from Zalla, Barokas, Hemmings (1984).

6.

**KEY FINANCIAL INSTITUTIONS AND AN OVERVIEW
OF RURAL FINANCE**

This final section reviews the functioning and performance of the two key institutions involved in rural finance in Niger. First, the "Caisse Nationale de Crédit Agricole" (CNCA) is practically the only financial institution supplying credit to the agricultural sector in the last two decades. The current poor financial situation of the CNCA represents an important constraint to the implementation of agricultural development programs. The treatment of this institution in this report relies upon and summarizes a recent study by Masini and Graham (1986), undertaken as part of the on-going OSU-USAID rural finance project in Niger.

The second part of this section will discuss the operations of the "Caisse Nationale d'Epargne" (CNE), the only financial institution with a truly national scope of activity. The CNE represents a key potential basis for the development of financial services in rural areas. The section concludes with some final remarks on the current state and the prospects of rural financial markets in Niger.

6.1 THE "CAISSE NATIONALE DE CRÉDIT AGRICOLE", CNCA

The CNCA was created in 1967 within the framework of the sectoral specialization adopted in shaping Niger's financial system. In this framework, the institution was empowered to carry out any financial operation that could benefit economic activity in rural areas. The CNCA emerged as a separate institution from the division of the "Union Nationale de Crédit et de la Coopération"

(UNCC) into two bodies, the CNCA and the UNCC itself, subsequently restructured as the UNC²⁰.

A total of 109 employees worked in the CNCA at the end of the 1984-85 exercise. Forty-five employees were in the central office, sixty were stationed in a total of five branches²¹, and four were on external training programs. The distribution of personnel by level and their average salaries in the most recent period (1984-85) were the following:

Category	Number	Average salary (CFA F/year)
Subordinate staff	33	406,136
Executive staff	24	696,951
Middle management	41	1,261,035
Officers	11	2,105,559

Even after the credit function of the UNCC was passed on to the CNCA, strong administrative and functional links between the two institutions remained in place. The CNCA, moreover, continues to rely heavily on the parastatal "Offices et Sociétés d'Economie Mixte" (OSEMs)²² both as a device to channel credit to farmers and to perform some critical functions in identifying, selecting and monitoring its own direct customers. Transferring the credit function to the CNCA did not automatically create the appropriate banking skills in the new institution, nor were the extension and monitoring skills of the OSEMs improved.

The CNCA, given its reduced staff, could not afford to establish direct contact with its ultimate borrowers in the rural areas. Therefore, forced to work through other institutions to reach the final borrower, it could not develop the necessary banking skills

20 See section 4 for a description and discussion of the functions of the UNC.

21 Niamey, Dosso, Tahoua, Maradi and Zinder.

22 For example, OPVN, "Riz du Niger", ONAHA, SONARA, or the "Central d'Approvisionnement" (CA). See section 4.

for an efficient performance. This situation was not improved by the emergence of the Productivity Projects (PPs). The goals and operational structure of these projects make it very difficult for an institution like the CNCA to participate directly in the loan evaluation and loan administration procedures where these projects operate. This effect is compounded when the project can count on its own lines of credit. In short, the CNCA becomes a mere administrative conduit to channel funds with no participation in the loan decision making process.

As a consequence of the limitations described above, the CNCA has very little control over the resources it lends. This became evident in 1981-82 when the institution tried to enforce a more aggressive loan repayment policy. Borrowers managed to divert the sources from which their loans were drawn towards other financial institutions (e.g., the BDRN), thus precipitating the CNCA into a deeper financial crisis.

In the credit distribution system such as the one that links the CNCA to the OSEMs and the PPs, the identification of lending opportunities, risk assessment and client selection, and related administrative procedures are undertaken by the OSEMs and the PPs. Under this scheme the financial entity is a mere administrative device completely subordinated to the purpose of channelling credit to predefined uses. Furthermore, these end uses follow the priorities of a development agency whose task is to stimulate the adoption of specific technologies with the aim of increasing output. Such an approach does not provide the incentives to develop within the financial institution the appropriate skills needed to administer a loan portfolio and develop healthy bank-client relationships.

The structure of liabilities and capital of the CNCA is reported in table A.4 of the Appendix. The performance of selected liabilities is shown in Table 15 highlighting the behavior of funds borrowed in domestic and external financial markets. There is a large variability of growth rates among different types of liabilities and over time, denoting extreme instability and lack of diversifica-

tion of funding sources.

