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Structural Adjustment and Stabilization in Niger: Macroeconomic Consequences and Social Adjustment

Cathy L. Jabara

CORNELL FOOD AND NUTRITION POLICY PROGRAM

MONOGRAPH 11 • JUNE 1991



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Abbreviations

ASDG	Agricultural Sector Development Grant
BCEAO	Banque Centrale des Etats de l'Afrique de l'Ouest
BDRN	Banque de Développement de la République du Niger
CA	Centrale d'Approvisionnement
CERDI	Université de Clermont I Faculté des Sciences Economiques
CFAF	CFA Franc
CFNPP	Cornell Food and Nutrition Policy Program
CGE	Computable General Equilibrium
CILSS	Comité Permanent Inter-états de Lutte Contre la Sécheresse dans le Sahel
CNCA	Caisse Nationale de Crédit Agricole
COMINAK	Compagnie Minière d'Akouta
COPRO-NIGER	Commercialisation des Produits de Première Nécessité
CPI	Consumer Price Index
CSPPN	Caisse de Stabilisation des Prix et de Péréquation du Niger
EEC	European Economic Community
ESAF	Enhanced Structural Adjustment Facility
FNI	Fond National d'Investissement
GDP	Gross Domestic Product
GON	Government of Niger
HSDG	Health Sector Development Grant
ICTS	Impôt sur les Traitements et Salaires
IDA	International Development Association
IFPRI	International Food Policy Research Institute
IGR	l'Impôt Général sur les Revenus
IMF	International Monetary Fund
MDP	Ministère du Plan

NEPRP	Niger Economic Policy Reform Program
NIGELEC	Société Nationale d'Electricité
OFEDES	Office d'Exploitation des Eaux du Sous-Sol
ONAHA	Organisation Nigérien de l'Aménagement Hydro Agricole
ONPPC	Office Nationale des Produits Pharmaceutiques et Chimiques
OPT	Office des Postes et Télécommunications
OPVN	Office des Produits Vivriers du Niger
PESAP	Public Enterprise Sector Adjustment Program
PIP	Public Investment Program
PMI	Centre de Protection Maternelle et Infantile
RINI	Société du Riz du Niger
SAC	Structural Adjustment Credit
SAF	Structural Adjustment Facility
SAP	Structural Adjustment Program
SAM	Social Accounting Matrix
SICONIGER	Société Industrielle et Commerciale du Niger
SMIG	Salaire Minimum Interprofessionnel Garanti
SNCP	Société Nigérienne de Collecte des Cuirs et Peaux
SOMAIR	Société Minière de l'Air
SONARA	Société Nationale de Commercialisation de l'Arachide
SONERIAN	Société Natonale d'Exploitation et Recherches Animales
SONICHAR	Société Nigérienne de Charbon
SONIFAME	Société Nigérienne de Fabrications Métalliques
SONITAN	Société Nigérienne de Tannerie
SONITEXTIL	Société Nigérienne des Textiles
UMOA	Union Monétaire Ouest-Africaine
UNC	Union Nationale des Coopératives
UNCC	Union Nigérienne de Crédit et de Coopération
USAID	U.S. Agency for International Development
VAT	Value-added Tax

Preface

This monograph on Niger is the eleventh in a series of extensive reviews of the literature and secondary sources dealing with the effects of stabilization and structural adjustment programs on macroeconomic performance and household-level welfare in Africa. Niger, like so many other countries in sub-Saharan Africa, has confronted unsustainable deficits in its balance of payments and budget. These deficits have resulted in increased reliance on financing from the World Bank, International Monetary Fund (IMF), and bilateral institutions. This financing has been accompanied by, and in some cases contingent upon, belt-tightening and structural reform measures designed to restore balances in the internal and external accounts.

The purpose of this monograph is to contribute to an understanding of the impact of such policy reform measures. First, it focuses on identifying groups of households that will be differentially affected by macroeconomic and sectoral restructuring. Then it seeks to promote understanding of the evolution of the macroeconomic disequilibria and to clarify the nature of the policy reforms that have been planned or initiated. Finally, it examines the functioning and characteristics of the markets and institutions that mediate between reform policies and their household and macroeconomic impact.

This research is performed under a cooperative agreement between the U.S. Agency for International Development (USAID) and the Cornell Food and Nutrition Policy Program (CFNPP). CFNPP is examining the effect of policy reform on low-income households in a number of sub-Saharan African countries. Financing for the Niger component of the multicountry study is provided by both the AID in Washington and the AID mission in Niger. Further research output on both Niger and other countries will be reported in future CFNPP monographs and working papers.

Washington, DC
June 1991

David E. Sahn
Deputy Director

Executive Summary

The series of stabilization and structural adjustment programs initially introduced by the Government of Niger (GON) in late 1983 were triggered by a declining uranium market and by an economy that had overspent its resources in the middle to late 1970s. The government's efforts were first aimed at reducing its fiscal and external deficits through successive stabilization programs. In later years policy reform programs concentrated more on structural adjustment measures to increase productivity. As a member of the West African Monetary Union or Union Monétaire Ouest-Africaine (UMOA), Niger was unable to make a nominal exchange rate adjustment to bring its external current account into balance. The GON also lacked explicit authority to manipulate interest rates. As a result, stabilization and structural adjustment reforms attempted to lower Niger's real exchange rate by other means. These means have included limiting wage increases, raising the prices of imported and exported goods through price reforms and tax policy, and making the formal economy more open to trade. Because of the large concentration of Niger's productive resources in agriculture and livestock, structural adjustment reforms focused largely on the rural sector, as well as on improving the performance of the parastatal sector as a whole.

Stabilization and structural adjustment reforms to reduce domestic absorption would have had to be made by the GON with or without IMF and World Bank programs due to the reduction in world demand for uranium. Initially, assistance from foreign donors helped to cushion the impact of declining uranium revenues on the economy and to stretch out the adjustment period. This assistance included a uranium price subsidy provided by the French companies that purchase Niger's uranium exports. Niger was helped by repeated rescheduling of debts owed to bilateral donors through the Paris Club and to commercial banks through the London Club. Niger was also helped by the provision of grants and of structural adjustment and standby loans by multilateral and bilateral donors. However, the companies that buy Niger's uranium have since decided to eliminate the uranium price subsidy by gradually lowering Niger's export price until it reaches a level more commensurate with the world price level. Structural adjustment in Niger is thus far from over. Indeed, many of Niger's financial problems may be starting anew.

The social effects of Niger's structural adjustment and stabilization program (SAP) are not well established. Niger lacks data on the characteristics of

different income groups and on the importance of exogenous forces that have influenced Niger's economy over the past seven years. These forces have included the following:

- A severe drought in 1984;
- Economic policy reforms in Nigeria, which have involved an official exchange rate devaluation, border closure, official restrictions on imports and exports, and a significant overvaluation of the CFA franc (CFAF) in terms of the Nigerian *naira* on the parallel foreign exchange market;
- A sharp drop in the world rice price in 1986; and
- A continuous decline in the world uranium price since 1984.

Real prices, employment numbers in the formal sector, the tax burden, and government spending have changed during the course of Niger's SAP. Despite the lack of hard data on specific effects, it appears that the social adjustment has not been large, considering the GON's financial situation. Most of the adjustment has been felt by those who live in the urban areas and are employed in the private modern (formal) sector. The theoretical literature suggests that Niger's emphasis on reducing its unsustainable fiscal and current account deficits through reductions in imports, rather than through reductions in nontraded goods or through higher taxes alone, tended to lessen the need for an adjustment in its real exchange rate and served to soften the effect of the adjustment on real wages.

Consumer prices actually declined during Niger's SAP. However, it is not clear if this decline is due more to policy reforms that eliminated government regulation and distribution monopolies or to the sharp depreciation of the *naira* in terms of the CFAF on the parallel market. Increased tariff and tax protection for the rice industry, starting in 1984, raised retail rice prices to levels that were higher than they would have been without the protection during the SAP. But this protection resulted from the desire of the GON to preserve the rice industry and not from any specific structural adjustment requirement. Retail rice prices actually fell from 1986 to 1988 with the decline in the international rice price.

The reduction in public-sector spending was largely concentrated in the development budget, as real recurrent expenditure increased over pre-SAP levels. Combined recurrent expenditure on education, health, and social services in real terms is currently higher than it was before the SAP. However, the level of education and health services provided in Niger, particularly at the primary level, was low at the start of the SAP, and budgetary reforms have perhaps had some social cost by preventing an even faster rate of expansion in

services. In particular, shortages of medicines and drugs provided through the public health-care system exist in the rural areas, and the number of rural dispensaries has remained about the same since 1982.

Development expenditure on infrastructure, mining, industry, and parastatal subsidies before the SAP had caused rapid employment growth among private and parastatal enterprises. Reduced development spending after implementation of the SAP resulted in a relatively large decline in employment in the private modern sector. Employment in the public sector rose rapidly from 1983 to 1988, however, with the result that modern-sector employment is roughly at the same level as before the SAP. Given that Niger's urban population has been expanding at an annual rate of about 7 percent, this growth still implies that an ever-increasing proportion of employment must be found in the informal sector where wage levels, on average, tend to be lower than in the formal sector. The minimum wage, which has been held constant since 1980, fell by 15 percent in real terms from 1981 to 1985, but then increased from 1986 to 1988 as the overall price level declined.

The modern sector has also borne the burden of GON's efforts to increase tax revenues. Upward adjustments in rates for telecommunications, water, and electricity, and higher import tariffs on consumer and investment goods primarily affected urban households and businesses. On the surface, the increase in the tax burden appears to have been progressive. Thus, taxes have increased relatively more for people working in the modern sector (where average incomes are higher) and that tax burden has increased relatively more for people with the highest incomes in that sector. At the same time, however, wealthy businesses that operate in the informal sector have managed to avoid paying a large share of the applicable taxes.

Agricultural policy reforms played an important role in Niger's structural adjustment. Such reforms included reduction in input subsidies and elimination of almost all government intervention in pricing and marketing for millet, sorghum, cowpeas, and peanuts. Government intervention in these markets is now reduced to the operation of a grain reserve stock by the Office des Produits Vivriers du Niger (OPVN). GON intervention in domestic cotton and rice markets, on the other hand, is still extensive.

Agricultural policy reforms resulted in reduced budgetary costs to the GON, but the extent to which they have improved agricultural income and the prices received by producers is not well established. Many agricultural reforms eliminated policies that previously had little direct effect on economic incentives. Before the SAP, most farmers had found that they could easily circumvent the GON's market regulations, although with varying costs to themselves. Farmers

in marginal areas may have been the worst affected by increased agricultural input prices because those farmers depended more on the GON for input supplies in the past.

The social impact of structural adjustment in Niger and its effect on the Nigérien economy can be assessed through a more formal analytical framework. This framework should link specific policy changes to specific income groups and sectors of the economy. To link these changes, in the next phase of the project CFNPP plans to develop a computer model that is based on a social accounting matrix for Niger.

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1.

Introduction

Niger, a vast landlocked country with an estimated population of 7.2 million and a 1987 per capita gross domestic product (GDP) of US\$ 260, is among the poorest countries in the world. The economy is dominated by the rural small-holder sector and by uranium mining, which has been the country's principal foreign exchange earner since the mid-1970s and is an important source of government revenue. Despite its meager resource base, Niger's recorded food imports are small relative to domestic production (except during drought periods), and Niger exports both livestock and crops.

Niger's financial difficulties originated in the uranium boom that occurred from 1976 to 1981. The uranium boom brought increased foreign exchange earnings, higher tax revenues, and improved economic performance to Niger. The boom ended abruptly in the early 1980s, but only after fundamentally changing the economy. Public expenditures escalated under a large public investment program, and the modern (formal) sector began to play a more significant role in the economy. World uranium prices declined by 25 percent between 1979 and 1982, however, with the result that Niger's uranium export earnings stopped growing. The contribution of uranium production and exports to the government's budget dropped sharply. Real GDP stagnated from 1980/81 to 1981/82, and it declined by almost 3 percent in 1982/83. (The split years refer to the Nigérien fiscal year, October to September.)

The slowdown in economic activity was accompanied by the emergence of sizable fiscal and external deficits as the Government of Niger (GON) was unable immediately to adjust its public expenditures to its reduced financial circumstances. Moreover, both agricultural crop and livestock production were affected by a severe drought in 1984. Besides forcing the GON to increase food imports, the drought reduced Niger's livestock herd, the country's second most important source of foreign exchange earnings.

Niger is a member of the Union Monétaire Ouest-Africaine (UMOA). UMOA operates a common central bank – Banque Centrale des Etats de l'Afrique de l'Ouest (BCEAO) – and maintains a common currency for all member countries. Thus, Niger was unable to use changes in nominal exchange rates and interest rates as policy options to respond to its financial situation. Instead Niger implemented self-imposed stabilization measures to reduce demand in 1981/82 and 1982/83. In 1983/84, Niger negotiated the first of four

successive standby arrangements with the International Monetary Fund (IMF). The standby programs furthered the GON's efforts to reduce domestic absorption. They concentrated on (1) limiting the growth of current expenditure, (2) reducing and restructuring investment expenditure, (3) restraining foreign borrowing, (4) decelerating domestic credit expansion, and (5) improving tax collection. The standby programs were initially aimed at demand management (stabilization), as were reform programs supported by the World Bank, U.S. Agency for International Development (USAID), and other donors; but they also involved elements of structural adjustment. Niger's structural reforms have included liberalization of pricing and marketing policies, particularly for agriculture, reductions in the size of the parastatal sector, and a reorientation of public investment toward the directly productive activities.

Niger's implementation of a structural adjustment and stabilization program (SAP) was necessary because of the declining prospects for the international uranium market and the associated loss to Niger of foreign exchange and government revenues. The SAP has generally been successful in improving Niger's financial situation. However, the program has also been accompanied by changes in real incomes, consumer prices, and labor market conditions in both the rural and urban areas. Some of these changes have been the direct result of the SAP while others have resulted from exogenous influences on Niger's economy, such as drought and economic policy changes in Nigeria, Niger's principal trading partner. Because of the problem of poverty in Niger, it is particularly important to identify the changes that have been the direct result of the SAP reforms. The effect on different socioeconomic groups is particularly relevant.

The purpose of this background paper is to describe the reform measures taken from 1983 to 1990. It also seeks to link these reforms to the economic situation of the economy as a whole and to the situation of different socioeconomic groups. A second objective of the study is to identify relevant data sources for the second stage of the Cornell Food and Nutrition Policy Program's project in Niger. To do this, CFNPP will develop a model that can be used to link household behavior to macroeconomic reforms. A third objective is to identify important policy issues that should be analyzed using the model.

ORGANIZATION OF THE REPORT

The paper is organized as follows: Section 2 begins with an overview of the economic background of the Nigérien economy, including information on rural and urban incomes, and on international trade. Next is a profile of the nutritional, educational, and health status of the population. Section 4 provides

information on the economic situation in Niger that led to implementation of the SAP, and on the policies and reforms implemented under the SAP. Section 5 analyzes the trends in income, prices, and expenditures that have accompanied the SAP. This section also analyzes how the various income groups have fared using data that currently exist. The final section provides conclusions and suggestions for further research.

2. Economic Background

Niger is a landlocked country with an area of 1.27 million square kilometers (km) — about 2.5 times the size of France. Its closest access to the sea is 600 km from its southern border. Rainfall varies from 50 to 800 mm per year according to the region. Niger has three ecoclimatic zones: desert in the north, an intermediate semi-arid pastoral zone, and an agricultural zone to the south. Rainfed production is carried out in the south where rainfall is from 300 to 800 mm. Herding is the main activity in the northern pastoral zones. Nearly 90 percent of the population is concentrated in the south within 150 km of the Niger-Nigeria border in a narrow rainfall zone of 200 to 600 mm. Approximately 42 percent of Niger's population lives directly along this border.

Niger's economic policies have been biased in favor of primary activities (agriculture, livestock rearing, and mining) and in favor of import-substitution rather than export-promotion activities (Louis Berger 1989b). A five-year development plan established in 1979 had the following major goals: (1) self-sufficiency in food production, (2) development of basic infrastructure, (3) improvement of social services, and (4) expansion of mining operation. Niger's most recent five-year plan runs from 1987 to 1991. Essentially, it continues the same goals but places more emphasis on agriculture and extension of irrigation, and less on mining to reflect the downturn in the world prospects for uranium (World Bank 1988b). Import substitution has been encouraged by high import duties and taxes, tax concessions for certain industries, quantitative restrictions on imports and exports, and regulation of prices. Although the GON eliminated most price controls on consumer goods under its SAP, price regulation still applies to some industries and, in particular, to processed products that use local resources as inputs.

Niger's annual rate of population growth was estimated at 2.7 percent between 1977 and 1985. Following further study by the Direction des Statistiques et des Etudes Economiques, the figure was raised to 3.1 percent in 1985 (FAO/OSRO 1988). Seventy-one percent of the population was classified as agropastoral, 13 percent as urban, and 16 percent as nomadic in the 1977 census. This distribution has since changed as the nomadic population has decreased since the 1981 drought. With an estimated 7 percent annual growth rate since 1977, the urban population has been expanding faster than the population as a whole. Preliminary results from the May 1988 census indicate

Niger's population in 1988 was 7.25 million, of which 84.6 percent is rural and 15.4 percent urban (Ministère du Plan 1990b). The population is characterized by its youth; nearly 44 percent is younger than 15 years old.

ECONOMIC STRUCTURE

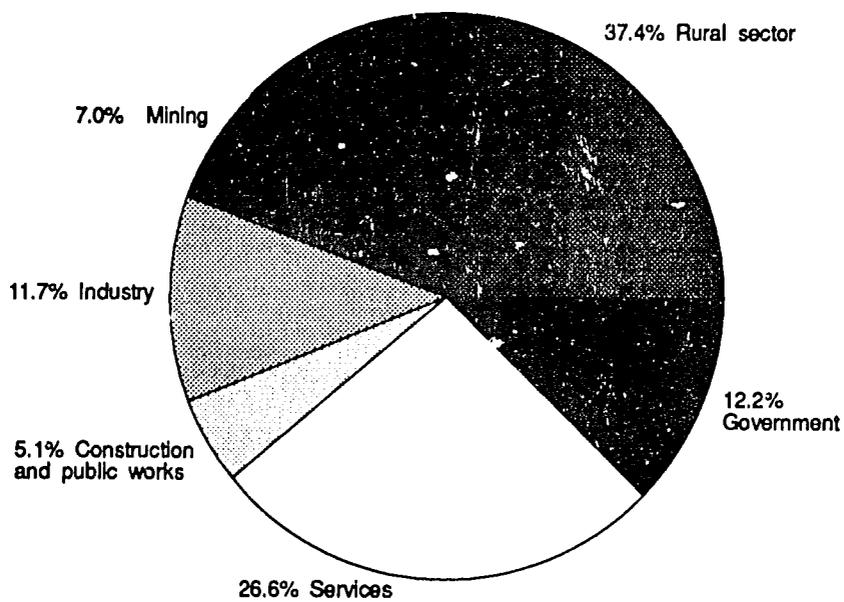
Agriculture and livestock herding, services, and the public sector dominate economic activity in Niger. In 1988, the rural sector (agriculture, livestock, forestry, and fishing) contributed 37 percent of Niger's GDP, the service sector (commerce, transport, and other miscellaneous services), 27 percent; and government administration, 12 percent (Figure 1). The industrial share of GDP is a modest 12 percent. Modern manufacturing industries are only a small portion (1.4 percent GDP share) of this category, which also includes electricity, water, and artisanal production. The remainder of GDP is generated by mining (7 percent) and by construction and public works (5 percent). Despite its relatively small share, mining, principally for uranium, is a major element in government revenue and provides almost 80 percent of Niger's official export earnings.