The predominant sources of funds are either the government or external donors. Central bank rediscount lines accounted for 44.7 percent of total borrowing, on average, over the period covered in Table 15. Fixed-term deposits (mostly from the Treasury) and external lines of credit from international donors accounted respectively for 22.8 percent and 20.1 percent, on average, of total

TABLE 15

CNCA: Selected Liabilities. Annual Rates of Change and Composition at Year End, 1979/80 - 1983/84

	1979- -1980 %	1980- -1981 %	Year		1983- -1984 %
			1981- -1982 %	1982- -1983 %	
	Rates of Change				
Central Bank	4.01	-0.73	15.32	67.51	-25.17
Checking Accounts	208.20	5.80	273.52	-23.03	-15.90
Current Accounts	64.18	352.02	-45.81	-4.66	27.75
Banks & Correspondents	236.64	54.58	-24.39	-66.43	-100.00
Fixed Term Deposits	126.52	-17.48	17.46	-9.51	-8.87
Ext. Lines of Credit	270.20	39.01	-10.27	18.52	13.73
Total	60.20	10.30	-9.70	49.30	14.30
	Percentage Composition				
Central Bank	42.5	38.3	40.2	54.8	47.9
Checking Accounts	2.7	2.6	8.8	5.5	5.4
Current Accounts	1.7	7.0	3.5	2.7	4.1
Banks & Correspondents	4.9	6.9	4.7	1.3	—
Fixed Term Deposits	30.2	22.6	24.3	17.8	18.9
Ext. Lines of Credit	17.9	22.6	18.5	17.9	23.7

Source: Masini and Graham (1986).

borrowing by the CNCA. At the end of the period 1983-84, government and external donors represented about 91 percent of CNCA's borrowed funds.

When the structure of liabilities of a financial institution is dominated by government rediscount lines of credit or international donor funds, all loan procedures and administrative practices

are designed to favor borrowers' interests²³. Detailed farm-budget studies are emphasized, while rigorous analyses of loan repayment probabilities, and loan recovery procedures are minimized.

The portfolio of financial assets of the CNCA consists almost exclusively of loans and overdrafts. The average annual growth of the portfolio between 1979/80 and 1983/84 was 17.6 percent (including doubtful loans net of provisions). The average rate of growth over the same period, excluding doubtful loans, was 16.9 percent for overdrafts, 23.1 percent for short-term loans and 25.7 percent for medium-term loans (see table A.5 in the Appendix). In

TABLE 16

CNCA: Distribution of Loans by Beneficiaries, 1984 and 1985^a

Beneficiaries	Number of Accounts		Amount Outstanding (million CFA F)		Doubtful Loans (million CFA F)			
	1984	1985	1984	1985	1984	1985	% of Outstanding 1984	1985
Medium-term								
Cooperatives	1,160	1,160	2,299.4	2,531.8	31.4	362.3	1.37	14.31
OSEMs	5	5	596.3	383.0	—	—	—	—
State	1	1	1,016.1	338.2	300.2	298.3	45.13	46.54
Short-term								
Cooperatives	1,548	1,548	208.7	256.3	10.8	256.3	5.13	100.00
Individuals	3,396	3,396	202.0	143.5	74.8	69.7	37.13	48.58
Overdrafts								
Crop loans	2	1	2,522.2	150.9	—	—	—	—
Input supply	5	5	2,629.0	3,430.3	—	—	—	—
Prefinancing	16	16	762.9	567.1	—	—	—	—
Advances ONAHA and AHAs	43	43	2,072.7	2,390.9	—	—	—	—
Other advances on c.a.	111	111	2,164.8	3,084.9	189.3	220.0	8.74	7.13
Total	9,506	9,505	15,199.4	13,918.0	606.7	1,206.7	3.99	8.67

Source: Masini and Graham.

^a As of September 30 of each year.

23 A feature that Masini and Graham refer to as "borrower-domination".

1983/84, seventy percent of the CNCA loan portfolio consisted of overdrafts and short-term loans, while 30 percent was comprised of medium-term loans.

As shown in Table 16, overdrafts fall into five main groups. Until 1983/84 crop loans consisted mostly of loans to OPVN and, to a lesser extent, to "Riz du Niger" and SONARA. Input supply loans were granted mostly to the "Central d'Approvisionnement"; prefinancing loans mainly to Productivity Projects²⁴; advances to ONAHA and directly to some "Aménagements Hydro-Agricoles" (AHA). This situation reflects the fact that overdrafts only benefit farmers indirectly. The customers of the CNCA in this case are neither cooperatives nor individual borrowers, but government agencies with various functions in the rural sector of Niger.

On the other hand, short-term loans are concentrated on cooperatives and individuals. They accounted for 52 percent of the number but only 3 percent of the value of total loans outstanding in 1984/85. The main stated end-uses of these loans are the financing of land preparation, farm equipment, cattle fattening, marketing of horticultural products and production campaigns in irrigated areas.

Medium-term loans represented 46 percent of the number and 28 percent of the value of total loans outstanding at the end of 1984/85. An important although decreasing proportion of these loans is accounted for by the consolidation of loans granted to crop marketing agencies, and by one loan granted to the government, on which no interest is accruing according to the notes to the financial statement for 1983/84. The rest of the medium-term portfolio is represented by loans to cooperatives and to individuals. The main end-use of loans to cooperatives was farm equipment. For individuals, major stated end-uses were orchard production, cattle raising and seed storage.

In summary, retail lending (loans to cooperatives and indivi-

²⁴ Prefinancing corresponds to credit granted as an advance on the expected disbursement of lines of credit obtained from external donors or the "Fonds National d'Investissement".

duals) represents only one-fourth of the total value of the portfolio of the CNCA, and is concentrated in short and medium-term loans. With the exception of medium-term loans to cooperatives, the average loan amount is so small that it is unlikely that the net interest margin is sufficient to cover the operating costs of handling these loans.

It is clear that the quality of the loan portfolio of the CNCA has been steadily deteriorating over the years. The CNCA reports as doubtful only a proportion of those loans granted to individuals and cooperatives, because it considers all other loans granted to or guaranteed by the government as secure²⁵. Under this narrow definition of non-performing loans, only 8.7 percent of the total portfolio was considered as doubtful and adjusted accordingly with increased loan loss provisions at the end of 1984/85. A more realistic appraisal of the proportion of doubtful-loans in the portfolio should consider a substantial part of the loans to parastatals as equally doubtful as those written off for cooperatives and individuals. Thus the misleading 8.7 percent estimate could be adjusted upwards to a ratio close to 20 percent of total loans outstanding. This is still a lower-bound estimate for delinquency, since the incidence of non-performing loans is no doubt higher than the conservative provisions for bad debt made by the CNCA.

This poor loan repayment performance undermines the stability of the institution in several ways. On the one hand, the limited loan turnover creates liquidity problems for the CNCA. On the other hand, the increased cost of funds prompted by the liquidity squeeze, the lost interest income and the loss in the value of assets seriously compromise the profitability of the institution.

The assessment of the CNCA's profitability relies necessarily upon the existing accounting evidence. As suggested above, accounting procedures in the institution are questionable in many

25 For example no provision for loan losses has been made for loans to the OSEMs, even though many of these loans are clearly non-performing.

respects, particularly in what relates to loan loss provisions. These limitations must be kept in mind in the discussion that follows.

Table 17 reports the main financial indicators of profitability for the period 1979/80 through 1983/84. Panel A of this table indicates that the CNCA manages to show a positive net return on its capital and reserves, usually an index of overall efficiency. However, there is a negative trend both in the profit margin and in the gross return on capital and reserves over the four accounting periods included in Table 17.

Several factors help explain the declining trend indicated above. First, overdrafts which bear the highest average return are still dominant in the composition of the portfolio, but lost ground during 1983/84 (see table A.5 and A.6 in the Appendix). Secondly, the gross return on medium-term loans fell sharply in 1983/84 because — according to a note in the annual report — interest on a loan to the government was not accrued. Finally, non-interest bearing financial assets increased their share over total financial assets during 1983/84 to create a better liquidity position (see table A.5 in the Appendix).

The incidence of interest costs and the incidence of provisions for bad losses generally increased throughout the period covered in Table 17. The incidence of operating costs however shows a negative trend. Even though personnel costs increased steadily until 1982/83, the institution did not engage in excessive expenditure and controlled effectively its other operating costs. The incidence of extraordinary items is associated with the need to take into consideration accounting items that escaped appropriate reporting in previous periods. This reflects the difficulty of measuring the performance of the CNCA. Factors that tend to increase this item are the inefficiency of the CNCA's information system and the controversies surrounding the relationships between the CNCA and some of its parastatal clients.