Niger's economy is highly dualistic. The modern (formal) sector, which operates within an established legal framework, exists next to an informal sector composed of a multitude of small establishments that often have no legal accountability. In 1988, the modern sector supplied 27 percent of GDP, yet it employs roughly 3 percent of the labor force (ILO 1990). The modern sector is composed primarily of government administration, mining, and transport and commerce, which contributed 45, 22, 13, and 12 percent of modern-sector activity, respectively, in 1988 (Ministère du Plan 1990a).

A large number of public (parastatal) and mixed public and private enterprises operate in the modern sector. Most were created during the boom years of the uranium industry in the 1970s. The government has been diversifying out of some of these enterprises, but at one time there were 54 enterprises with total or majority public participation. They were involved in such activities as the provision of electricity and water and of various services such as transport, marketing, finance, and trade (World Bank 1987).

In 1981/82 the activity of the non-uranium public enterprises accounted for 24 percent of value added in the modern sector and for 4.6 percent of GDP. Following the government's decision to fully or partly privatize 22 parastatals in October 1986, the parastatal share declined to about 9 percent of modern-sector GDP. The formal private sector is primarily composed of European trading companies that tend to be heavily involved in local industrial activities and foreign trade. This sector accounts for approximately 8 percent of GDP, or 24 percent of modern-sector activity (Giroday, M'Poko, and Mouskoura 1987).

Figure 1 — Niger: Structure of GDP at Factor Cost, 1988



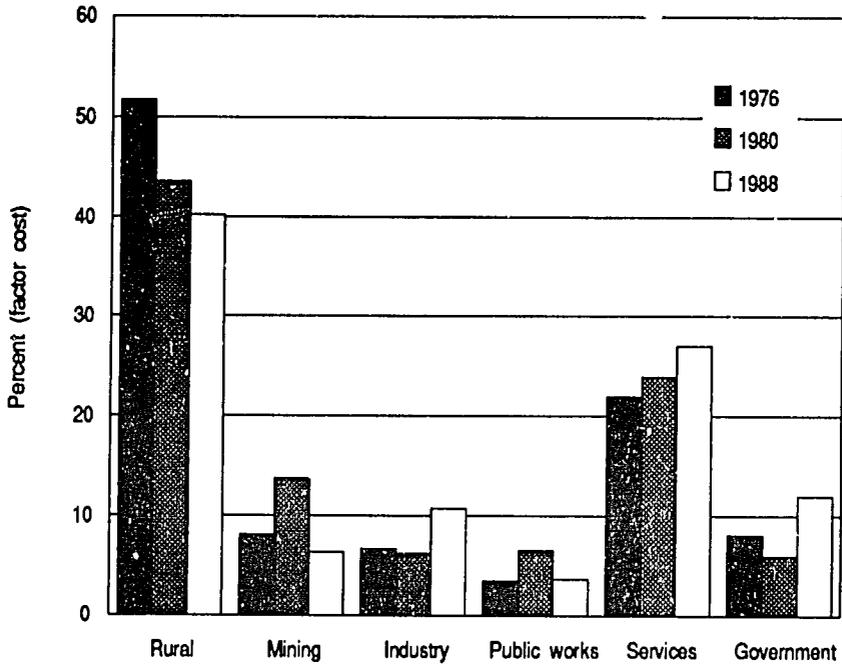
Source: *Ministère du Plan (1990a).*

Informal-sector activities, which generate the remaining 67 percent of GDP and employ about 97 percent of the labor force, include (1) agriculture, livestock, forestry, and fishing; (2) commerce, trade, and other services; and (3) artisanal production. These activities accounted for 40, 28, and 10 percent, respectively, of informal-sector activity in 1988 (Ministère du Plan 1989c and 1990a). Informal production activities include milling, baking, butchering, building, tailoring and textiles, oil processing, welding, jewelry making, soap manufacturing, pottery, woodworking, and tanning, among others.

Niger's dual economy has served to constrain the development of the modern sector, particularly since the decline in the uranium market. Informal and modern enterprises compete in a number of activities, particularly in manufacturing and in commerce and trade (Giroday, M'Poko, and Mouskoura 1987). Because many informal establishments are small, they often escape the GON's formal tax and regulatory policies. These policies fall disproportionately on formal-sector enterprises, and thus reduce their ability to compete with the informal sector.

Three important factors influence Niger's GDP growth. First, rainfall, through its effect on agricultural and livestock production, influences annual variation in GDP. Second, developments in the world uranium market affect the level of activity in Niger's domestic uranium production and in other operations, such as energy and transport that supply inputs. Because of the importance of uranium mining in supplying financial resources, developments in the world uranium market also have an important effect on government activity and on the size of the modern sector. A third influence is the level of economic activity in neighboring countries, particularly Nigeria, with whom Niger has important informal as well as formal commercial relations.

Trends in the sectoral shares of GDP shown in Figure 2 indicate a declining role for the rural sector and increasing shares for services and government administration from 1976 to 1988. The activities that directly benefited from the uranium boom (1976 to 1980) were mining, construction, and services. This benefit was because the GON used the financial resources generated by the uranium boom (1) to finance an expansion in mining production and an increase in infrastructure development, (2) to create public enterprises in the service sector, and (3) to increase employment, both in government administration and among parastatals. The uranium industry has strong links to transportation and energy enterprises in Niger, but its ties to the remaining sector of the economy are relatively weak. Thus, the uranium boom did little to develop industrial production outside mining.

Figure 2 — Niger: Sectoral Share of GDP, 1976, 1980, and 1988

Sources: IMF (1985, 1988c); Ministère du Plan (1990a).

Niger's modern sector experienced good growth between 1976 and 1980 that was linked to the mining industry and public expenditure. This growth was partially due to the GON's policy of supporting national businessmen through bank credit extended by the Banque de Développement de la République du Niger (BDRN) and other parastatal credit agencies (Giroday, M'Poko, and Mouskoura 1987). Thus, modern-sector activities deteriorated sharply with the GON's financial crisis that followed the downturn in the uranium market.

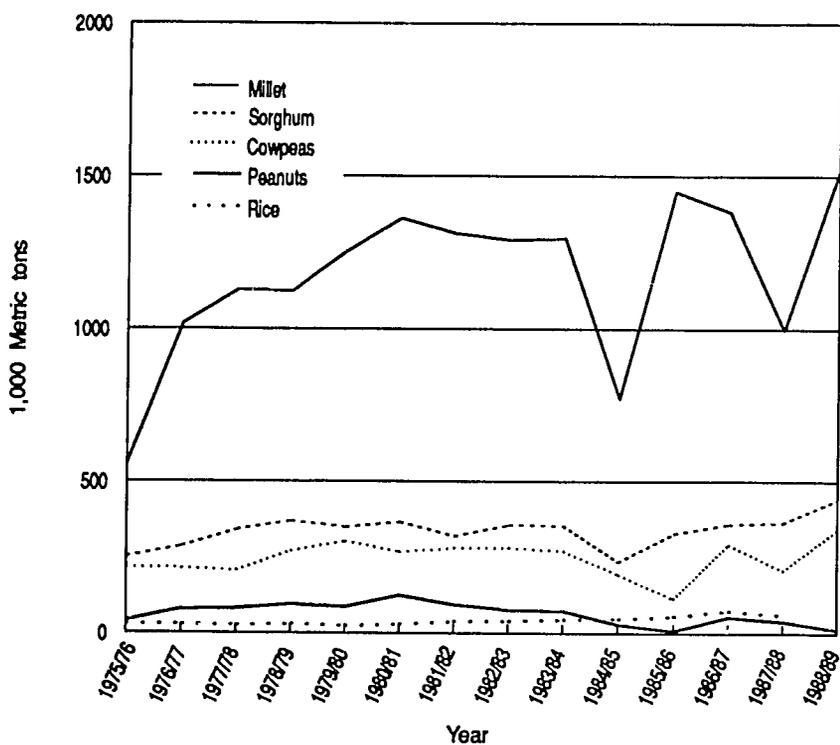
Government administration, services, and industry increased their importance in GDP from 1980 to 1988. Growth in the latter two activities, which are dominated by the informal sector, represents the increasing informalization of the economy that has taken place since the downturn in the uranium market. Informal-sector surveys in Niamey indicate that since 1981 the number of informal-sector establishments has more than doubled, with the largest growth in commerce and trade (Ministère du Plan 1989a). The industrial sector's GDP share increased from 6 percent in 1980 to 10 percent in 1988. But production growth outside electricity and water has been generated by artisanal activities, as the share of modern manufacturing in GDP has remained constant since 1976.

THE RURAL SECTOR

Approximately 90 percent of Niger's actively employed population is engaged in primary activities – agriculture, livestock herding, forestry, and fishing. Agricultural production constitutes about 50 percent of the value added in the rural sector, followed by livestock production with 36 percent. Agricultural production typically takes place on small family plots where rainfed crops are cultivated by traditional methods. Because of deficiencies in rainfall levels, soil types, and location, only 9 to 12 percent of Niger's land is considered cultivable, and about 4 percent of total land is under cultivation in a given year (Sedes 1987). On the basis of water availability and soil type, approximately 240,000 hectares have been identified as having potential for irrigation. However, only 13,000 hectares are currently irrigated using modern systems, and roughly 20,000 to 25,000 hectares are under partial water control.

Livestock are both an important form of rural savings or wealth and an important trading commodity. About 20 percent of Niger's population is exclusively engaged in livestock herding. It is estimated that 66 percent of Niger's livestock herds are raised under nomadic conditions (FAO/OSRO 1988).

Crop production is dominated by millet and sorghum, Niger's staple food crops (Figure 3). Of the approximately 5.0 million hectares cultivated in a given year, about 4.4 million are planted in these cereals. Rice is grown on another

Figure 3 — Niger: Crop Production Trends, 1975/76 -1988/89


Sources: FAO/OSRO (1988); Ministère du Plan (1989b, 1990a); Rassas et al (1989).

20,000 hectares along the Niger River. Of these, 10,000 hectares are under irrigation and managed by the Organisation Nigérien de l'Aménagement Hydro Agricole (ONAHA), a parastatal. Cotton is produced on about 12,000 hectares, of which 2,000 are irrigated. Wheat, corn, sugarcane, cowpeas, and vegetables are also grown under partial or modern irrigated conditions on about 50,000 hectares during the off season.

The GON encouraged expanding irrigation in both the 1979 to 1983 and the 1987 to 1991 Development Plans. However, the GON must subsidize producers of rice and cotton to maintain production. Subsidies are provided through official price policy and, additionally in the case of rice, through taxes on rice imports (Rassas and Loutte 1989). A development program launched in 1983 to stimulate cotton production also provides insecticides free to cotton farmers.

Cash crops include cowpeas, peanuts, vegetables (mainly onions and string beans) as well as cotton. Peanuts and cotton have declined in importance since the 1960s as production of cowpeas, which were grown on 1.8 million hectares in 1987/88, has increased. The shift to cowpeas, a highly drought-tolerant crop, occurred for a number of reasons. These reasons include the downtrend in rainfall, the decline in world prices for peanuts and peanut oil since the 1960s, and the withdrawal of French support for Niger's peanut sector (Berg and Associates 1983; Rassas et al. 1989). Niger's marketed cowpeas are sold primarily to Nigeria; thus cowpea production in Niger has benefited from both increased per capita income and population in Nigeria. Cowpeas are traditionally intercropped with either millet or sorghum.

Production of millet and sorghum rose significantly during the late 1970s. From 1973 to 1980, the area devoted to these crops increased by 33 and 23 percent, respectively. The average annual increase in domestic production of cereals was approximately 4 percent in the late 1970s and early 1980s, a rate that outstripped annual population growth (3.1 percent) by a comfortable margin. Per capita cereal availability averaged 268 kilograms per year during this period, which, although slightly lower than pre-1973/74 drought levels, was above the official estimate of cereal needs (238 kilograms per capita), even if domestic production alone is considered. A study of household transaction costs undertaken in the early 1980s found that most rural households in Niger were able to produce enough millet and sorghum to feed themselves for at least a year after a good harvest. However, this ability was not found to exist when the harvest was bad (Hopkins and Reardon 1989).

Crop price movements during the 1970s and early 1980s generally favored production of food over cash crops. Data on the actual prices received by farmers for all crops are not available. However, the data on official prices —

the prices that were set by the GON — can be used as a benchmark to assess price trends (Berg and Associates 1983; Sedes 1988). During the late 1970s real official producer prices for millet and sorghum rose slightly, while the real prices for rice, peanuts, cowpeas, and cotton declined. Increased official prices for cowpeas starting in 1978 were associated with an upturn in cowpea production from 1978 to 1980, and with an increase in planted area during the early 1980s.

Total agricultural crop production in Niger since the early 1980s has generally exceeded its levels of the 1970s except in two years, 1984/85 and 1987/88, in which drought occurred. Real official producer prices for all crops rose much more from 1980 to 1988 than during the 1970s, and official food crop prices increased more on average than the prices of nonfood export crops (Sedes 1988). Lower production of millet and sorghum from 1980/81 to 1984/85 is generally attributed to insufficient rainfall (Sedes 1988). Rassas et al. (1989) have suggested that reduced demand in Nigeria, which itself embarked on a structural adjustment program in the early 1980s, contributed to the decline in cowpea production from 1983/84 to 1985/86. However, Rassas et al. was unable to explain the upturn in production starting in 1986/87.

The physical limits placed on Niger's agricultural production by limited arable land are accentuated by the fact that most of Niger receives less than 400 mm of rainfall per year. In addition, rainfall levels in many areas of the country appear to be decreasing from long-term averages. Drought-resistant crops such as millet and cowpeas are the only real alternatives for rainfed agriculture, and these crops are typically low yielding in the capital-poor farming conditions that prevail in Niger. Nevertheless, farmers in Niger adapt to their production environment with considerable ingenuity. Sixty percent of land is intercropped. Rural people also take more off-farm work in periods of drought as a strategy for minimizing risk (Sedes 1988).

Current technical and production practices are a second problem for agriculture. Low input-production practices combined with the poor condition of the natural resource base make for low productivity and consequently a low standard of living in rural Niger. The key factor in maintaining production has been the extension of planting into marginal, and easily depleted, lands, rather than any improvements in productivity.

Farm Earnings and Incomes

The available information from the national accounts indicates a wide disparity between rural and urban incomes in Niger. According to these data, per capita GDP in the rural areas (including the value added from rural artisanal production and commerce) in 1988 was about CFA 44,100 (US\$ 146), while average per capita income in the nonrural sector was about CFA 297,396

(US\$988) (Ministère du Plan 1990a). Although rural household members also engage in a wide variety of nonagricultural activities during both the rainy and the harvest seasons, rural income-earning activities are based primarily on agricultural and livestock production. Approximately 5 percent of the rural population is employed full time in artisanal production activities, and an additional 1 percent is employed full time in commerce and trade (ILO 1990). Informal commerce is also an important source of part-time employment.

Relatively low levels of income in the rural sector have been attributed to the poor natural resource conditions, and thus to low levels of agricultural productivity, and to lack of opportunities for wage employment during the rainy and harvest seasons (Sedes 1987; Doan and Lewis 1989). For instance, farmers work in agriculture only about 5 months out of 12, and many are underemployed or unemployed in the remaining months. Doan and Lewis (1989) found that weak urban-rural links in many rural towns located outside of Niamey were primarily responsible for the lack of wage employment in rural areas. These weak links are exemplified by the fact that most producer and consumer goods used in the rural areas are largely imported or come from other areas outside the regional economy. Although many farmers engage in secondary income-earning activities, Doan and Lewis found that these are restricted primarily to less-profitable, rural-based trading activities.

A 1982/83 village level survey of 258 farmers conducted in 13 villages throughout Niger found that farmers' incomes consisted of income from crops and livestock and from nonfarm sources. Nonfarm can include income from the sale of nonagricultural goods, wages earned from off-farm work in town or in other countries, and gifts of money from friends or relatives (Berg and Associates 1983). Income from agricultural activities (crops and livestock) accounted for the largest share of farmers' incomes in this survey. Crop sales in particular (millet/sorghum, peanuts, cowpeas, rice, and garden vegetables) constituted the largest source of rural income (41 percent), followed by animal sales (30 percent) and nonfarm income (29 percent). On average, 40 percent of crop income came from millet and sorghum sales, followed by sales of other crops (rice and garden vegetables), which generated 35 percent of crop income.

This survey also found that income sources vary considerably by farm size. The survey defined "small farmers" as those who harvested no more than 1,500 kg of millet and sorghum, "medium farmers" as those who harvested between 1,500 and 3,500 kg, and "large farmers" as those who harvested more than 3,500 kg. Nonfarm income provided a larger share of income for small and medium farmers (25 percent and 30 percent, respectively) than for large farmers (14 percent) (Berg and Associates 1983). However, crop sales provided a larger

share of income for large farmers (53 percent) than for small and medium farmers (34 and 27 percent of total income, respectively). More specifically, the survey found that millet and sorghum sales played a much smaller role in generating crop income for small farmers (12 percent) than for medium and large farmers (44 and 48 percent, respectively), and that small and medium farmers tended to be net buyers of cereal grains, while large farmers were net sellers. The survey found that income supplied from animal sales was an important income component for all farm sizes. Income from animal sales constituted 29, 35, and 28 percent of small, medium, and large farmers' incomes, respectively.¹

In the past, the government attempted to stabilize farm prices and to support farm income by setting official prices for crops. It has been argued that these official prices did not play an effective role in enhancing farm incomes because the prices were usually lower than prices offered by private merchants. Thus most crops were sold on unofficial (parallel) markets at prices much higher than the government's price (Berg and Alexander 1986; Sedes 1988).² In the case of millet and sorghum, the market share of the Office des Produits Vivriers du Niger (OPVN), which had the legal monopoly on purchases through the early 1980s, rarely exceeded one-third of total marketings (Berg and Alexander 1986). The Société Nationale de Commercialisation de l'Arachide (SONARA), which had the legal monopoly on cowpea purchases from 1976 to 1984, exported less than 12 percent of estimated exports of cowpeas during this period (Rassas et al. 1989). Moreover, when the official prices were above market prices, as cereal prices were in 1982, 1983, and 1985, OPVN did not buy all the quantities offered. Most studies have also found that OPVN was generally ineffective in reducing producer price variability (Berg and Alexander 1986; Sedes 1988).

URBAN HOUSEHOLD INCOMES

The modern sector provided employment for about 60,000 persons in 1988, or for about 30 percent of the nonagricultural labor force. This employment consisted of 24,000 persons employed in the private sector and in parastatals, and 36,000 employed in government administration (ILO 1990). Employment in the private sector and among parastatals has declined from the levels reached

¹ More information on farm household income and activities will be available from the rural household survey that is currently being undertaken by the International Food Policy Research Institute (IFPRI). The results of the survey will be available in 1991.

² However, information on price formation in unofficial markets is largely unavailable. If private merchants used the official prices as a basis for making their offers, then the official prices may have served as a support to the unofficial market.

during the uranium boom. From 1982 to 1984 employment in those areas declined by 38 percent — from 34,500 persons to 21,400. Employment in government administration, on the other hand, increased steadily during the 1980s — from approximately 26,000 persons in 1982 to 31,000 in 1984, and to the current level of employment in 1988. This growth was due to the government's policy of providing jobs to all university graduates (most of whom received government scholarships) who sought employment in the public sector.³ On the whole, formal-sector employment currently is about the same as it was during the uranium boom. However, the government's share has increased from 40 percent in the early 1980s to 60 percent.

Employment in the urban informal sector was estimated at about 200,000 persons, or at 50 percent of the nonagricultural labor force in 1988 (Ministère du Plan 1989a). The 20 percent of the urban labor force not in the informal and formal sectors is employed as domestic household workers or as workers in traditional health and education. These workers are not counted in the informal-sector surveys.

The urban informal sector expanded rapidly during the 1980s, with businesses involved in commerce and trade leading this growth. In 1981, businesses involved in commerce and trade represented 60 percent of the estimated informal establishments, other service-related establishments represented 18 percent, and artisanal production establishments represented 22 percent. By 1987, however, the shares of commerce and trade-related businesses in total informal establishments had increased to 65 percent, while the shares of other service-related and production establishments had declined to 16 and 19 percent, respectively. The decline in the production share of establishments is largely attributed to increased imports from Nigeria of used clothes that put many tailors out of business (Ministère du Plan 1989a).

Wage and salary determination varies between the informal and formal sectors. The GON determines salaries for civil servants and sets the minimum wage, which is followed more by formal-sector establishments. Other wage rates are determined bilaterally or through collective bargaining. In January 1981 the minimum wage (Salaire Minimum Interprofessionnel Garanti [SMIG]) was raised by 10 percent to CFAF 109.2 per hour retroactive to October 1980. Since then, the SMIG has not been adjusted and it currently remains at CFAF 109.2 per hour. Most workers in the modern sector, however, enjoy wage rates that are higher than the legal minimum.

³ A system of recruitment by competitive examination was put in place in early 1990.

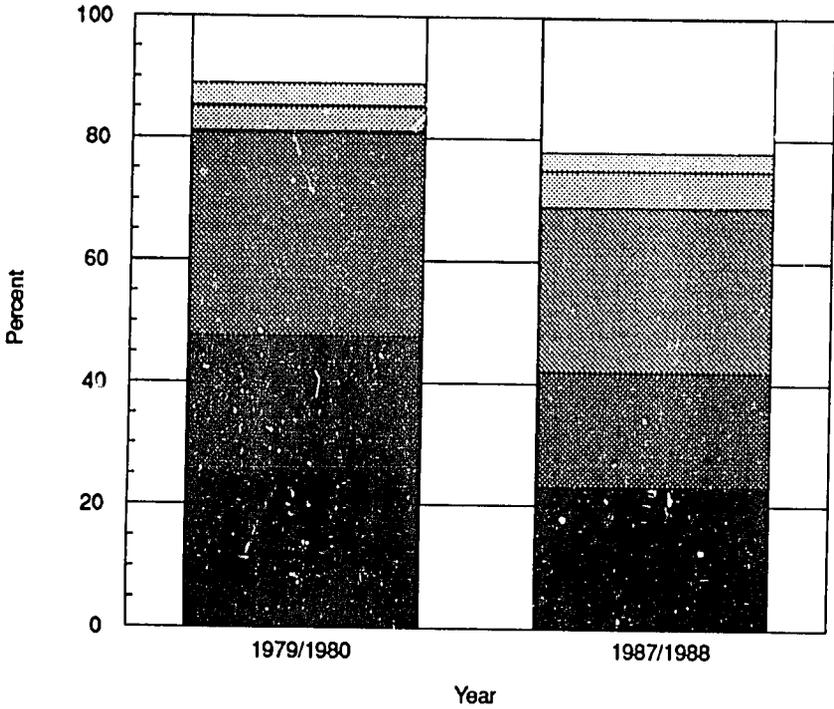
Wage rates in the informal sector often are lower than the legal minimum wage (IMF 1985). However, since the SMIG has not been changed for so many years, it is not clear how current informal wages relate to the SMIG. Moreover, a large number of wealthy businesses and individuals operate in the informal sector. Nevertheless, GDP data and labor employment figures show that earnings per employed person in the modern sector are almost four times those of persons employed in the informal sector. On average, informal sector establishments are small and employ few people. Salaried employment is rare in the informal sector, and many employees are apprentices or family aides who are remunerated per task. It is estimated that two-thirds of the sedentary establishments are owned by one person or have one employee.

GOVERNMENT REVENUES AND TAXATION

Niger's revenue structure (excluding foreign assistance and grants) is relatively diversified. In 1987/88, tax revenue represented about 82 percent of the GON's total revenue. Income and profit taxes represented about 20 percent of total tax revenue; taxes on domestic goods and services, 19 percent; import taxes; 27 percent; export duties, 6 percent; and other taxes, about 7 percent (Figure 4). Export duties on uranium account for about 50 percent of export taxes, but uranium production also contributes to tax revenue through royalty payments, income taxes, and value-added or turnover taxes. The importance of uranium as a source for government revenues has been reduced in recent years. Uranium revenues provided about a fifth of government revenue in the late 1970s, but only 13 percent of revenues in 1988.

The tax burden, as measured by the ratio of tax revenue to GDP, declined from more than 13 percent in the late 1970s to 10 percent in 1988 and is one of the lowest in Africa. Niger's difficulty in raising tax revenues reflects (1) the slowdown in modern-sector activity since the end of the uranium boom, (2) Niger's narrow tax base and dependence on uranium for generating revenues, and (3) inefficient tax collection and enforcement. A relatively small part of the economy, the modern sector, bears the bulk of the tax burden while the large and growing informal sector pays relatively little in taxes. For instance, the tax burden (indirect taxes paid as a percent of value added) in the informal sector ranges from 4 percent for manufacturing, building, and service activities to 7 percent for activities in commercial trade. The comparable tax burden on the formal sector ranges from 11 percent for industry to 27 percent for commercial trade and service establishments (Ministère du Plan 1989a). Since many business taxes are fixed, whatever the income, many small business establishments have a very strong incentive to avoid these taxes altogether.

Figure 4 — Niger: Government Revenues, by Source, 1979/80 and 1987/88



- Non-tax revenue
- ▨ Other taxes
- ▩ Export taxes
- ▧ Import taxes
- Domestic goods and services
- Income, profit tax

Sources: IMF (1985, 1988c).

MONETARY AND EXCHANGE RATE POLICY

Niger, as a member of the UMOA, shares a common currency, the CFA franc, and the same central bank, the BCEAO, with six other countries — Benin, Burkina Faso, Côte d'Ivoire, Mali, Sénégal, and Togo. The CFAF is pegged to the French franc at a fixed exchange rate of CFAF 50 to one French franc. France is represented on the board of the BCEAO and supports the UMOA to maintain free convertibility of the CFAF 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. In theory, this account can be overdrawn by any amount as a result of the commitment by France to guarantee the convertibility of the CFAF regardless of the amount of external liquid assets of the African partners (Bhatia 1985).

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. In doing so, it takes into account production, prices, liquidity, balance-of-payments target, level of foreign reserves of each country, and 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 must 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; in the past, preferential rates applied for certain credits.

Although BCEAO rules tend to impose financial discipline on member countries, there are a number of ways to circumvent the formal limitations of the monetary union (Plane 1989). First, the 20 percent limit on cash advances applies to gross credit because the BCEAO has no control over government deposits in the banking system. Thus governments can get around this limit by borrowing from commercial banks, which, in turn, can borrow from the BCEAO under the condition that no more than 45 percent of a bank's total credit may be rediscounted with the BCEAO.⁴ In addition, external loans, misuse of

⁴ Note that IMF requirements are different in that IMF stabilization programs place limits on net credit to governments.

seasonal credit allocations (for which there are no ceilings), and the accumulation of arrears have been used in the past to circumvent BCEAO credit ceilings.

Niger participated in the reform of monetary policy instruments adopted by the council of ministers of the UMOA in September 1989. The reform aims at progressively replacing the existing BCEAO administrative controls on money and credit with a more simple, indirect, and market-oriented system of monetary instruments, while strengthening bank supervision at the national and supra-national levels (IMF 1990a). In this context, effective 2 October 1989, the monetary authorities abolished the preferential rediscount rate, simplified and rationalized the schedules of interest rates of the commercial banks, and granted the banks greater flexibility in determining their rates on deposits and loans. In addition, the BCEAO's policy of sectoral credit allocation was discontinued. The conditions for access to central bank refinancing are being tightened as part of the reform, and the rediscount rate will be kept above the money market rate, with the BCEAO intervening only as a lender of last resort.

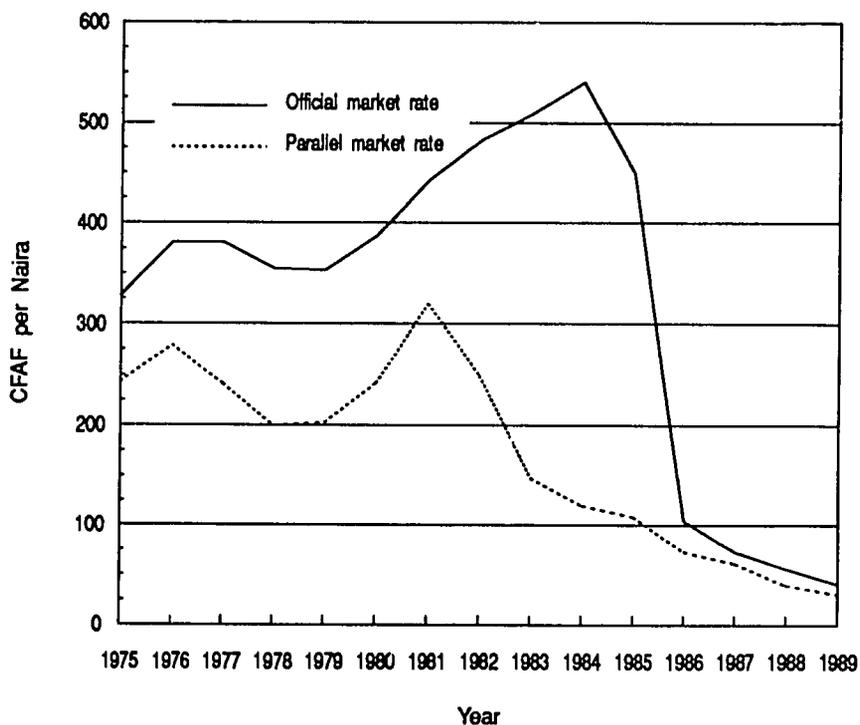
INTERNATIONAL TRADE

Niger has traditionally maintained an open economy, exporting and importing about 25 percent of its GDP. Strong trade links exist with Europe (mainly France) and neighboring African countries (particularly Nigeria). Niger's membership in the UMOA and the convertibility of the CFAF have facilitated this trade openness. While official trade links exist, much commercial activity takes place unofficially over the vast Niger/Nigeria border. This cross-border trade has been stimulated by traditional ties maintained between the peoples living on either side of the border, by the inability of each country to police the border, and by the different trade and exchange rate policies followed by the two countries.

The Niger/Nigeria Exchange Rate

During the oil boom years of the middle to late 1970s, Nigeria's policy of maintaining an overvalued exchange rate resulted in a black market where the naira could be exchanged for CFAF at a considerable discount to the official rate (Figure 5). The black market served primarily as a means for Nigerians to gain access to foreign exchange by selling nonconvertible naira for fully convertible CFAF. But access to cheap naira encouraged unofficial cross-border Nigerien imports from Nigeria. The existence of the black market also encouraged unofficial cross-border exports, particularly livestock and agricultural products, despite the fact that Nigerien exporters who sold their goods through the official market could exchange naira for CFAF at the higher official rate. Niger's export taxes and cumbersome export procedures more than made up

Figure 5—Niger: Official and Parallel Market Exchange Rates, 1975-1989



Sources: Berg and Associates (1983); Ministère du Plan (1990a); and IMF (various years).

Note: Data are for December in years shown, except for 1989, which are for June.

for the difference in the two rates. To avoid changing naira into CFAF on the black market, many Nigérien exporters purchased cereals and manufactured goods in Nigeria and shipped these goods back to Niger where they were sold for cash.

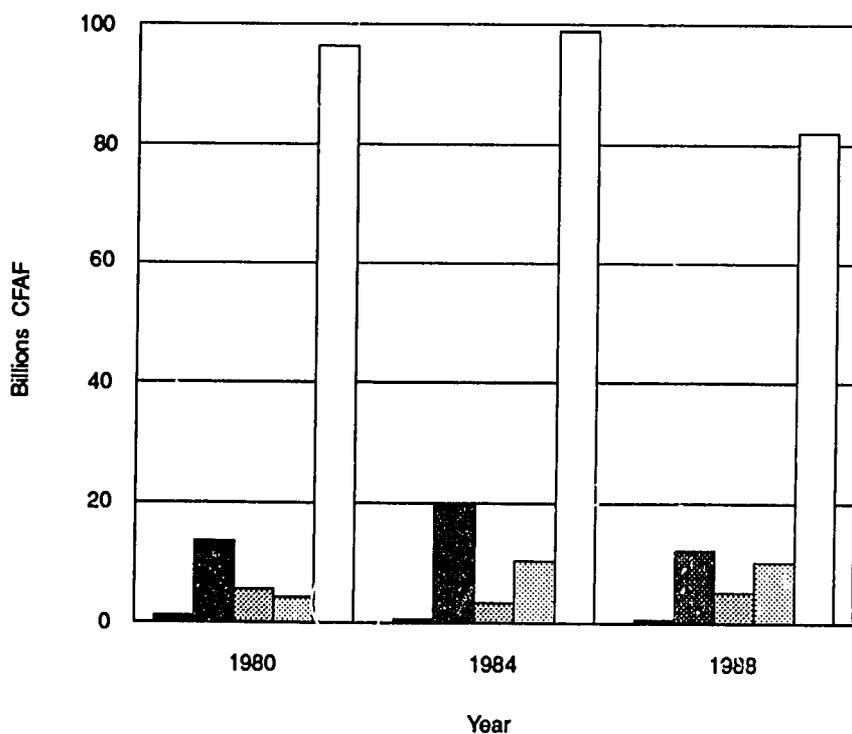
Austerity measures taken in Nigeria in the early 1980s, such as restrictions on food imports and on unofficial cross-border trade, including closure of the border in 1984, resulted in a sharp decline in the black market value of the naira. These measures were instituted by the Government of Nigeria to conserve foreign exchange, but in reality they created an even greater incentive for Nigerians to use the black market to gain access to foreign exchange. Nigeria's official devaluation of the naira in mid-1986 narrowed the difference between the official and black market naira rates. Cook (1988) and Rassas et al. (1989) have argued that the Nigerian devaluation had an important adverse effect on the Nigérien economy, particularly the rural sector. More specifically, these studies suggest that the devaluation reduced real incomes in Nigeria – and thus demand for Niger's exports of agricultural and livestock products – by forcing the Nigerian economy to adjust to higher prices and import costs.

Niger's Export Trade

Niger's exports consist of uranium, livestock and livestock products, cowpeas, and others (including cotton and onions). Figure 6 shows the trend in the composition of Niger's official exports from 1980 to 1988. Uranium export receipts declined by almost 16 percent between 1980 and 1988, but their contribution to total export earnings only fell from 80 to 75 percent because other export receipts grew only marginally during this period. Uranium, however, is sold through official channels, whereas livestock and cowpeas are largely sold unofficially; thus their importance is underestimated in the official trade statistics. Two parastatals, Société Nationale d'Exploitation et Recherche Animales (SONERAN) for livestock and SONARA for cowpeas, were only marginally involved in exporting these products. For instance, in the past approximately 85 percent of livestock exports, 70 to 100 percent of cowpeas exports, and 50 percent of hides and skins exports occurred on the unofficial market (USAID 1989). Niger exports primarily livestock and cowpeas to Nigeria, although limited numbers of livestock are also sold to Algeria, Ivory Coast, Benin, and Togo.

The 1984 drought resulted in initially large livestock sales as herders sought to avert livestock losses from reduced grazing conditions (Cook 1988). These sales were made primarily to Nigeria in exchange for Niger's purchases of Nigerian oil. In August 1985, the GON banned livestock and poultry exports to promote herd reconstitution. In general, this ban merely had a political effect

Figure 6 — Niger: Composition of Official Exports, 1980, 1984, and 1988



Sources: IMF (1985); Ministère du Plan (1990a).

because of the low proportion of livestock exports controlled by the GON. However, from August 1985 until June 1987, when livestock exports were finally allowed under quota, Niger had no official livestock revenues since officially no one could export.

Unofficial cross-border exports are important in increasing incomes, particularly in the rural areas, but they may have a different effect on the economy from official sales. Because exporters who use the unofficial market often convert export receipts to goods before returning to Niger, and because the GON is unable to collect taxes on these transactions, the currency earned from unofficial sales often remains outside Niger's banking system.⁵ The effect of cross-border transactions on the economy depends on whether export receipts from unofficial sales would be used to import goods from Nigeria anyway, or whether they would normally be allocated through the banking system to uses that are more beneficial to the economy. If the former, then both the unofficial and official export sales are equally efficient in converting exports to socially useful imports, tax issues aside. If the latter, then the unofficial sales are less socially useful to the country as a whole than the official sales.

Niger's export earnings from uranium have been relatively stable despite periods of boom and bust. This stability is due to export agreements on prices and levels of exports that are negotiated annually by the Nigérien government and the foreign shareholders of the two principal uranium mining companies, SOMAIR (Société Minière de l'Air) and COMINAK (Compagnie Minière d'Akouta). Only a limited quantity of Niger's uranium is sold in the spot market where prices are determined by supply and demand. As shown in Table 1, the European spot price for uranium measured in CFAF fell by 25 percent from 1978 to 1980, and by 46 percent from 1983 to 1988, but Niger's export price stayed constant or increased.

The difference between the uranium spot price and Niger's export price is reflected in the subsidy paid to the country through foreign uranium shareholders. The subsidy grew during the early 1980s to be a major source of foreign exchange earnings, and it comprised 54 percent of Niger's export earnings from merchandise in 1989. If uranium exports were disaggregated into a subsidy and a real component, the uranium subsidy in 1989 was Niger's single largest source of export revenue at CFAF 53 billion. This subsidy was followed by exports of uranium itself equal to revenues of CFAF 20 billion.

⁵ Although unofficial sales are untaxed, exporters must often bribe border guards — or take other costly actions to avoid border guards — to effect the sale.

Table 1 – Niger: Uranium Exports, Uranium Export Prices, Uranium Spot Prices, and Price Subsidies, 1977-1989

Year	Uranium Exports	Niger Export Price	European Spot Price ^a	Price Subsidy ^b	Total Subsidy Relative to Total Export Earnings ^c
	Metric Tons	CFAF per Kilogram		Percent	
1977	1,466	21,566	22,857	(6.0) ^d	(4.0)
1978	2,206	23,099	21,687	6.1	4.8
1979	3,422	23,971	19,938	16.8	13.8
1980	3,956	24,353	16,270	49.7	26.5
1981	4,971	20,418	16,737	21.9	13.5
1982	3,832	23,875	17,350	37.6	20.6
1983	3,491	26,977	19,493	38.4	18.5
1984	3,468	28,989	18,506	56.6	27.4
1985	3,042	29,888	14,827	101.6	40.7
1986	3,026	29,975	13,523	121.7	40.8
1987	2,948	29,353	11,428	156.8	48.7
1988	2,950	27,513	10,593	159.7	45.2
1989	2,950	25,000	6,922	261.1	53.8

Sources: USAID (1986b); Ministère du Plan (1989b, 1990a); and unpublished data, U.S. Department of Energy.