In summary, the various measures of profitability set forth in Table 17 show a trend of declining profits in recent years, reflecting the deterioration of the CNCA's portfolio. These findings are in

fact even more disturbing since actual profits, as opposed to accounting profits, are no doubt non-existent. All estimates of profitability discussed above are based on "accrued" interest, a conventional accounting term that considers all the hypothetical interest earnings for delinquent loans to the OSEMs and the PPs as

TABLE 17

CNCA: Selected Financial Ratios, 1979/80 - 1983/84

	1979- -1980 %	1980- -1981 %	Year		
			1981- -1982 %	1982- -1983 %	1983- -1984 %
A. Return on Capital and Reserves					
Gross Return on Cap. & Res. ^a	68.6	71.6	85.6	106.4	79.9
Profit Margin ^b	21.0	11.8	8.4	9.0	9.8
Net Return on Cap. & Res. ^c	14.4	8.4	7.2	9.6	7.9
B. Return on Financial Assets					
Gross Return on Fin. Assets	11.5	11.1	12.8	14.6	12.6
Charges on borrowings / Ave. Financial assets	6.0	5.9	8.1	9.8	6.3
Provisions for Loan Losses / Ave. Fin. Assets	0.9	1.9	1.2	1.5	2.3
Operational Costs / Ave. Financial Assets	2.0	2.7	2.3	2.1	1.8
Extraordinary Items / Ave. Financial Assets	-0.2	0.7	-0.2	0.1	-0.4
Net Return on Fin. Assets	2.4	1.3	1.1	1.3	1.2

Source: Masini and Graham (1986).

^a Income from financial operations / Ave. capital and reserves.

^b Net profit / Income from financial operations.

^c Net profit / Average capital and reserves.

revenue, since it is accruing in the books of the institution. If, instead one were to use actual interest payments to estimate interest revenue, then the CNCA would be recording increasing losses rather than declining profits.

"The deteriorating performance of the CNCA in recent years can be largely traced to poor loan management procedures and practices, and to an operational philosophy that prevented the institution from maturing sufficiently to play an autonomous role as a true intermediary in the rural development of Niger" (Masini and Graham, p. 38). By forcing the CNCA to operate primarily

through other organizations, the financial viability of the institution has been seriously compromised.

6.2 THE "CAISSE NATIONALE D'EPARGNE" AND RURAL SAVINGS

The "Caisse Nationale d'Epargne" (CNE) was officially created in 1970, as a legal successor of the "Caisse d'Epargne Postale du Niger" which existed since independence. The CNE is defined as a public, autonomous, financial institution. It operates primarily through the branches of the "Office des Postes et Télécommunications" (OPT). The CNE has practically no lending functions, since all deposit funds are channelled to the Treasury or deposited at the BDRN (a public bank). The CNE's own funds can be invested only in real estate or in government securities and shares.

Funds are mobilized from the public in the form of savings deposits, about 96 percent of total balances at the end of 1984, and retirement accounts (4 percent). Table 18 shows the behavior of outstanding deposit balances from 1971 until 1984. Balances increased during this period at an average annual rate of 12 percent, while the number of accounts grew on average at 18.5 percent per year. Both growth rates slowed down after 1981, most likely as a result of the overall economic recession of the early 80's. The average amount per account also grew steadily until 1981, stagnating in the period 1982-1984 (see Table 19). In real terms however, the average size of balance has dropped an average of ten percent per year between 1981 and 1984.

Deposits are paid a nominal interest rate of 7.5 percent per annum. The effective rate is substantially lower, as interest accrues only starting the first or the sixteenth day of the month. In fact, the implicit effective rate paid on deposits in the years 1981 through 1983 can be estimated between 3.72 and 4 percent per annum²⁶.

²⁶ Estimates based on very condensed profit and loss statements available for these years. Average balances were estimated assuming that they grow linearly during the year.

During 1985 the CNE was earning 9.25 percent on its account with the Treasury (about 30 percent of its financial assets), and 11.25 percent on a fixed-term deposit with the BDRN (representing the other 70 percent of its financial assets). Effective financial earnings are affected by the effective dates at which the net financial balances between the CNE and the OPT are settled.

The CNE operates through 42 full service branches of the OPT and the mobile units currently run by the OPT in eight regio-

TABLE 18

CNE: Number of Deposit Accounts and Deposit Balances, 1971-1984

Year	Number of Accounts		Outstanding Balances	
	Number at year-end	Increase %	Amount at year-end CFA F (000)	Increase %
1971	11,667	3.91	109,696	14.30
1972	12,120	3.88	112,408	2.47
1973	12,763	5.31	120,345	7.06
1974	13,639	6.86	145,084	21.16
1975	14,752	8.16	167,484	14.87
1976	15,832	7.32	194,180	15.94
1977	16,950	7.06	231,100	19.01
1978	19,642	15.88	287,273	24.31
1979	22,605	15.09	379,585	32.13
1980	26,757	18.37	533,236	40.48
1981	32,505	21.48	667,686	25.21
1982	38,080	17.15	788,300	18.06
1983	44,896	17.90	920,718	16.80
1984	51,605	14.94	992,474	7.79

Source: CNE, Annual Report 1983 and 1986.

nal circuits. Employees of the OPT in the post offices act as CNE agents, except in a few branches where there are personnel devoted exclusively to savings operations. It is estimated that in 1985 some 50 OPT employees worked full or part-time for the CNE, while the CNE has its own staff of 33 people located in the Niamey headquarters. The CNE compensates the OPT for its support a flat fee of 1.25 million CFA francs per year.