^a Average uranium prices for spot deliveries to final users in the European Economic Community.

^b Difference between the Niger export price and the spot price as a percentage of the spot price. Use of the spot price tends to overstate the amount of the actual subsidy because Niger's uranium exports are sold under contract and contract prices may exceed the spot price.

^c Price subsidy times the volume of uranium exports as a percentage of Niger's total export earnings.

^d Figures in parentheses indicate Niger's export price is less than the spot price.

The uranium companies announced in 1988 that because of the steady decline in the spot market price, they could no longer guarantee the uranium price subsidy. Niger's export prices for uranium have since been steadily revised downward. An export price of CFAF 20,500 per kg is predicted for 1990 (Ministère du Plan 1990a).

Niger's Official Imports

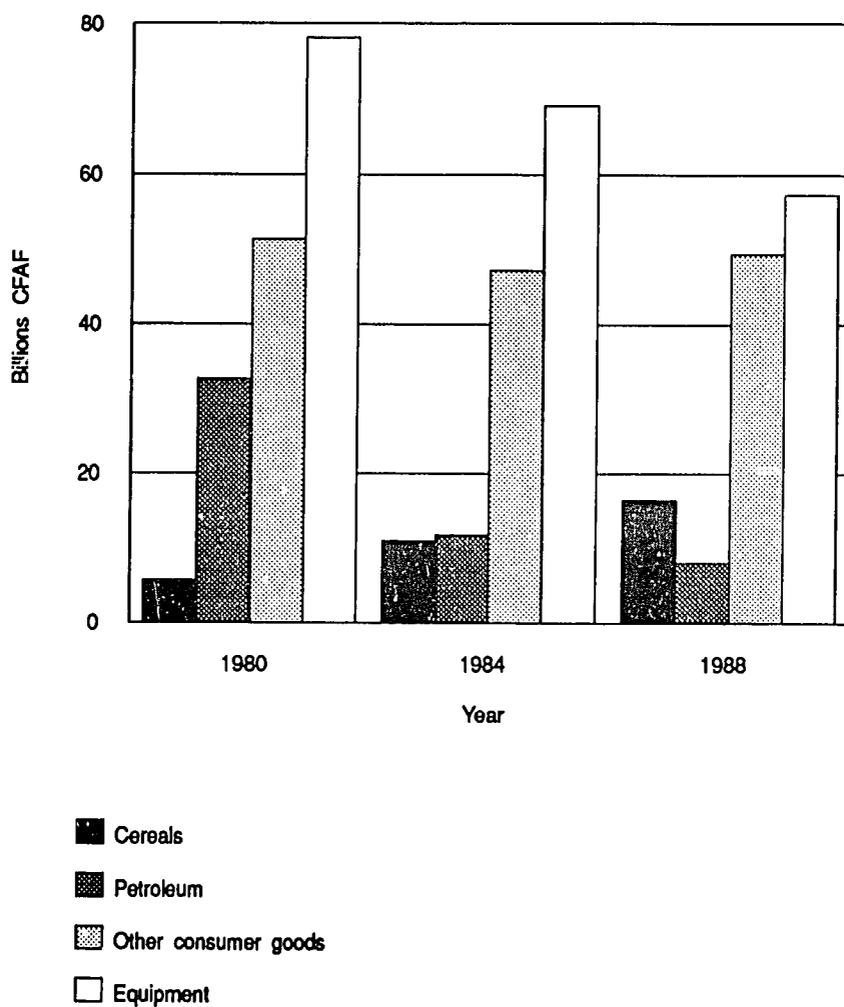
Niger's official imports are dominated by equipment and investment goods, followed by consumer goods, petroleum products, and cereals (Figure 7). Trends in nominal import values indicate that imports of equipment and petroleum products declined steadily during the 1980s, cereal imports increased, and the value of consumer product imports remained constant. (In real terms, import values for equipment, consumer goods, and petroleum declined from 1980 to 1988, and the value of cereal imports increased.) Imports of cereals are dominated by wheat, wheat flour, and rice. Niger also imports foods such as salt, coffee, and tea that are not produced locally, as well as products such as vegetable oil, milk, and sugar that are produced locally. Food imports in total represent about 30 percent of the value of Niger's imports.

As shown in Figure 8, Niger has generally been self-sufficient in coarse grains (millet, sorghum, and maize) except in drought years (1983 to 1985) when imports supplied more than 10 percent of domestic consumption. Cereal import shares shown in Figure 8 include both commercial and concessional imports. Rice imports have generally supplied 50 to 60 percent of domestic rice consumption, and sugar imports, less than 50 percent. Although not shown, imports of wheat and wheat flour supply more than 95 percent of consumption.⁶ The data for wheat flour and rice imports are highly variable because Nigeria banned imports of these products in 1986. Thus, imports of these commodities reflect quantities that may have been re-exported clandestinely to Nigeria. Vegetable oil imports, primarily palm oil, show an increasing import share because local production of peanut oil has declined.

Niger's Unofficial Imports

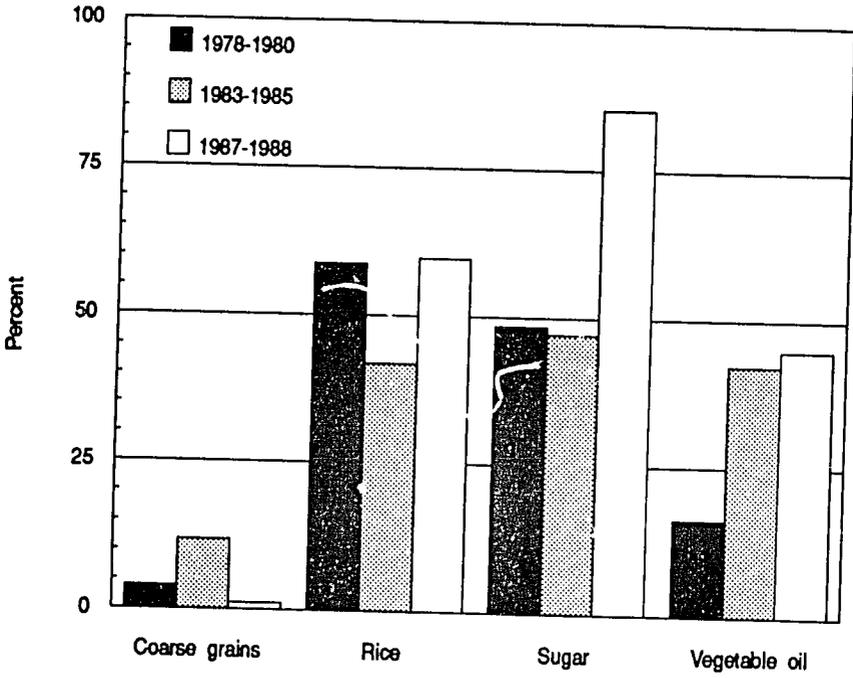
In addition to the official imports, Niger imports substantial quantities of coarse grains unofficially from Nigeria. Between 130,000 and 264,000 tons of millet, sorghum, and maize on average enter across the Niger/Nigeria border

⁶ In the past, Niger imported wheat for milling at the Grands Moulins du Benin in Cotonou. The transformed flour was then brought from Cotonou to Niger where it was sold in the wholesale outlets of the Grands Moulins du Sahel. Since 1982, however, wheat has no longer been imported for processing because changes in relative prices (due to European subsidy policies) made it cheaper to import flour.

Figure 7 — Niger: Consumption of Official Imports, 1980, 1984, and 1988

Sources: IMF (1985, 1988c); Ministère du Plan (1990a)

Figure 8 — Niger: Import Shares in the Availability of Selected Foods, 1978-1988



Sources: FAO Trade Yearbooks (various years); Ministère du Plan (1989b, 1989c).

each year, with the larger quantities occurring during drought years (Sedes 1987). Rice is also imported unofficially, particularly since 1984 when the GON raised the applicable import taxes. Unofficial rice imports, which primarily enter Niger from Benin, are also re-exported to Nigeria.

In addition to cereals, Niger imports a wide range of manufactured goods from Nigeria through the unofficial market. These imports include fertilizers, wheat flour, cement, gasoline, soft drinks, textiles, hardware, spare parts, and other products.

Niger/Nigeria Trade Regimes

Because its membership in the UMOA requires that Niger maintain an official fixed CFAF exchange rate, Niger has long used a system of customs tariffs and licensing to influence its external trade. Tariff protection of imports occurs by the application of four categories of duties and ad valorem taxes (*droit de douane, droit fiscal d'importation, taxe statistique*, and tax on value added), as well as specific taxes on certain products (e.g., rice and petroleum products). To promote import substitution, customs tariffs have tended to be higher on manufactured imports. This high tariff, in turn, has penalized export activities through the taxation of imported intermediate inputs (Université de Clermont 1989).⁷ In the past, export of manufactured goods were much less taxed and licenses were given rapidly as compared with exports of livestock and other agricultural products.

Customs duties on food products tend to be relatively low, with the current exception of rice. However, in the past, the GON has intervened in the marketing of both food grains and processed food products by channeling official imports through state monopolies. These monopolies have included OPVN (coarse grains), Société Industrielle et Commerciale du Niger (SICONIGER) (vegetable oil), the Grands Moulins du Sahel (wheat and flour), and Commercialization des Produits de Première Nécessité (COPRO-NIGER) (basic commodities). In addition, until 1985 rice imports were limited to OPVN and a small number of approved private importers. Although the stated purpose of the government's import regulation was to ensure regular supplies at low and uniform prices, inefficiencies in the protected processing and distribution activities tended to keep domestic prices of processed foods high in relation to border prices (Université de Clermont 1989).

Niger's trade policies, trade relations, and prospects are affected by the economic policy regime in Nigeria. For instance, from 1984 to 1986 Nigeria

⁷ To protect local manufacturing industries, imports of some products have been banned in the past. These include imports of wheat flour and peanut oil.

closed its border with Niger, and starting in 1988, the Nigerian government banned all exports of cereals. These restrictions obviously reduced Niger's official trade with Nigeria, but they had a limited effect on reducing unofficial cross-border trade flows between the two countries. Moreover, during the 1984 drought, the Nigerian government temporarily opened the border to allow sales of Nigérien livestock. However, in a bad harvest year, such as the one experienced in Nigeria in 1987/88, the interdictions on cereal trade probably made Niger's cross-border cereal imports more costly.

3. Nutrition, Health, and Education

Like many of its Sahelian neighbors, Nigériens suffer from poor health status and inadequate access to health services. Life expectancy at birth is a low 43 to 47 years, even when compared to other African countries (Table 2). Although the mortality rate declined from 27 per thousand in 1960 to 20 per thousand in 1985, it still remains high, particularly among women and children. With rates of child and infant mortality of, respectively, 28 and 132 per thousand in 1985, these deaths account for 60 percent of all deaths in the country. Major health problems include measles, diarrhea, meningitis, malaria, pneumonia, and tetanus. Malaria is the number one cause of morbidity (USAID 1986a). The population covered by health and obstetrical services was estimated at 48.0 and 46.5 percent, respectively, in 1985 (Tinguiri 1990).

Niger's high rate of population growth also poses an important health problem. Population demographics from the 1977 census indicate that people from 15 to 49 years old represent about 40 percent of the population, one woman in two is of child-bearing age, and the average number of births per woman is about seven. The estimated crude birth rate of 52 per 1,000 in 1985 is one of the highest in the world. It has been estimated that if mortality continues to be reduced by improved health services, and fertility remains at its current level, the rate of population growth will increase to 4.5 percent by the year 2010 (to 17.5 million people) (USAID 1986a). Recognizing that Niger's rapid rate of population growth will ultimately jeopardize the ability of the nation to feed itself in future years, the President of Niger formally endorsed family planning efforts in January 1985.

HEALTH STATUS AND SERVICES

Niger's public health-care system is based on a five-tiered hierarchy of services. At the base level are the village health teams (*équipes de santé villageoises*), consisting of village health workers (*secouristes*) and trained birth attendants (*matrones*). The purpose of the village health teams is to promote hygiene, provide health education and curative health treatments, dispense medications, and help with childbirth. At the next level are the rural dispensaries (*dispensaires ruraux*) and medical posts (*dispensaires de quartier en ville*), which are found at the village level and staffed by nurses supervising the village health teams. Next are the medical centers (*centres médicaux*) at the *arrondissement*

Table 2 – Niger: Basic Social Indicators, 1960-1986

	Niger		Middle- Income Economies 1986	Sub- Saharan Africa 1986
	1960	1985		
Life expectancy at birth (years)	36	44	63	50
Daily calorie supply per capita	2,000	2,276	2,719 ^a	2,097
Population growth rate (percent)	2.7	3.2	2.1	3.2
Crude birth rate (per thousand)	—	52	31	48
Crude death rate (per thousand)	27	20	9	16
Total fertility rate (per thousand)	—	7.0	4.1	6.7
Infant mortality rate (per thousand live births)	178	132	65	113
Primary school enrollment (percentage of age group)	11	26 ^b	104	75

Sources: World Bank (database^a); USAID (1986a); Verez (1989).

^a Latest World Bank estimate.

^b Data for 1987.

level; each center may have a dispensary, a small hospital, a maternity unit, and a center for mother and infant care (*centre de protection maternelle et infantile* [PMI]). At the top of the health infrastructure pyramid are eight hospitals (one in each departmental capital) that provide specialized care. Three hospitals (two in Niamey and one in Zinder) are designated as national hospitals.

The GON launched a program to improve rural health care in 1964. The GON's commitment to this program was reaffirmed in 1974, and during the uranium boom, rural health-care infrastructure and resources expanded rapidly. The percentage of villages covered by village health teams grew from 17 percent in 1978 to 45 percent in 1985 (USAID 1986). Moreover, the number of rural dispensaries increased by 35 percent from 1978 to 1984, with the result that the number of persons per rural dispensary declined by 19 percent from 1978 to 1982 (Table 3). Substantial improvement was also made in providing health-

Table 3 – Niger: Health Care Indicators, 1978, 1984, and 1989

Indicator	1978	1984	1989
Persons per fixed primary care unit ^a	26,600	22,285	24,000
Persons per rural dispensary	26,297	21,311 ^b	28,000
Persons per doctor	50,900	36,000	23,580
Number of women of child-bearing age per midwife or obstetrical technician	—	7,420	4,250
Rural dispensaries	159	215	219
Medical centers	38	38	36
Maternity units	41	50	71
Centers for mother and infant protection	—	28	46
Hospitals	7	8	8

Sources: *Ministère de la Santé Publique (1985); Tinguiri (1990).*

^a *Rural dispensaries, medical posts, medical centers, maternity units, and PMI centers.*

^b *Data are for 1982.*

care services to pregnant mothers and children. As shown in Table 3, growth in health-care infrastructure has basically leveled off since 1984 with the exception of maternity units and PMIs.

Despite the progress previously made in rural health-care services, numerous studies of the health-care system have cited biases in the allocation of public health-care resources in favor of the urban areas, and in favor of hospital services as opposed to basic health care. Health infrastructure is concentrated in Niamey, which has two of the three national hospitals, 24 percent of the PMIs, and 50 percent of the doctors (Tinguiri 1990). In 1988, more than 50 percent of the GON's current expenditure for health services was allocated to hospitals as compared with the 35 percent allocated for primary health care (Ministère de la Santé Publique 1989b). Moreover, Niamey, with 5.5 percent of Niger's population, absorbs more than 45 percent of health-related public expenditure.

Health-care expenses are absorbed by users as well as the GON. Members of the village health teams are paid directly for their services by the recipients. Village health workers collect fees for the medicines and drugs that they

distribute. All services, including drugs and medicines when available, are provided free at rural dispensaries and medical centers. However, if drugs are not available, the patient is given a prescription to buy the medication at a pharmacy or private drug depot. Aside from the medicines that are provided free, all drugs are sold at the same price in Niger no matter which location. It is estimated that the government pays 28 percent of the average cost of medicines; households, 48 percent; and enterprises, 24 percent (Ministère de la Santé Publique 1989c).

Drugs and medicines are imported into Niger exclusively by the Office National des Produits Pharmaceutiques et Chimiques (ONPPC). This office sells the products to the Ministry of Health, which is responsible for supplying drugs to the public health-care system, and to pharmacies and drug depots. In recent years, shortages of medicines available through the health-care system have particularly affected the services provided to the rural areas by the village health teams and rural dispensaries. These shortages do not appear to be affecting health-care services in the urban areas. However, in a national health-care survey undertaken in 1987, the majority of respondents living in both the rural and urban areas suggested that the health-care system could best be improved by increasing the supply of medicines (Ministère de la Santé Publique 1989a).

Hospital service charges since 1962 have been based on professional and socioeconomic class: Government workers pay only 20 percent of charges; workers with incomes less than 25 percent of the SMIG pay only particular charges; indigents are totally exempted; children younger than five years pay 25 percent while children aged 5 to 12 years pay 50 percent of charges (Ministère de la Santé Publique 1985). These tariff rates are designed to protect the vulnerable groups from excessive hospital payments. However, Tinguiri (1990) notes that in reality the charges have been applied inequitably and that those with the least incomes often pay more for services.

EDUCATION

Despite the GON policy since 1961 of providing free and obligatory primary school for everyone, enrollment rates, particularly for primary school, are quite low in Niger (Table 4). In 1985, the adult literacy rate was only 14 percent (8 percent among women), a 1985 study found only 4.4 percent of 1,300 women interviewed to be literate (USAID 1986a). The education system in Niger consists of three levels: primary school (duration of six years), secondary school (*l'enseignement du second degré*), and university (*l'enseignement supérieur*). During the uranium boom, 1976 to 1981, public expenses for education, exclud-

Table 4 – Niger: Primary School Enrollment Rates, 1976-1989

Year	Percent Gross Enrollment
1976	15.0
1978	16.9
1980	18.1
1981	21.8
1987	26.0
1988	26.7
1989	27.9

Sources: *Tinguiri (1990); Verez (1989).*

ing investment, grew at an annual rate of 27.1 percent. The number of students enrolled in primary school increased at an annual rate of 9.6 percent during this period, while the primary enrollment rate increased from 15.0 percent of eligible students to 21.8 percent (Table 4). The number of students enrolled at the secondary and university levels rose by 23 and 19 percent, respectively, during the same period.

Primary schools accounted for 44 percent of recurrent education expenses in 1989, but Niger's education system generally favors secondary and university education at the expense of the primary level. This is due to the small numbers of students who attend the higher education levels in relation to the number of primary students. It is estimated that 92.6 percent of students, who are mainly in primary school, benefit from 35.9 percent of education expenditure, while at the other extreme, 0.7 percent of students benefit from 24.3 percent of education expenditure (Tinguiri 1990). The education budget at the university level includes transfers in the form of scholarships, which, in general, benefit the higher-income classes.

NUTRITIONAL STATUS AND CONSUMPTION EXPENDITURE

Nutritional status in Niger is difficult to assess because Niger lacks national nutritional surveillance surveys. Per capita intake is currently estimated at 2,276 calories per day, which is above the average calorie intake of other African

countries and meets the minimum requirements set by the World Health Organization for countries in West Africa (Table 2). Calorie intake may be satisfactory, however, but undernutrition may exist due to the lack of a quality diet (Edmundson and Sukhatme 1990).

Calorie consumption in Niger, like its Sahelian neighbors, is variable according to the season. Calorie consumption tends to fall during the rainy season (*soudure*), June to October, before the harvest, when the supply of basic cereals is reduced and prices are higher. This period requires the maximum energy for planting and weeding; thus this is when malnutrition is more likely to occur. Calorie consumption tends to rise following the harvest.

Studies of food consumption in rural Niger indicate that following a good harvest, seasonal differences in cereal consumption tend to be small, and that consumption levels can be maintained at or above requirements throughout the year (Hopkins and Reardon 1990). However, this conclusion does not hold in the event of a drought. For instance, a survey of 1,960 children in Niger conducted by the Ministry of Health following the 1984 drought revealed a 25.1 percent incidence of chronic malnutrition and a 16.8 percent incidence of acute malnutrition using weight-for-height as an indicator (Ministère de la Santé 1985). This survey found important regional variations in malnutrition following the drought, with 9.8 percent of the surveyed children in the urban areas suffering acute malnutrition compared with 27.5 percent in the rural areas.⁸

Food Consumption and Prices

Food consumption in Niger is affected by the seasonal variations in prices and the availability of foods both before and after local cereal harvests. As shown in Table 5, Niamey's retail prices for cereals and cowpeas start to rise in April, are highest in July and August, and are lowest in December to February following the harvest. Retail prices for rice exhibit the lowest monthly variation, probably because of the availability of imports to augment domestic supplies.

Food consumption surveys were undertaken by the Comité Permanent Interétats de Lutte Contre la Sécheresse dans le Sahel (CILSS) in 1988/89 in Niamey and in three villages in Tillabery during the preharvest (*soudure*) – July/August 1988 – and postharvest (January 1989) periods (CILSS 1989). The results indicate the importance of cereals in Nigérien diets, as well as differences in urban-rural food consumption patterns. Cereal consumption, as well as overall calorie consumption, tends to be much higher in the rural areas, both

⁸ Other studies have attempted to analyze nutritional status among specific groups (i.e., infants and children) at certain time periods in specific areas of Niger. The results of these studies are summarized in Tinguiri (1990). See also Hopkins and Reardon (1989 and 1990).

Table 5 – Niger: Indices of Seasonal Price Variation for Cowpeas, Millet, and Rice, Free Market Retail Prices in Niamey, 1977-1988

Month	Cowpeas	Millet	Rice
January	83.84	90.10	95.80
February	79.52	89.27	89.45
March	82.20	90.11	89.95
April	97.25	100.53	97.98
May	106.99	103.48	99.61
June	117.58	105.22	101.17
July	133.61	112.21	104.92
August	118.17	113.70	103.26
September	115.74	111.11	102.56
October	98.37	98.82	100.41
November	84.76	95.74	99.80
December	81.91	89.70	98.63

Sources: *FAO/OSRO (1988); Berg and Associates (1983); CERDI (1989).*

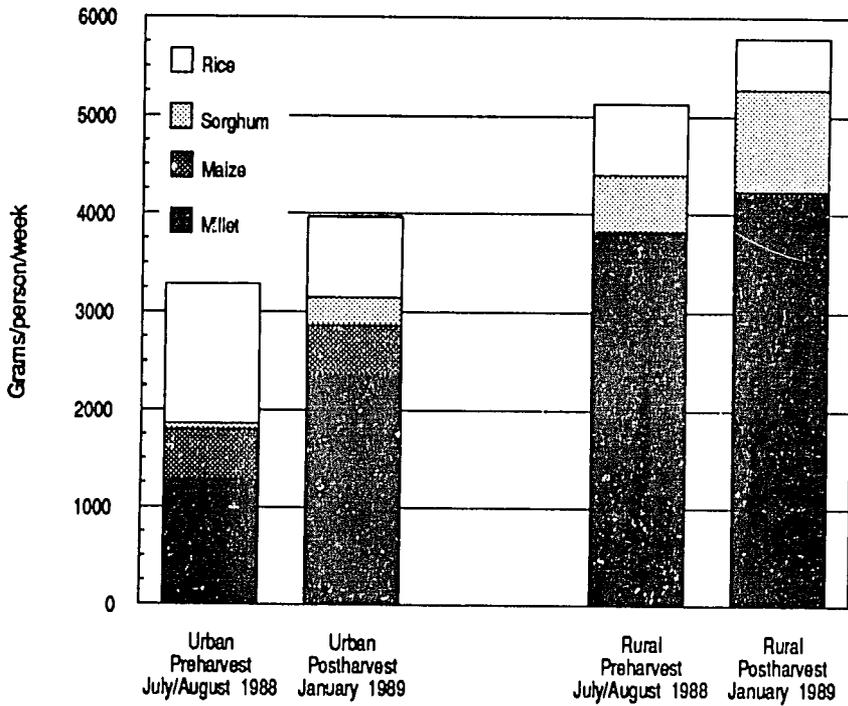
Note: *Calculated from centered 12-month moving averages.*

during and after the soudure (Figure 9). Rural diets tend to be based largely on millet and sorghum, which supplied 85 percent of cereal consumption in the villages during the soudure and 90 percent during the postharvest period, as compared to 51 and 66 percent of cereal consumption during the same periods, respectively, in Niamey.

Use of imported cereals (i.e., rice) appears to be a seasonal phenomenon in both the rural and urban areas. Rice consumption is higher during the soudure when the supply of local cereals is reduced. However, rice consumption plays a much smaller role in rural diets, accounting for only 14 and 9 percent of cereal consumption in rural areas during the soudure and postharvest periods, respectively, compared with 28 and 20 percent of cereal consumption in the urban areas during the same periods, respectively.

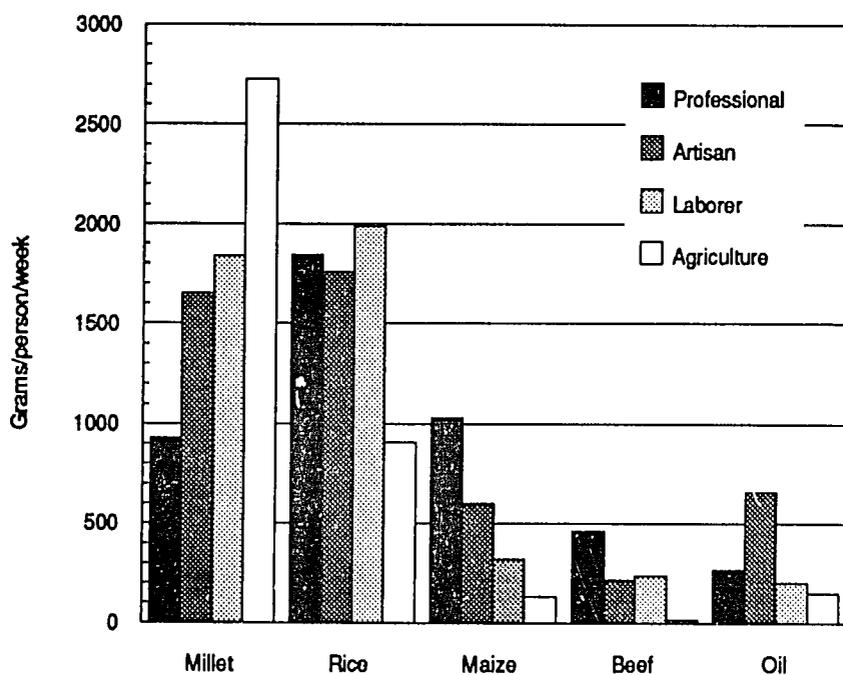
Food consumption by income distribution is not available from the CILSS data. However, some information can be inferred through data on households classified by profession of the household head (Figure 10). Consumption of

Figure 9 — Niger: Household Cereal Consumption, by Sector, Preharvest, and Postharvest, July/August 1988 and January 1989



Source: CILSS (1989).

Figure 10 — Niger: Household Food Consumption, by Profession, July/August 1988



Source: CILSS (1989).

maize, which is also imported, and beef is highest among urban professional workers, who have the highest incomes, while millet consumption tends to be more important among the other groups. Rice consumption is important for all categories of household profession. Gamatie (1987) notes that there is a relation between urbanization and increasing rice consumption. Because local cereals have to be processed before being eaten, rice is actually less expensive to consume in terms of losses, time in preparation, costs of processing, and conservation after use.

Consumption of noncereal foods among rural households is only about half that of urban households. Urban households tend to compensate for the decreased availability of cereals during the soudure by increasing their consumption of noncereal foods. Consumption of noncereal foods by urban households during the postharvest period is much lower than during the soudure (CILSS 1989).

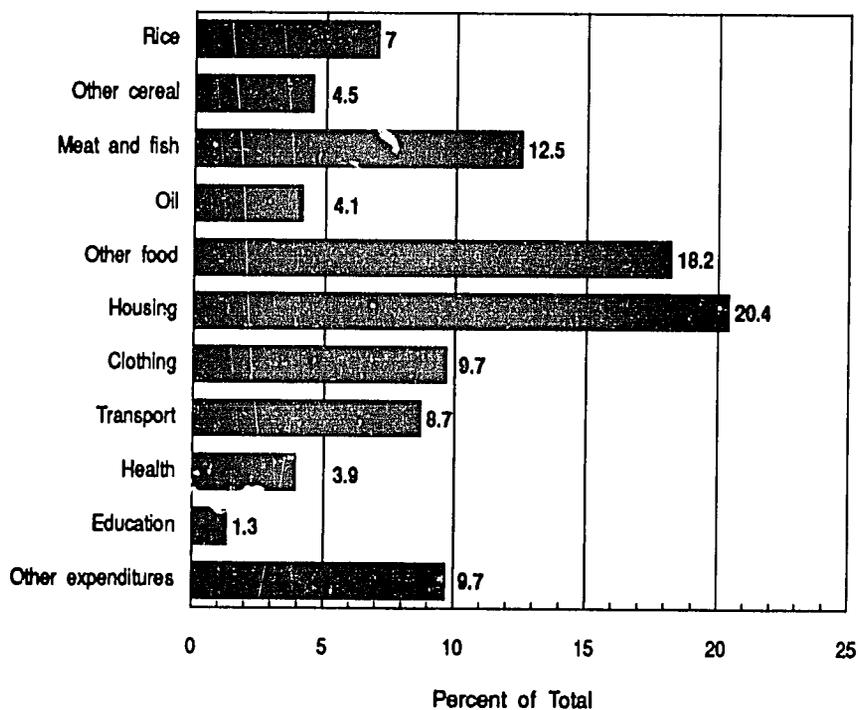
In general, the CILSS survey data indicate that during a relatively good harvest year, 1988/89, per capita food consumption in both rural and urban areas averaged 2,231 calories per day during the postharvest period and 2,007 calories per day during the soudure.⁹ Per capita daily calorie consumption tends to be higher in the rural areas during both the soudure and postharvest periods, averaging 2,500 and 2,804 in the rural areas, respectively, during these periods, compared with 1,876 and 2,084, respectively, in the urban areas. Both rural and urban areas experienced a 10 to 11 percent decline in calorie intake during the soudure.

Consumption Expenditure

Information on household expenditure patterns at the national level is currently unavailable for Niger. A pilot household budget survey undertaken in Niamey in 1986/87 by the Ministère du Plan (MDP) provides the most recently available information on household expenditures in urban areas (Ministère du Plan 1988).

As shown in Figure 11, which provides a breakdown of the expenditure shares by category available from the MDP's pilot survey, food expenditure accounts for the largest share of household expenditure (46.0 percent), followed by housing (20.0 percent), clothing (9.7 percent), transport (8.7 percent), and other. Expenditure shares obtained from the MDP's pilot survey are shown in Table 6 next to the expenditure weights used in the current calculations of the European and African consumer price indexes (CPI) for Niamey. The expen-

⁹ Per capita calorie consumption may actually be higher because the CILSS study did not provide information on consumption of cowpeas, fruits, and vegetables.

Figure 11 — Niger: Urban Household Expenditures, by Category, 1986/87

Source: *Ministère du Plan (1988).*

Table 6 – Niger: Comparison of Consumption Weights in Niger Consumer Price Index and in 1986/87 Pilot MDP Survey

	MDP 1986/87 Weights	European CPI Weights	African CPI Weights
Food and beverages	46.3	46.1	58.7
Clothing	9.7	6.0	13.5
Housing	20.4	21.8	10.4
Other	23.6	26.1	17.4

Sources: Ministère du Plan (1988 and 1989b).

diture weights in the CPIs are based on expenditure shares from surveys undertaken in 1960. The MDP weights appear to be quite close to the European weights, but are substantially different from the weights in the African index, particularly for food and housing. More specifically, the CPI comparisons indicate that food expenditure has declined in importance since 1960 for African households living in Niamey, while housing expenditure has increased in importance. It will be shown later that housing prices exhibited the largest increases under Niger's SAP.

The data suggest that African consumption patterns have evolved toward the European consumption patterns of 1960 – that is, African families tend to spend relatively less on food and clothing than in 1960 and more on housing and other items. If European consumption patterns were sampled alone, however, they might be quite different from those currently shown in the European CPI.

4. Structural Adjustment in Niger, 1981 to 1990

Niger's financial difficulties began in the early 1980s following the downturn in the world uranium market of the late 1970s. In the preceding period, 1976 to 1980, Niger's economy had been characterized (1) by strong growth based on increased mining and modern-sector activity, (2) by steady growth in crop and livestock production, and (3) by an upsurge in public-sector activity spurred by the belief that the uranium boom of the early to mid-1970s would continue indefinitely. Niger's uranium export receipts continued to increase until 1981 (despite a 29 percent decline in the spot price from 1977 to 1980) because of higher export volumes and rising negotiated export prices. A sharp decline in Niger's export price in 1981 (despite increased export volume) created severe financial stress as public-sector outlays, which had been planned on expectations of higher uranium prices, greatly exceeded government revenues. The weakened uranium market combined with a drought in 1984 that devastated the agricultural and livestock sector. This condition left the economy in a situation of chronic fiscal and external deficits because both sectors had been important in generating both government revenues and foreign exchange.

Until 1983, the GON considered its economic and financial difficulties to be short term, and its response was to implement self-imposed stabilization measures to reduce demand. Difficulties in servicing the external debt, however, and an emerging liquidity crisis compelled the Nigérien authorities to initiate a formal adjustment process in 1983 with the support of IMF. Adjustment support was also provided by USAID starting in 1984, by the World Bank through a structural adjustment credit (SAC) in 1986 and a public enterprise sector adjustment program (PESAP) in 1987, and by a three-year arrangement from the IMF's structural adjustment facility in 1987. Niger became the sixth country to become eligible for an arrangement from the IMF's enhanced structural adjustment facility (ESAF) in 1988/89. Niger has also benefited from successive debt rescheduling with the bilateral donors represented by the Paris Club and with the commercial banks represented by the London Club.

A number of factors have complicated Niger's efforts to stabilize the economy and to generate economic growth. In addition to the 1984 drought, these factors include a second drought in 1987 and a second round of uranium price cutting that resulted in a 14 percent drop in Niger's negotiated uranium export price from 1984 to 1989. The sharp appreciation of the CFAF in terms of naira on

the black market and the increased cross-border imports from Nigeria have benefited Nigérien consumers, but they have played an important role in preventing Niger's modern sector from recuperating from the decline in uranium exports. At the same time, the economic austerity measures in Nigeria have resulted in declining real incomes and reduced demand by Nigeria for Niger's agricultural exports (Cook 1988).

The following chapter discusses the situation before structural adjustment, programs and policies implemented since 1983 to adjust demand and to restructure economic policies, and Niger's economic progress since 1980. Table 7 gives a summary of the external events that have contributed to Niger's financial difficulties, the role of donors in supporting structural adjustment and stabilization programs in Niger, and the steps taken to adjust the economy.

BOOM IN THE URANIUM MARKET AND THE 1982/83 CRISIS

Rising demand for nuclear energy following the 1973 oil crisis fueled an unprecedented period of growth in demand for uranium. World uranium prices increased by more than fourfold from 1973 to 1977. The Nigérien export price tripled (from less than CFAF 8,000 per kg in 1975 to almost CFAF 24,000 per kg in 1980). With the opening of a second uranium mine in 1978, Niger's uranium production increased from less than 1,500 tons in 1976 to slightly more than 4,000 tons in 1980. Growth in uranium production, combined with adequate rainfall and a government-supported herd reconstitution program following the drought in 1973, contributed to a period of extraordinary economic performance from 1976 to 1980.

The uranium boom provided budgetary resources and foreign exchange for the rapid expansion in public-sector and investment spending. The GON undertook an ambitious five-year (1979 to 1983) development program under which capital expenditure more than doubled. Development expenditure under the plan was highly concentrated on infrastructure — roads, transportation, and buildings — and on investments for the mining and agricultural sectors. Value added from construction and public works increased by more than sixfold (from CFAF 5 billion in 1975 to CFAF 32 billion in 1980). Employment in this sector reached a peak of 17,214 in 1979 and contributed about half of modern-sector employment outside government administration.