Despite the support received from the OPT, the CNE has recorded in recent years administrative costs that were as high as its interest costs. Table 20 summarizes the operating expenses and revenues of the CNE as a percent of estimated average annual deposit

TABLE 19

CNE: Deposits and Retirement Accounts. Average Balances and Number and Amounts of Transactions, 1975 - 1984

	Year									
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Number of Participating OPT Branches	37	37	40	41	41	41	41	42	42	42
Deposit Accounts										
Number of Accounts	14,752	15,832	16,950	19,642	22,605	26,757	32,502	38,080	44,896	51,605
Ours. Balance, CFA(000)	167.5	194.2	211.1	287.3	339.6	533.2	667.7	788.3	920.7	992.5
Ave. Balance, CFA(000)	11.4	12.3	13.7	14.6	16.8	19.9	20.5	20.7	20.5	19.2
Deposit Transactions										
Number						33,725	45,395	51,509	59,224	63,281
Amount, CFA(000)						813.5	1,097.3	1,459.8	1,645.8	1,812.0
Ave. Amount, CFA(000)						24.1	24.2	28.3	27.8	28.6
Withdrawals										
Number						36,997	52,486	67,143	80,767	86,059
Amount, CFA(000)						681.5	985.8	1,366.7	1,551.3	1,751.2
Ave. Amount, CFA(000)						18.4	18.8	20.4	19.2	20.4
Retirement Accounts										
Number of Accounts					195	235	315	465	518	896
Ours. Balance, CFA(000)					4,272	6,141	9,736	14,882	26,843	46,432
Ave. Balance, CFA(000)					21.9	26.1	30.9	32.0	51.8	51.8

Source: CNE, Annual Report (various years).

balances for the years 1981 through 1983. Despite relatively high administration costs (on average 4 percent of outstanding balances), the CNE managed to earn operating surpluses in 1982 and 1983. It must be kept in mind however, that the administration costs indicated in Table 20 do not include the costs of OPT

employees who handle CNE operations in the post-office network, in excess of the 1.25 million CFA that CNE pays to the OPT.

The OPT estimate of about 50 employees devoted totally or partially to supporting CNE operations suggests a low level of

TABLE 20

*CNE: Revenue, Expenditure and Operating surplus as a Proportion of Outstanding Balances, 1981-1983**

	1981 %	Year 1982 %	1983 %
Revenue, as % of Average Balances ^b	7.13	9.41	9.44
Expenditures, as % of Average Balances			
Interest payments	3.72	4.00	3.78
Administration expenses	3.62	4.52	8.52
Total	7.32	8.52	7.56
Operating Surplus, as % of Average Balances	-0.19	0.89	1.88

Source: Calculations based on data in CNE, Annual Reports, 1981 through 1983.

^a Includes deposits and retirement accounts.

^b Average balances were estimated assuming they grow linearly during the year.

productivity per employee. In 1985 the number of first and subsequent deposits, withdrawals and passbook deposits for interest calculations represented the equivalent of 12,017 hours of work²⁷. This amounts to only 12 full-time employees, assuming 211 working days a year, a 60 percent ratio between effective and total time worked, and that all CNE operations took place in OPT branches. The estimate of 50 employees, although it includes part-time dedication, appears somehow exaggerated. On the other hand, even taking the more "efficient" estimate of 12 full-time employees per year, at an average personnel cost of 500 thousand CFA francs per

²⁷ Estimate obtained using time-per-operation standards of the "Conférence de l'Administration des Postes et Télécommunications des Etats de l'Afrique de l'Ouest".

year, the OPT support to CNE would amount to 6 million CFA francs, instead of the 1.25 million that the OPT receives from the CNE per year.

In summary, the CNE appears as a relatively healthy financial operation, partially because of the support received from the OPT in excess of its annual compensation. This non-compensated support amounts to at least 4.75 million CFA francs per year, about 0.5 percent of average annual balances (using 1984 data). On the other hand, the CNE is the only supplier of deposit services in rural areas. It operates with very small accounts and a clientele difficult to reach and service. The subsidy implicit in the support received from the OPT appears very moderate and more than justified to achieve this objective. This subsidy is covering the transaction costs that otherwise would have prevented rural depositors from access to the deposit services offered by the CNE/OPT network.