Foreign assistance, together with private international capital inflows, helped to finance a sizable portion of Niger's 1979 to 1983 investment program. Net multilateral and bilateral foreign assistance increased from US\$ 176 million in 1978 to US\$ 332 million in 1980 (including grants). Net foreign private capital inflows reached US\$ 121 million in 1978. Private capital inflows, however, were

Table 7 – Niger: Macroeconomic Adjustment Summary, 1976-1990

Calendar Year ^a	Exogenous Influences	Foreign Assistance	Economic Adjustments	Economic Outcomes
1976 to 1980	<p>Adequate rainfall; rising demand for nuclear energy contributes to increased uranium demand and prices; Niger uranium export price triples and uranium production rises by 166%; Nigerian naira becomes overvalued on official market because of increased petroleum prices and price inflation in Nigeria; parallel market CFAF/naira rate starts to fall.</p>	<p>International capital flows with foreign assistance finance sizable portion of 1979 to 1983 investment program; total net foreign capital inflows rise from \$176 million (1978) to \$332 million (1980) including foreign assistance, which rose from \$55 to \$253 million.</p>	<p>Government undertakes ambitious five-year development program (1979 to 1983); government spending and public sector expand rapidly; capital expenditure more than doubles between 1979 and 1980.</p>	<p>Value added in construction and public works expands; government expands parastatal sector; real GDP rises at an average rate of 11% per year.</p>
1981 to 1982	<p>16% drop in uranium export price in 1981; depreciation of French Franc and higher import prices lead to 25% decline in terms of trade; uranium export earnings fall in 1982 despite uranium price recovery caused by reduced export quantity.</p>	<p>Long-term, project-related foreign assistance drops sharply in 1982; the GON borrows on commercial terms and draws down external reserves to finance external deficit.</p>	<p>Investment expenditure reduced by 23% in 1981/82 budget; demand management measures introduced in 1982/83 budget include a freeze on public-sector wages and salaries, additional cuts in expenditure for supplies and investment goods, tighter control on foreign borrowing, and reductions in imports.</p>	<p>Real GDP stagnates; sizable fiscal deficit emerges with large expenditure and declining uranium-related budgetary receipts; the GON accumulates domestic arrears; austerity measures reduce fiscal deficit to 4% of GDP but foreign reserves are depleted and the GON faces severe liquidity crisis.</p>

Calendar Year ^a	Exogenous Influences	Foreign Assistance	Economic Adjustments	Economic Outcomes
1983	Uranium export volume falls by 10%, but export revenues rise due to 13% export price increase; 35% recovery in the external terms of trade but terms of trade index remains well below 1980 level.	The GON obtains \$19 million in IMF standby and \$25 million from IMF's compensatory financing facility; debt rescheduling reached with Paris Club.	1983 standby program limits growth of current outlays, reduces and restructures investment, restrains foreign borrowing, and decelerates rate of domestic credit expansion; structural adjustment measures include reductions in size of parastatal sector and liberalized pricing and marketing policies; under 1983 reforms, OPVN reduces personnel and number of buying centers (from 200 to 79); OPVN monopoly on purchase of domestic rice from RINI ended; water and electricity tariffs in urban centers raised 21%; COPRO-Niger monopoly on import and sale of 7 consumer goods abolished.	Real GDP declines by 3.6%; imports drop sharply; current account deficit declines from 18% of GDP to 13%; expenditure reduction affects investment outlays, which decline from 12% to 8% of GDP; fiscal deficit (without transfers) rises from 4% to 9.5% of GDP because of higher recurrent expenditure, but fiscal deficit (with transfers) is maintained at 7% of GDP.
1984	Nigeria closes border; Niger drought results in 30% decline in food production and 40% loss of livestock herd; the GON encourages livestock exports to reduce herder losses from the drought; real uranium export earnings increase because of higher export prices, but are well below 1980/81 levels; world spot uranium price falls by 5%, the first year of a steady 7-year decline.	Second IMF standby; USAID transfers \$5 million to the GON under rural sector development grant; USAID provides \$32 million agricultural sector development grant; first ASDG tranche (\$10 million) released unconditionally by end of year; additional debt rescheduling reached with Paris and London Clubs.	1984 reforms include strengthened tax administration; elimination of preferential duties on certain imports; higher excise taxes; the GON ends OPVN cereal and SONARA groundnut and cowpea marketing monopolies; floor prices for groundnuts and cowpeas introduced, but are set high enough to keep SONARA in the market; <i>taxe de péréquation</i> (CFAF 5,000) introduced to protect rice producers and domestic rice marketing agency (RINI) from cheaper rice imports; UNCC liquidated.	Drought lowers rural income and contributes to increased inflation; border closure forecloses major market for official agricultural and livestock exports; imports and investment outfall further in terms of GDP; fiscal deficit (without transfers) rises to 10% of GDP as drought and the border closure contribute to reduced GON revenues; fiscal deficit (with transfers) falls to 6% of GDP.

Calendar Year ^a	Exogenous Influences	Foreign Assistance	Economic Adjustments	Economic Outcomes
1985	Previous year's drought results in increased food aid transfers; weather and agricultural production improve; real export earnings from uranium decline.	Third IMF standby; debt rescheduling with Paris Club negotiated; second tranche (\$9.5 million) of ASDG released at end 1985.	The GON reduces subsidies on fertilizer, pesticides, and implements to 18%, 5%, and 24% of cost, respectively; establishes bid and tender system for replenishment of OPVN stock; makes plans to transfer CA input marketing duties to cooperative movement (UNC); remaining COPRO import distribution monopolies abolished; all import monopolies abolished except for petroleum products; number of consumer items and services subject to price ceilings reduced from 27 to 7; following study of parastatal sector, the GON classifies enterprises as to whether they should be liquidated, maintained, or privatized; the GON prohibits livestock exports to promote herd reconstruction.	With improved weather, real GDP grows by 8% and inflation declines; imports rise because of drought-induced increase in cereal imports; current account deficit worsens; investment outlays fall further as fiscal deficit improves.
1986	Nigeria reopens border; Nigeria officially devalues the naira (by 50% relative to the CFAF), eliminates price controls, and bans imports and exports of certain products, including cereals; decline in Nigerian real incomes reduces demand for Niger's exports while border sanctions promote parallel trade; Niger rice import price falls by 32%.	Fourth IMF standby; three-year \$60 million World Bank SAC-approved to support policy reforms for (1) public resource management, (2) reform of state-owned enterprises, and (3) agricultural policy; debt rescheduling negotiated with the London and Paris Clubs; USAID and the GON sign \$15 million health sector development grant.	Revised PIP introduced; the GON abolishes agricultural implement subsidies; the GON agrees to limit OPVN operations to managing 80,000-ton security stock; the GON suspends CNCA lending and CNCA accounts audited; the GON requires merchants to obtain 25% of rice supplies from RINI to reduce domestic surplus; <i>taxe de péréquation</i> for imported rice doubles to CFAF 10,000; value-added tax introduced (January); number of imported products with controlled margins declines from 200 to 64; the GON commences parastatal restructuring program; the GON allows livestock exports under quota for species other than cattle.	Real GDP rises by 3.5%; external current account deficit improves; imports decline from the drought-induced level of 1985; both development and recurrent expenditure rise relative to GDP with the result that the fiscal deficit (without transfers) increases to 10% of GDP; fiscal deficit (with transfers) declines.

Calendar Year ^a	Exogenous Influences	Foreign Assistance	Economic Adjustments	Economic Outcomes
1987	Uranium export earnings in real and in nominal terms fall because of a 25% decline in Niger's negotiated export price and to reduced export volume; late rains reduce crop production.	Three-year, \$30 million IMF structural adjustment facility approved; three-year \$80 million World Bank public enterprise sector adjustment program approved; third ASDG tranche (\$12.5 million) released in June; \$7 million ASDG extension approved to 1989.	Floor prices for coarse grains eliminated; regionalized price system applied for OPVN sales; taxe de péréquation on imported rice doubles to CFA 20,000 in January, but is reduced in June; number of importers allowed to import rice increased and quantitative import restrictions abolished; customs duties and VAT reduced 30%; number of goods subject to preset profit margins reduced from 64 to 39; number of goods subject to price ceilings reduced from 7 to 5; actions taken to liquidate 4 parastatals, to rehabilitate others, and to reduce the GON's equity; Niger allows cattle exports under quota.	Real GDP declines with lower agricultural production and uranium exports; reduced economic activity results in slower import growth, thus exacerbating the GON's fiscal problems.
1988	Uranium export proceeds continue to fall as Niger's export price continues to be negotiated downward as world price of uranium falls; weather and agricultural production improve.	Fourth (\$5.9 million) and fifth (\$4.2 million) ASDG tranches released; USAID provides \$15 million grant for export promotion under NEPRP; second ASDG extension for credit union development provides \$7 million; Paris Club debt rescheduled; commercial banks (London Club) agree to reschedule principal obligations due in 1989 and 1990. ^b	Official prices for cowpeas and groundnuts reduced; OPVN negotiates successful purchase for security stock through tender and bids; export duties on agricultural and livestock exports eliminated; number of commodities prohibited for import reduced from 11 to 5.	Real GDP increases by 1.2% with improved agricultural production, but slowdown in mining and in construction hinders growth; investment expenditure fall from 9% of GDP to 7%; recurrent expenditure remain at about 11% of GDP; fiscal deficit (without transfers) rises to 10% of GDP.

Calendar Year ^a	Exogenous Influences	Foreign Assistance	Economic Adjustments	Economic Outcomes
1989	Further drop in spot uranium price and in Niger's negotiated export price; poor weather conditions reduce agricultural production; the external terms of trade decline.	Debt relief obtained from Paris Club; three-year \$66 million enhanced structural adjustment facility (ESAF) from IMF; World Bank and the GON agree to reform program for education sector; ASDG extension through 1991 provides \$7 million, but requires additional reforms in input marketing, export promotion, agricultural credit, and natural resource management.	Special 2% import levy introduced; general 6% public sector wage increase; the GON agrees to limit public sector recruitment and to review civil service policy; number of imported goods subject to preset margins reduced from 39 to 20; official prices for groundnuts and cowpeas abolished; the GON agrees to set producer prices for cotton and rice more in line with world price; customs tariff on rice increased, and compulsory purchases from RINI ended; quantitative restrictions on vegetable oil imports ended.	Fiscal deficit (without transfers) projected to increase to about 11% of GDP with slow growth in GON's tax receipts and with increased investment outlays; real GDP declines by 5 percent.
1990	Niger's export price for uranium continues to deteriorate; the terms of trade are projected to decline further by 18 percent.	Discussions initiated with the World Bank for Niger to use the IDA debt reduction facility to buy back up to \$100 million of its commercial bank debt; debt rescheduling arranged with Paris Club.	Preset profit margins for all products abolished; import/export licenses eliminated; SONARA, SICONIGER, and SONERAN liquidated.	Fiscal deficit (without transfers) expected to increase to 11.6% of GDP; external current account deficit, excluding transfers, projected at 11.4 percent of GDP.

Sources: IMF (1985, 1986b, 1987a, 1987c, 1988a, 1988b, 1990a, 1990b).

^a Some policy reforms that were introduced at the start of the Nigérien fiscal year, which begins in October, have been placed in the row for the following calendar year. For example, some policies introduced from October to December 1984 may be found in the row for 1985.

^b Agreement not implemented because the GON did not make the required payments.

largely in the form of debt instead of equity, with an increasing portion having nonconcessional terms. Before 1978, Niger had run small surpluses on its balance-of-payments account. Although these surpluses grew into deficits during 1978 to 1980, they were considered to be manageable given the country's export potential and its access to foreign capital.

The favorable uranium situation proved to be short-lived for Niger. Niger's negotiated export price declined by 16 percent in 1981. The export price recovered in 1982, but by that time, the depreciation of the CFAF relative to the dollar had contributed to a 40 percent increase in Niger's import price index and to a 25 percent deterioration in the terms of trade. Reduced export demand contributed to a decrease in Niger's uranium production – from more than 4,300 tons in 1981 to 3,400 tons in 1983 – and to a 10 percent reduction in Niger's uranium export earnings from 1980 to 1982. Net foreign assistance also declined by 35 percent, to \$217 million, in 1982.

The turning points for the Nigérien economy occurred in 1981, when the budget deficit more than doubled, and in 1982, when the overall balance-of-payments deficit reached a then record high of CFAF 43 billion (7.2 percent of GDP). In addition to the changes in the uranium market, past government policies also contributed to poor economic performance. These policies included the practice of prefinancing projects in anticipation of exceptional foreign assistance. This practice led to large extra budgetary capital expenditures (USAID 1986b). Moreover, many parastatals that had been created during the uranium boom were heavily in debt and generating net operating losses. The total outstanding debt (domestic and foreign) of the parastatals was estimated at about CFAF 120 billion at the end of December 1983, or 18 percent of GDP. Four parastatals, including OPVN, UNCC (Union Nigérienne de Crédit et de Coopération), SONICHAR (Société Nigérienne de Charbon), and OPT (Office des Postes et Telecommunications), accounted for 75 percent of this sector's indebtedness (IMF 1987a).

The GON responded by sharply cutting investment expenditure, which had reached about 19 percent of GDP in both 1980 and 1981. Demand management measures introduced in the 1982/83 budget included a freeze on wages and salaries, tighter controls on foreign borrowing, reduced purchases of material supplies, and reduced investment expenditure.

Devaranjan and de Melo (1987) have noted that in the CFAF zone, where monetary policy is largely in the hands of the BCEAO and nominal exchange rates remain fixed, the automatic response to an external deficit is a decline in the money supply. This response is because countries in the zone have limited means to sterilize the decline in bank assets that occurs from an outflow of

international reserves. In Niger, the balance-of-payments deficit was financed by drawing down official reserves, which, in turn, resulted in a 12 percent drop in the money supply. By 1983, the country was in a severe liquidity crisis, which, combined with difficulties in servicing its external debt, compelled the Nigérien authorities to initiate a formal stabilization and adjustment process with the IMF and other donors in mid-1983.

STRUCTURAL ADJUSTMENT AND STABILIZATION POLICY, 1983 TO 1990

The general condition for a successful SAP is that it reduce chronic imbalances in a country's external and internal deficits to more manageable levels. This reduction is achieved through a decline in the prices of domestic goods relative to traded goods, as defined by the real exchange rate. A depreciation in the real exchange rate indicates that production incentives have changed in favor of traded goods and that consumption incentives have changed in favor of domestic goods. Both of these developments reduce an external/internal deficit.

In general, two paths can be followed to achieve a real exchange rate decline. First, stabilization, or demand management policies, concentrate on reducing the availability of domestic credit to the economy and on reducing the budget deficit. These policies discourage domestic absorption by lowering the relative prices of domestic goods and, thus, real domestic income. Second, structural adjustment or expenditure-switching policies concentrate on increasing the profitability of export- and import-competing activities relative to domestic activities through exchange rate, price liberalization, or other incentive changes (see Scobie 1989 for more details).

While both types of adjustment paths will achieve a real exchange rate depreciation, they have two different economic effects. Demand management policies lower domestic prices (and real wages), but they often result in unemployment. Expenditure-switching policies, which usually work through a depreciation of the nominal exchange rate, switch expenditure from tradables to nontradables, and thus tend to contract the economy less. Unless there is considerable excess productive capacity in a country, expenditure-switching policies are usually accompanied by some demand management policies. Otherwise prices of domestic goods would rise so as to offset the initial depreciation of the exchange rate (IMF 1986b).

Because Niger was experiencing a severe liquidity crisis and could not adjust its exchange rate, Niger's adjustment program initially concentrated on demand management and fiscal policy reforms. In the later years, it has focused more on structural adjustment policies.

Economic Stabilization, 1983 to 1985

The standby agreements negotiated by the IMF and the GON from 1983 to 1986 concentrated on reducing Niger's structural imbalances through actions in seven priority areas. These included (1) limiting the growth of current expenditure, (2) improving tax collection, (3) reducing and restructuring investment expenditure, (4) reducing the GON's domestic arrears, (5) improving the financial performance of parastatals, (6) restraining foreign borrowing, and (7) decelerating the rate of domestic credit expansion. The agreements also included some elements of structural adjustment policy as they committed the GON to liberalize pricing and marketing policies, particularly in respect of agriculture, to reduce the influence of the parastatals and to reorient public investment more toward directly productive areas. These policies were expected to make the traded sectors more competitive while reducing the GON's financial commitments.

Financial assistance from the IMF in the early years of Niger's SAP was supplemented by exceptional extra budgetary assistance from the French government. In addition, the IMF programs allowed the Nigérien authorities to reschedule debt owed to the Paris Club (1983 to 1986, 1988 to 1990) and to the London Club (1984, 1986, 1988). The IMF's and Paris Club's assistance has helped finance budget and current account deficits since 1983. However, the 1988 London Club debt rescheduling was never put into effect because the GON did not make a required payment. In 1984 the USAID signed a US\$ 29 million agricultural sector development grant (ASDG) with the GON. The ASDG disbursed assistance through four successive tranches that were conditional on actions taken by the GON in the agreed areas of agricultural policy reform. The first tranche of US\$ 10 million was provided unconditionally at the end of 1984 after the GON decided to end the crop marketing monopolies of OPVN and SONARA. From 1983 to 1985, significant policy adjustments were made to accomplish the following:

Reduce the Budget Deficit. The quantitative ceilings established under the IMF standby programs reduced the GON's budget deficit and restrained the growth of net credit to the economy. The GON introduced changes into the distribution of credit by allocating a larger portion of the credit to the private sector. The budget deficit was reduced primarily by lowering public investment expenditure, which, by 1985, had fallen to 7 percent of GDP. Total real public expenditure (deflated by the GDP deflator) fell by 32 percent from 1982 to 1985 largely because of an 88 percent decline in the investment program. The budget deficit improved from a high of 11 percent of GDP in 1981 to approximately 9 percent in 1985.

To improve the productivity of public investment, the GON introduced a rolling three-year public investment program (PIP) in consultation with the World Bank. This program was linked to the annual preparation of the recurrent budget. It reoriented spending more toward the directly productive sectors (such as agriculture) and less toward infrastructure, mining, and social services.

GON expenditure on wages and salaries declined by 12 percent in real terms in 1984. Efforts were also made to increase cost recovery in the areas of irrigation, water supply, educational materials, and hospital services.

Stabilize the Balance of Payments. In 1983 Niger's overall balance of payments reached a surplus of CFAF 4.8 billion (or 1 percent of GDP), and the current account deficit (including transfers) had dropped by more than half (to about 4 percent of GDP). This drop was largely accomplished by reducing the volume of goods imported through official channels. The 1984 drought and closure of the Nigerian border resulted in an increase in the current account deficit that was financed primarily through debt relief.

Improve Tax Collection. Following a comprehensive tax study by the IMF, a tax reform program was put into effect in 1983/1984. The tax program

- Increased penalties for tax avoidance
- Standardized taxes on income and profits
- Eliminated preferential duties on certain imports
- Revised upward the customs valuation base (*valeurs mercuriales et barémées*)
- Raised excise taxes, stamp duties, and registration fees on certain commodities and services (petroleum products, tobacco, beer and other alcoholic beverages, soft drinks, telecommunications services, vehicle registration fees, and insurance services)
- Adopted revised property and estate tax codes
- Introduced a VAT (January 1986)

The tax burden borne by official imports rose steadily from 1983 to 1986 under the program. The VAT replaced the previous system of turnover taxes on production and services plus a local tax. The VAT was implemented to aid the export sector. Because export goods are exonerated from the tax, the VAT was expected to result in higher prices for producers and in increased profitability of export activities.

Reform Public-Sector Enterprises. Price adjustments, reductions in personnel expenditure, trade liberalization, and improvements in management and accounting systems were initiated for seven major enterprises -- OPVN, COPRO-NIGER, NIGELEC (Société Nationale d'Electricité), SONICHAR, OFEDES (Office d'Exploitation des Eaux du Sous-Sol), BDRN, and CNCA in September 1983. The GON reduced the number of OPVN buying and distribution centers, and it raised the tariffs on electricity, water, and telecommunications services. The GON also closed 17 COPRO-NIGER retail outlets, eliminated half of its work force, and removed its monopoly on the distribution of seven major consumer goods. In 1984, it was decided to liquidate the UNCC, which had been charged with organizing village-level farmer cooperatives and with administering the agricultural cooperative movement. It was replaced with the UNC, a private association.

A comprehensive study of 54 parastatals was undertaken in collaboration with the World Bank to make recommendations on what actions the GON should take in restructuring the public-enterprise sector. Following completion of this study in 1985, it was decided to retain 25 enterprises, integrate 4 enterprises into public administration, privatize fully or partially 22 enterprises, and liquidate any of the latter for which divestiture proved impossible.

Reform Pricing and Marketing. Pricing and marketing policy changes were implemented to reduce the financial burden of parastatal operations on the government and to improve marketing and pricing efficiency. In late 1984, the GON liberalized marketing and pricing for cereals by eliminating OPVN's monopoly on millet and sorghum purchases and imports. SONARA's legal monopoly on cowpeas was also abolished, and individuals and cooperatives were allowed to market alone or through SONARA. The GON abolished all import distribution monopolies, except for imports of petroleum products in October 1985. In late 1985 it also reduced the number of products subject to price ceilings from 27 to 7.