The recent survey carried out by OSU found little savings activity at the farm household level (see Cuevas, 1986). However, the CNE was the single most important institution where deposits were kept. Furthermore, the existence of a demand for safe instruments of financial savings is suggested by the use of "money keepers" documented in this survey, as well as the holdings of physical forms of savings. According to a survey of the CNE, farmers represent only 1.3 percent of its depositors. However, *rural* depositors are not limited to agricultural producers. On the contrary, the greatest potential for increased rural savings in an initial stage may exist among the non-farm rural population. The CNE/OPT network should be looked upon as a key potential basis for the development of financial intermediation in the rural areas of Niger.

6.3 CONCLUDING REMARKS

The overall picture of rural financial markets in Niger is not very promising. There is a complete segmentation in the provision

of financial services in rural areas. One institution, the CNCA, has the responsibility of delivering agricultural credit without offering deposit facilities to its customers. The other institution, the CNE, provides deposit services to the rural population without engaging in lending activities of any sort.

The poor performance and precarious situation of the CNCA have induced increased segmentation in the agricultural credit system. Existing as well as newly created agricultural development projects tend to establish their own credit delivery systems for each individual program. The CNCA has been reduced to serving as a mere window for the management of project accounts. Even this passive role is being diverted to other institutions in an effort to induce commercial banks into rural finance (e.g., the CLUSA-BIAO program). These "stop-gap" measures imply even further fragmentation of the financial system. Moreover, they represent a step away from the building of a diversified, reliable and viable financial system for rural areas.

The provision of deposit services is particularly limited in the rural areas of Niger. Both institutional and non-institutional savings appear to be limited. However, there is an important informal financial activity at the village level. Most rural households engage in informal financial transactions, thus suggesting the existence of temporary surpluses at the household level. The potential role for improved financial intermediation depends upon the lack of coincidence of temporary surpluses and temporary deficits, both geographically and over time. In other words, the potential for "institutionalization" of these informal financial transactions is a function of the covariance of surpluses. Direct informal financial arrangements are efficient and least costly when surplus units and deficit units coincide in the same place (i.e., the same village) at the same point in time. However, when these transactions must be performed across long distances, or when liquidity must be "stored" through time in some form before an informal loan or assistance can be granted, then informal transactions become more costly to perform and a more formal vehicle for financial interme-

diation may be justified.

The foregoing discussion indicates the complementarity between rural development initiatives in the non-financial sector and the improvement of rural financial markets. Diversification in agricultural production and in rural economic activities in general reduce the covariance of surpluses. Deficit units tend to exist at the same time that surpluses are being generated elsewhere. Surpluses being produced today from "counter-seasonal" cropping along the Niger river are needed tomorrow by rainfed farming. In summary, the demand for financial intermediation develops as a result of improvements in the non-financial side of the rural economy. Successful rural development initiatives in Niger will in fact be creating the need for improved financial intermediation. If no steps are taken in the direction of building a healthy financial system for rural areas, self-sustained and steady growth of the rural economy is not likely to be attained.