Reform Agricultural Policy. The ASDG committed the GON to undertake specific agricultural policy reforms in the following four broad areas:

- Agricultural inputs — reduction of agricultural input subsidies and improvement of efficiency and competition in agricultural input markets
- Cereals marketing reform — removal of all restrictions and fiscal impediments to movement of grains, reduction in activities of official grain marketing agencies to managing a food reserve stock, to handling food aid, and to supplying cereals to collective consumers

- Agricultural export policy – reduction of administrative and fiscal controls on border trade, particularly those on exports of livestock and cowpeas
- Agricultural credit – conduct of an agricultural credit study as a basis for further actions on agricultural credit reform

The first tranche of the ASDG was released unconditionally because of the GON decisions to end both the OPVN and SONARA monopolies on crop marketing. By so doing, the GON was considered by USAID to have met the ASDG's *conditions précédents*. The second tranche was released at the end of 1985.

Structural Adjustment, 1986 to 1990

The Nigérien economy reached most of the stabilization objectives set in the IMF accords by 1985. Since 1986, SAP initiatives have focused more on structural adjustment than on stabilization. The last IMF standby agreement activated in 1986 was transferred to a three-year structural adjustment facility (SAF) in 1987. A three-year US\$ 60 million World Bank structural adjustment credit (SAC) was implemented in 1986. Structural adjustment measures supported by the SAC and SAF basically extended the actions that had been taken earlier in the areas of public resource management and of parastatal and agricultural policy reform. The World Bank's US\$ 80 million public enterprise sector adjustment program (PESAP) supported a continuation of GON's efforts to restructure the public enterprise sector. Agricultural measures proposed by the World Bank's SAC largely paralleled those of USAID's ASDG, which was amended in 1987, 1988, and 1989. USAID complemented its agricultural assistance with a health sector development grant (HSDG) in 1986 and with further assistance for agricultural export promotion under its NEPRP in 1988. From 1986 to 1990, policy adjustments were made to accomplish the following:

Reform Agricultural Policy. Agricultural policy reforms in the World Bank's SAC largely focused on the same areas that had been included in the ASDG. These included (1) cereal pricing and marketing, (2) agricultural input subsidies, (3) agricultural credit, and (4) agricultural research. In 1986, the GON agreed to limit OPVN operations to managing a food security stock of no more than 80,000 tons of cereals. The GON also agreed that OPVN grain purchases and sales out of this stock would be conducted under a tender and offer system. Agricultural input subsidies were reduced, on average, to no more than 15 percent of cost during this period. Subsidies on the purchase of agricultural implements were eliminated for the 1985/86 season.

Lending operations of the CNCA, the responsible agency for seasonal credit, were suspended in 1986 and an audit instituted. (The CNCA's agricultural lending had [in practice] been halted since August 1982.)

Reform Public-Sector Enterprises. By 1987, 16 public enterprises had been privatized, integrated into government agencies, or liquidated, and 7 key enterprises were undergoing rehabilitation. In 1988/89, decisions were made to liquidate three additional public enterprises — Air Niger, CNCA, and Société Nigérienne de Fabrications Métalliques (SONIFAME) (metals). Reorganization plans for OPVN and RINI were adopted in 1988. Emergency measures were also adopted in 1987 to help RINI to reduce its rice stocks as the latter had been unable to market its output profitably because of its high costs compared to the price of rice imports.

Agricultural parastatal reforms also met the requirements for the agricultural policy reforms of the ASDG and SAC. OPVN's purchase price for coarse grains was abolished in the 1986/87 season. SONARA's official prices for peanuts and cowpeas were abolished in favor of indicative (floor) prices in 1987/88. Government price intervention for peanuts and cowpeas was eliminated in the 1988/89 season.

Reform Pricing and Marketing. Consumer pricing reforms eliminated par-territorial pricing for cereals and introduced price differentials to reflect variations in transportation and distribution costs among regions. In 1987, the number of imported goods subject to the system of preset profit margins was reduced further from 64 to 39 products, and the number of products subject to fixed price ceilings was reduced further from 7 to 5 products. In 1990, the GON removed all controls on prices, with the exception of prices of certain strategic goods and services.

Reform Customs, Trade, and Tax Policy. In May 1987 the GON reversed its customs tariff policy of the previous five years by reducing the duty rates applying to a large number of imported goods, as well as the domestic VAT. This action was taken to reduce the rising tax fraud. Other measures were introduced to offset the initial decline in tax revenues that were exported. These measures included a strengthened enforcement of customs regulations and anti-smuggling measures, increased duties on transit goods, a revised customs valuation base, and an added 2 percent levy on imports (*précompte forfaitaire à l'importation*) applied to large informal-sector importers.

Under IMF/World Bank pressure, the GON eliminated domestic purchase obligations for rice that had been instituted earlier to ensure that the domestic rice marketing agency, RINI, was able to sell its accumulated rice stocks. Limits

on the number of traders allowed to import rice were also abolished. Export duties on agricultural and livestock products were eliminated in 1988, as were the export quotas for livestock that had been introduced after the 1984 drought.

STRUCTURAL ADJUSTMENT AND STABILIZATION: MACROECONOMIC EFFECTS

Membership in the CFAF zone, in principle, might allow a country to delay adjustment to a foreign exchange crisis because of the borrowing facilities of the BCEAO. Plane (1989) has shown that Niger did not make use of the borrowing facility, and previously it was shown that Niger responded to its crisis by immediately reducing investment imports and expenditure. The automatic adjustment to a balance-of-payments deficit in a fixed exchange rate country like Niger is a sharp decline in liquidity. This decline forced the GON to seek recourse to IMF borrowing and to debt rescheduling in order to stabilize its external and internal account imbalances. In this regard, it should be noted that if Niger had not sought access to IMF resources, its money supply would have continued to fall until the contraction in liquidity had eliminated the deficits. Niger's access to external resources through the IMF and other donors has allowed it to cushion its economy from many of the adjustments that otherwise would have had to be made.

The following examines Niger's current macroeconomic situation. The extent to which the trade and fiscal balances have been stabilized and the real exchange rate reduced since introduction of the SAP are of particular concern.

Trade and Fiscal Balances

Niger's early stabilization efforts resulted in a sharp improvement in its official balance of payments and in a reduction in its fiscal deficit. From 1983 to 1989, the balance of payments has actually been in surplus (Figure 12). The current account deficit (without transfers) improved from about 18 percent of GDP in 1982 to about 10 percent in the most recent period, while the current account deficit (with transfers) improved from 9 percent in 1982 to 4 or 5 percent of GDP. In addition to grants, the capital account has been increasingly financed by debt reschedulings as net inflows of public long-term capital declined sharply during the SAP. The GON has not undertaken any nonconcessional financing since 1981.

The external current account adjustment occurred largely through a sharp reduction in official imports, which, in real terms, remain below pre-1981 levels (Figure 13). Although structural adjustment efforts concentrated on raising the profitability of export activities, real (official) export earnings have also declined to below pre-1981 levels because of the contraction in demand for uranium

(Figure 14). While official trade data do not reflect any increase in unofficial exports that may have occurred under structural adjustment, reduced uranium exports have forced the GON to stabilize its official trade balance at a much lower import level.

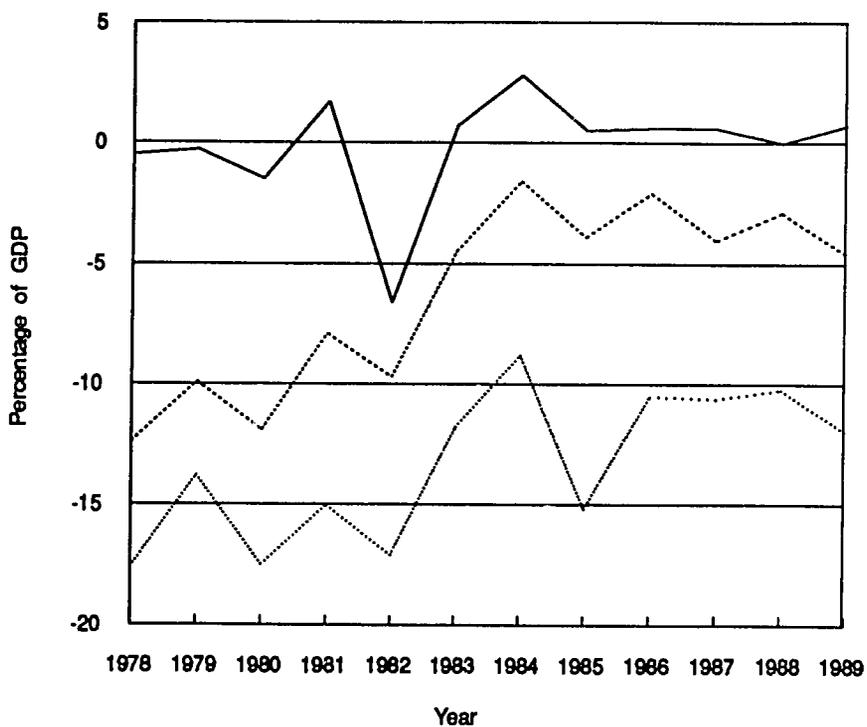
Developments in the fiscal accounts parallel those of the trade accounts. Niger's public-sector deficit was reduced from 11 percent of GDP in 1981 to about 9 percent in 1983 (Figure 15). However, since 1983, the fiscal account (without grants) has remained constant at about 11 percent of GDP, while being increasingly financed by transfers from abroad. The sharp cutback in imports by the GON is reflected in the GON's development expenditure, which has fallen sharply since 1981. Recurrent expenditure, on the other hand, has risen (Figure 16).

The Real Exchange Rate and Economic Growth

Because the CFAF is fixed to the French franc, movements in Niger's real exchange rate are determined by changes in the value of the French franc vis-à-vis other currencies, and by movements in the Nigérien prices relative to the prices of its trading partners. Changes in Niger's real exchange rate must be examined at two levels, the official and the unofficial. First, the real official exchange rate (real X/R IMF) is calculated using official exchange rates and official trade statistics. It excludes the substantial portion of Niger's trade that takes place unofficially across the border with Nigeria. As shown in Figure 17, this exchange rate stagnated in 1981 and 1982, but then declined sharply from 1982 to 1983. Several factors contributed to the depreciation in Niger's real official exchange rate during this period. These factors included reduced government expenditures for wages and salaries under the 1983/84 IMF stabilization program and decline in real GDP from 1982 to 1983 (see Table 8), both of which contributed to a decline in domestic prices relative to those of traded goods. A 10 percent decline in the value of the French franc in relation to the dollar from 1980 to 1984 also assisted the real exchange rate depreciation.

Niger's real official exchange rate depreciated steadily from 1984 to 1989. The improvement in Niger's official trade balance reflects this exchange rate depreciation. The real official exchange rate probably would have declined even more had the GON not increased its real expenditures on wages and salaries in the 1984/85 budget and in subsequent budgets. As will be discussed in section 5, much of the decline in Niger's price level relative to the price levels of its official trading partners, particularly after 1986, is attributable to declines in the prices of goods that are imported from Nigeria or that compete with goods from Nigeria (Université de Clermont 1989).

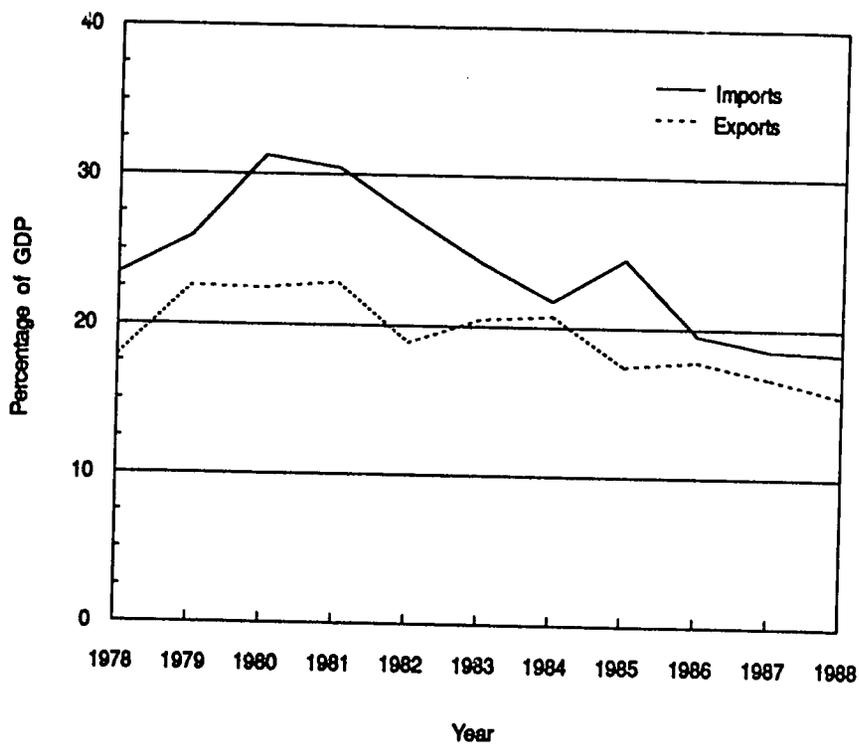
Figure 12 — Niger: Balance of Payments as Percentage of GDP, 1978-1989



— Overall balance
 Current account with transfers
 -.-.-.- Current account without transfers

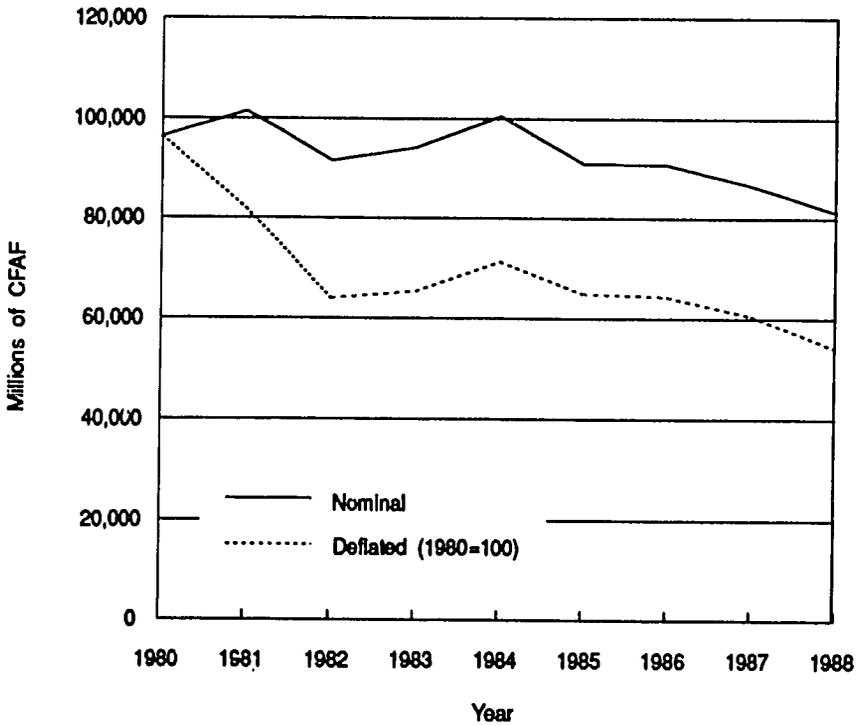
Source: IMF (1985, 1988a, 1988c).

Figure 13 — Niger: Exports and Imports as a Percentage of GDP, 1978-1988



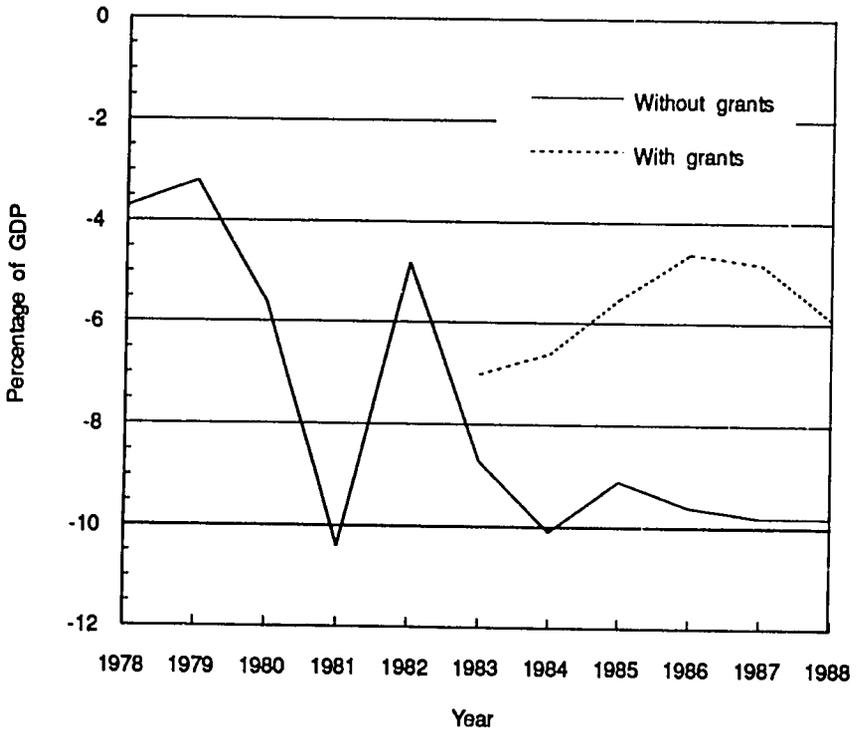
Sources: IMF (1985, 1988c).

Figure 14 — Niger: Uranium Export Proceeds, Nominal and Deflated by Import Price Index, 1980-1988



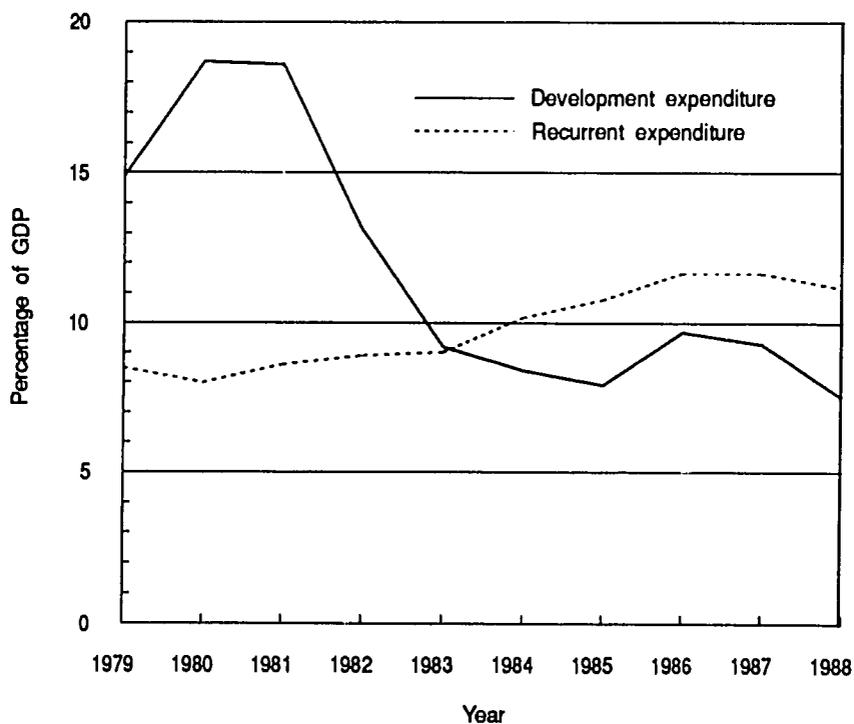
Sources: IMF (1985, 1988c).