May, 1986

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APPENDIX

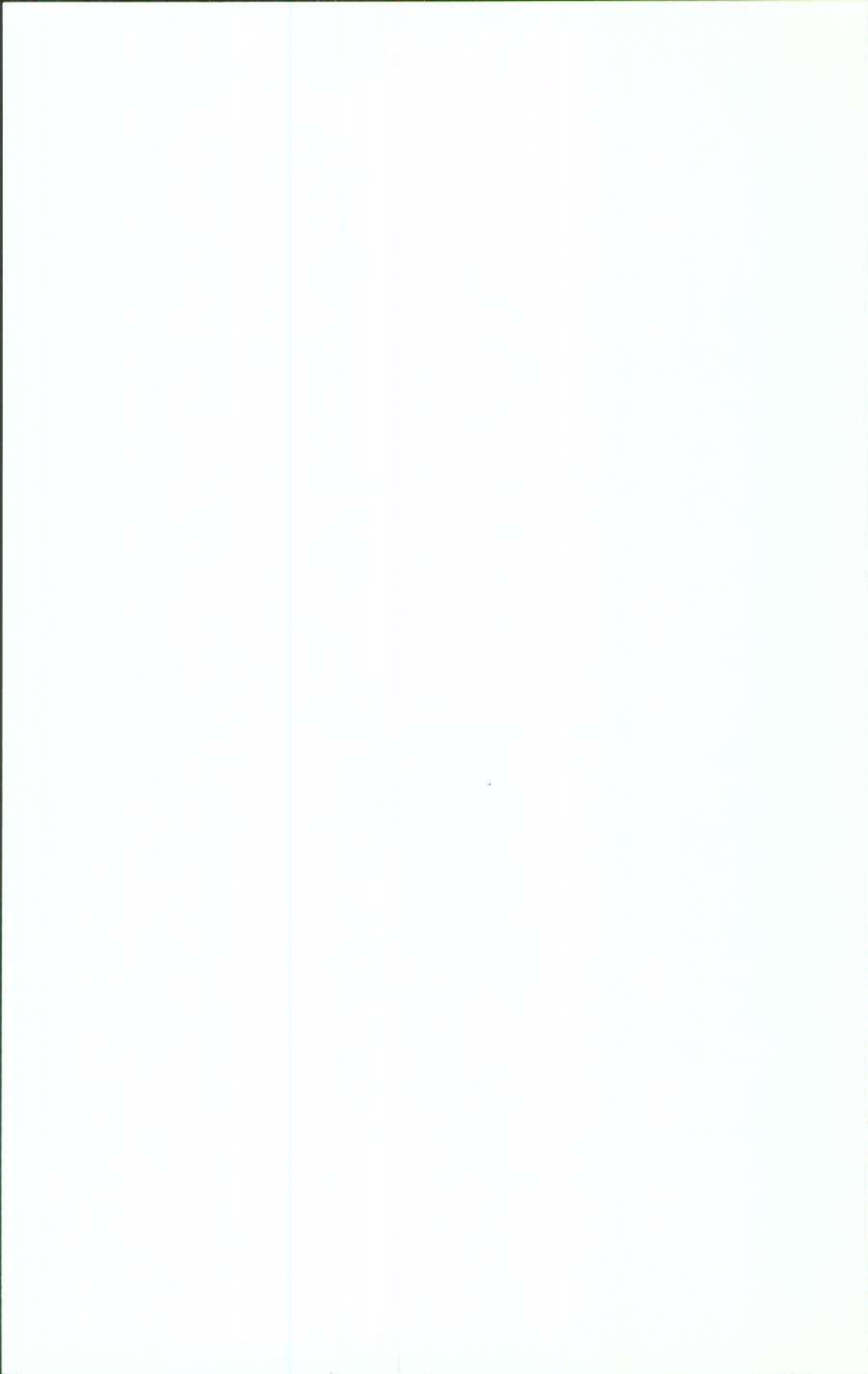


TABLE A.1

Structure of Production by Sector of Origin 1978-1985, in percent

	Year							
	1978	1979	1980	1981	1982	1983	1984	1985
Rural Sector	46.3	42.6	42.5	45.7	46.6	46.2	43.6	47.1
Agriculture	24.3	21.8	21.8	22.5	24.6	24.4	23.7	24.9
Livestock	17.1	16.3	16.6	17.6	16.8	19.0	15.1	14.2
Forestry & Fish.	4.8	4.5	3.4	3.4	3.4	3.5	3.6	3.5
Mining	10.3	14.2	12.6	8.8	7.7	8.2	8.7	8.4
Industry & Energy	4.6	4.4	4.1	4.6	5.0	5.5	5.8	5.5
Construction & Public Works	4.8	5.6	6.0	4.5	3.9	3.5	3.1	3.4
Commerce, Transport & Services	23.4	23.3	23.4	25.0	24.8	25.1	26.3	24.3
Government	6.3	5.7	6.3	6.7	7.1	7.4	8.6	7.8
GDP at Factor Cost	95.7	95.7	94.9	95.3	95.1	95.8	96.1	96.5
Import Taxes & Duties	4.3	4.3	5.1	4.7	4.9	4.2	3.9	3.5
GDP at Market Prices	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Toh (1986).

TABLE A.2

Indices of Physical Production of Selected Crops, 1978 - 1984 (1978 = 100)

	Year						
	1978	1979	1980	1981	1982	1983	1984
Millet	100.0	111.8	121.5	117.0	115.2	118.0	69.3
Sorghum	100.0	94.6	99.2	86.8	96.2	97.5	64.7
Rice	100.0	75.1	96.9	125.0	128.2	134.4	159.5
Cowpeas	100.0	111.8	97.8	98.2	100.0	98.9	71.7
Groundnuts	100.0	89.0	126.0	102.0	88.0	74.0	31.0
Cotton	100.0	69.0	64.5	40.1	44.5	89.0	144.0

Source: Calculations based on data reported in Toh (1986).

TABLE A.3

Distribution of Cooperatives and GMs by Department, 1984^a

Department	Number of Cooperatives	Number of GMs	Number of Villages
Niamey	292	1,632	1,334
Dosso	104	1,415	1,292
Tahoua	202	1,671	1,157
Maradi	188	2,273	2,047
Zinder	243	2,684	2,142
Diffa	81	718	547
Agadez	57	235	110
Total	1,167	10,628	8,829

Source: Union Nationale de Coopératives (UNC).

^a GM: "Groupement Mutualiste", the basic (village-level) unit of cooperatives.

TABLE A.4

CNCA: Liabilities and Capital Composition at end of year, 1978/79 - 1983/84

	Year					
	1978- -1979 %	1979- -1980 %	1980- -1981 %	1981- -1982 %	1982- -1983 %	1983- -1984 %
Central Bank	52.1	34.6	30.5	30.7	41.9	35.2
Checking Accounts	1.1	2.2	2.1	6.7	4.2	4.0
Current Accounts	1.3	1.4	5.6	2.7	2.1	3.0
Banks & Correspondents	1.9	4.0	5.5	3.6	1.0	—
Deferred Payments	0.8	0.7	2.5	2.5	2.4	2.8
Fixed-term Deposits	17.0	24.6	18.0	18.5	13.6	13.9
Lines of Credit	6.2	14.6	18.0	14.1	13.6	17.4
Adjustment Accounts	0.9	3.4	2.6	7.8	8.6	7.9
Reserves & Guarantee Funds	5.7	4.8	7.3	5.6	5.0	6.2
Undistributed Profits	—	—	—	1.0	1.6	3.1
Capital	12.6	7.9	6.7	5.9	4.8	5.4
Current Profit	0.6	1.9	1.2	1.0	1.1	1.2

Source: Masini and Graham (1986).

TABLE A.5

CNCA: Financial Assets. Annual Rates of Change and Composition at year end, 1978-79 - 1984-85

	1978- -1979 %	1979- -1980 %	1980- -1981 %	Year 1981- -1982 %	1982- -1983 %	1983- -1984 %	1984- -1985 %
Rates of Change							
Cash, CCP, Central Bank	—	-57.5	541.0	-78.0	112.7	-21.9	—
Banks & Correspondents	—	119.6	37.8	-96.0	284.3	349.5	—
Overdrafts	—	37.8	5.5	21.0	36.4	-16.1	-5.6
Short-term Loans	—	-30.6	155.9	-10.6	14.4	-13.8	-80.8
Medium-term Loans	—	111.9	18.1	-0.9	3.5	-4.0	-23.8
Doubtful Loans <i>less</i> Provisions	—	—	29.2	66.2	-63.9	-100.0	—
Total	—	52.9	13.3	10.8	24.0	-12.9	—
Percentage Composition							
Cash, CCP, Central Bank	0.4	0.1	0.7	0.1	0.2	0.2	—
Banks & Correspondents	0.6	0.9	1.0	0.1	0.1	0.6	—
Overdrafts	69.7	62.8	58.5	63.9	70.3	67.7	—
Short-term Loans	3.5	1.6	3.6	2.9	2.6	2.6	—
Medium-term Loans	24.3	33.7	35.1	31.4	26.2	28.9	—
Doubtful Loans <i>less</i> Provisions	1.5	1.0	1.1	1.6	0.5	—	—

Source: Masini and Graham (1986).

TABLE A.6

CNCA: Average Return on Loans, 1979-80 - 1983-84

	1979- -1980	1980- -1981	Year 1981- -1982	1982- -1983	1983- -1984
Medium-term					
Interest & Commissions (million CFA F)	174.8	243.5	270.8	358.4	189.9
Average Capital (million CFA F)	2,689.6	3,984.8	4,295.3	4,349.6	4,334.4
Average Return, %	6.5	6.1	6.3	8.2	4.4
Short-term					
Interest & Commissions (million CFA F)	26.1	68.6	29.1	21.3	10.1
Average Capital (million CFA F)	208.3	303.6	413.5	418.4	415.8
Average Return, %	12.5	22.6	7.0	5.1	2.4
Overdrafts					
Interest & Commissions (million CFA F)	824.5	949.5	1,359.2	1,846.9	1,644.9
Average Capital (million CFA F)	5,885.8	7,009.5	7,952.4	10,289.5	10,917.4
Average Return, %	14.0	13.6	17.1	18.0	15.1

Source: Masini and Graham (1986).