Figure 15 — Niger: Public Sector Fiscal Account as a Percentage of GDP, 1978-1988



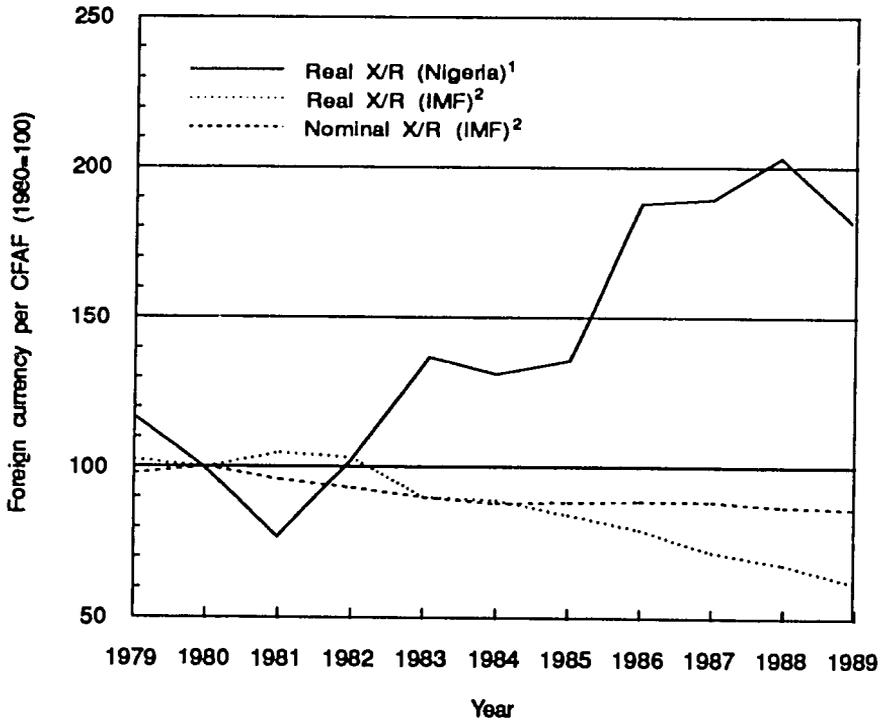
Sources: IMF (1985, 1988c).

Figure 16 — Niger: Expenditures as Percentage of GDP, 1979-1988



Sources: IMF (1985, 1988c).

Figure 17 — Niger: Real and Nominal Exchange Rate Indices, 1979-1989



Sources: IMF (1985, 1988c, 1990b); Ministère du Plan (1989b, 1990a).

¹ Parallel Rate.

² Real and nominal exchange rates (IMF) are calculated by the IMF using Niger's published trade statistics.

Table 8 – Niger: Change in Real GDP Growth, 1980-1988

Year	Percent Change from Previous Year
1980	4.9
1981	2.9
1982	0.2
1983	-3.7
1984	-13.5
1985	7.8
1986	3.7
1987	-1.1
1988	6.1

Sources: IMF (1985 and 1990b).

The second real exchange rate measure (real X/R Nigeria) is calculated using the black market exchange rate at Zinder, Nigeria, and the relative price levels of Niger and Nigeria. Using this exchange rate measure, Niger's real exchange rate shows a marked increase since 1982. Thus an opposite adjustment appears to have occurred in Niger's informal trade balance. The sharp increase in the real unofficial exchange rate with Nigeria indicates a drop in Nigérien competitiveness and increased cross-border imports.

An important issue in Niger's adjustment process is whether or not a devaluation could have reduced the need to rely on stabilization (demand management) measures to achieve the required adjustment. It can be argued that adjustment to an external deficit leads to a greater contraction in the economy – and is thus more painful – when devaluation or depreciation of the nominal exchange rate is ruled out (Mundell 1961). For a “small country” – that is, a price taker on the international market – devaluation is beneficial insofar as it instantly changes the structure of relative prices in favor of goods open to international trade. Moreover, if an economy has large unused production capacities, such as Niger's, it is possible that a considerable portion of the adjustment can be accomplished by the growth of supply (structural adjustment) rather than the curbing of demand (stabilization). In Niger's case, however, it

is not clear that a nominal exchange rate devaluation could have reduced the need for a strong stabilization program. Niger's external problems were caused by a contraction in demand for uranium. Moreover, its export prices are negotiated in CFAF. Thus, producer revenues from uranium exports in CFAF would not have been affected by the exchange rate devaluation unless the devaluation was passed through in the form of higher negotiated contract prices. Given the external demand situation for uranium, however, the scope for such negotiated price increases has been limited, particularly in view of the fact that Niger's uranium subsidy is currently being phased out.

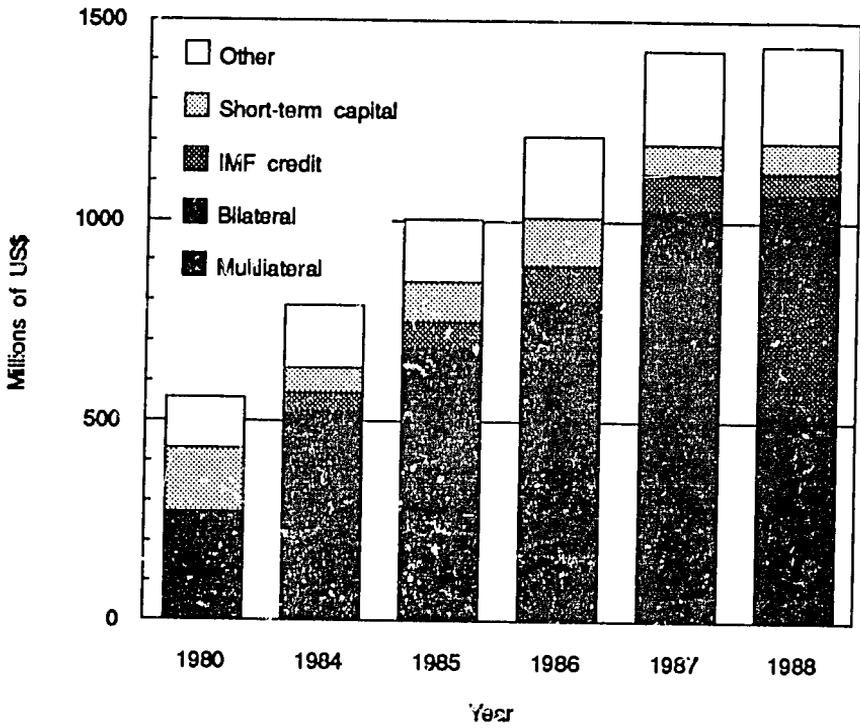
The effect that an official devaluation would have on the black market exchange rate with Nigeria is also not clear because this market serves as an important source of foreign exchange for Nigerians. Thus, the unofficial exchange rate is affected more by official Nigerian exchange rate policy and by the savings behavior of Nigerians than by policies taken in Niger. If the devaluation had no effect on this market, it would raise the prices of official imports and thus encourage unofficial cross-border imports from Nigeria, all other things held constant. However, it has been argued that if it were possible for Niger to depreciate its currency in relation to the naira on the black market, then Niger's agricultural exports to Nigeria would increase (Cook 1988, 1989; Shapiro and Berg 1988; Rassas et al. 1989).

Compensatory Financing and Foreign Debt

Since 1980, Niger's outstanding debt has tripled, from US\$ 500 million in 1980 to almost US\$ 1.5 billion in 1988 (Figure 18). A large part of the new debt has been contracted with bilateral donors, with whom outstanding debt has increased from about US\$ 100 million in 1980 to about US\$ 600 million in 1988. Niger's outstanding debt to multilateral institutions has increased from about US\$ 150 million to US\$ 600 million. In addition to new debt, the increase in outstanding debt to bilateral donors represents the successive debt reschedulings that have occurred since 1983. As shown in Figure 19, debt relief and official transfers have been the most important forms of compensatory financing under Niger's SAP as net public long-term capital inflows are less than one-third of their 1981 levels. Niger's total outstanding debt fell by 18 percent (in terms of CFAF) in 1989 because of debt cancellations by France, Belgium, and the United States.

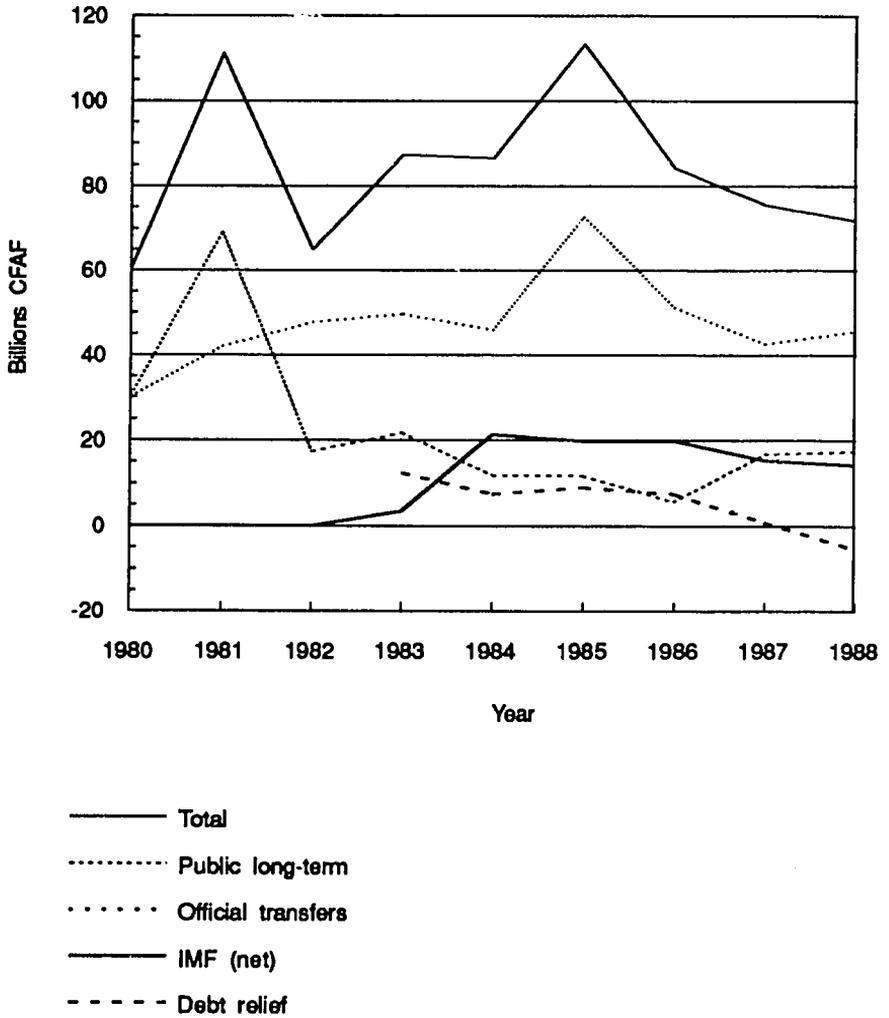
Combined with the decline in international uranium spot prices and the gradual elimination of Niger's uranium export price subsidy, Niger's debt overhang is particularly ominous for both current and future economic growth. Declining export earnings and increasing debt service leave little room for Niger to raise its investment expenditure and to invest in the social development of its

population. Niger's debt service as a percentage of exports of goods and nonfactor services (after debt rescheduling) has increased from 25.6 percent in 1984 to 31.1 percent in 1989 (IMF 1990b). Thus, while structural adjustment and stabilization policies appear to have been successful in reducing Niger's chronic fiscal and trade imbalances of the early 1980s, it is not clear how Niger is going to return to the upward growth path that it experienced during the 1970s.

Figure 13 — Niger: Debt Outstanding, 1980-1988

Source: World Bank (database b).

Figure 19 — Niger: Compensatory Financing, 1980-1988



Sources: IMF (1985, 1988c).

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5.

Social Adjustment Issues and Niger's SAP

BACKGROUND

Scobie (1989) has noted that to be successful in reducing current account and fiscal deficits, a structural adjustment and stabilization program must affect the relative rewards among factors used in the tradable and nontradable sectors and, thus, affect the income distribution between the two sectors. Khan and Lizondo (1987) have suggested, however, that if a deficit were eliminated entirely through a reduction in public-sector expenditures on traded goods, there would be no need for a decline in the real exchange rate to increase the supply of tradable goods.

As noted in the previous chapter, Niger's current account and fiscal deficits was reduced largely by the GON's lowering its imports of investment goods. Because the development budget had been used to support projects in infrastructure, construction, and public works, the decline in investment spending was initially accompanied by a reduction in labor demand and in real wages. This reduction also contributed to the decline in the real exchange rate.¹⁰ The theoretical literature cited above suggests, however, that the real exchange rate depreciation and the decline in real wages would have been even larger if the deficits had been eliminated entirely through reduced public-sector expenditure on nontraded goods or through higher taxes.

The direct social effects of Niger's SAP are difficult to identify for four important reasons: First, Niger's financial difficulties were caused by its overspending in relation to its financial assistance and its realized revenues from the uranium boom. Thus stabilization and structural adjustments to reduce domestic absorption would have had to be made anyway. Any analysis of the effects of structural adjustment on different social groups should compare the current situation with the hypothetical one that would have occurred if the GON had not undertaken a stabilization and structural adjustment program. As it is, international donors helped to cushion the effect of the decline in uranium revenues on the economy and to stretch out the adjustment period. This was done through the price subsidy for Niger's uranium exports, repeated debt

¹⁰ It is interesting to note that the strategy of using labor-intensive methods to implement development projects is currently being discussed by the GON with the World Bank.

rescheduling with the London and Paris Clubs, and through grants, structural adjustment and standby loans provided by multilateral donors.

Second, economic growth during the course of the SAP has been significantly affected by exogenous factors. The drought in 1984 reduced rural income and decimated the country's livestock herd. Moreover, the strong value of the CFAF in terms of naira on the parallel foreign exchange market has promoted unofficial cross-border imports from Nigeria and has hindered the ability of the modern private sector to recover from the decline in uranium production and trade. It is true that consumer prices have declined since the introduction of the SAP and that price declines have benefited the urban sector, but it is not clear whether price movements are due to the SAP's price liberalization measures or to the events in Nigeria.

Third, the link between the SAP and economic growth is particularly tenuous given the fact that many SAP reforms, with the exception of those that affected formal-sector activity, were concerned with changing policies that had little direct effect on economic incentives before introduction of the SAP. These policy changes reduced income transfers to specific interest groups, as well as the budgetary cost to the government, but they appear to have had little measurable impact on producer behavior.

Fourth, it is necessary to have a poverty profile of the population before analyzing the effects of structural adjustment and stabilization policies on different income groups. Such a profile would provide an initial characterization of the different income groups and would identify the important economic characteristics of each group. It could also include information on production activities, consumption patterns, holdings of land and other assets, and access to government services and to formal markets. We do not currently have this information for Niger. However, a poverty profile for rural households in western Niger will be available from the International Food Policy Research Institute (IFPRI) at the end of 1991.

Despite the above, however, in the following sections we examine some specific policy reforms that were made over the course of the SAP, and we assess the relative effects of the reforms on prices and incomes in the agricultural and urban sectors. This type of analysis is useful in that it summarizes the information that is available on the economic effects of the SAP and on the extent to which the policy reforms may or may not have affected household incomes in Niger. The specific effects of structural adjustment policies on income distribution in Niger will be analyzed further through the social accounting matrix (SAM) and the computable general equilibrium (CGE) model of the Nigérien that are currently being developed by CFNPP.

STABILIZATION, STRUCTURAL ADJUSTMENT, AND ECONOMIC GROWTH

Trends in Niger's aggregate, rural, and nonrural per capita real gross domestic product from 1978 to 1989 are shown in Figure 20. As mentioned previously, the specific effects of structural adjustment and stabilization policies on these trends are difficult to assess because of the significance of exogenous forces on the Nigérien economy.

Nonetheless, the data show that Niger's real aggregate per capita GDP during the period from 1984 to 1989 has been roughly 13 percent below, on average, the real per capita GDP of the 1978 to 1983 period. Both rural and nonrural real per capita appear to have declined from 1981 to 1984, although the specific causes of these declines (reduced uranium activity, poor weather) may have been different. Real per capita GDP generated in the rural sector was roughly equivalent to the per capita GDP of the nonrural sector during 1978 to 1983. However, since 1983 real rural per capita GDP has consistently been below that of the nonrural sector, with the exception of 1988. The direct effects of the 1984 drought on the agricultural sector accounted for roughly two-thirds of the reduction in real aggregate GDP in 1984 (USAID 1986b).

Real value added per worker in the urban modern sector fell by 12 percent from 1980 to 1984. From 1984 to 1989 it fell by only 2 percent. In total, per capita GDP generated in the nonrural sector appears to have stabilized between 1984 and 1987. It declined slightly from 1987 to 1989.

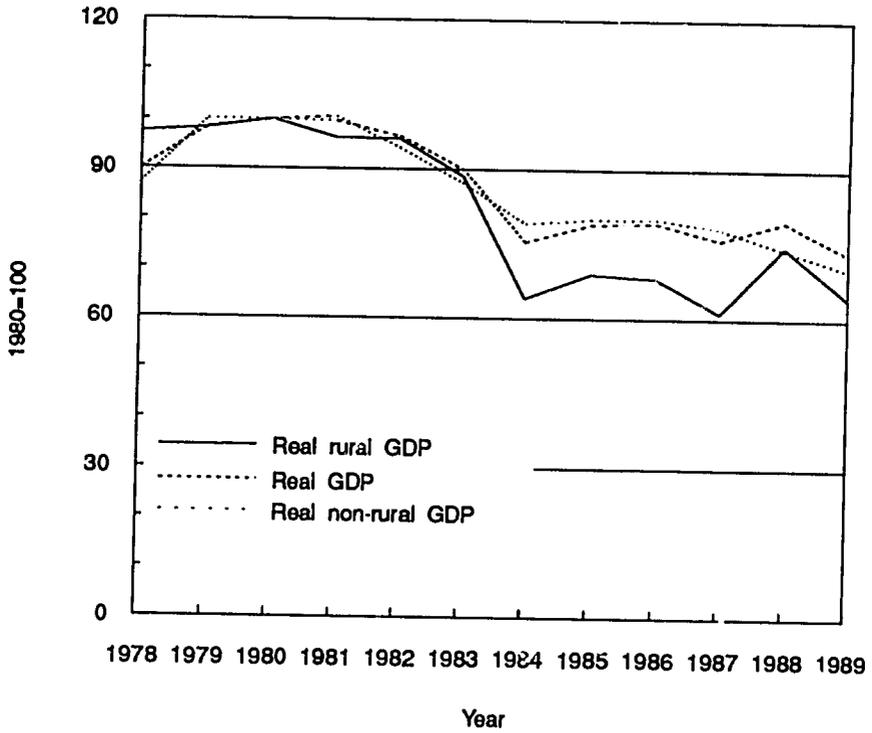
STABILIZATION, STRUCTURAL ADJUSTMENT, AND URBAN EMPLOYMENT AND EARNINGS

Labor Policy During the Uranium Boom, 1977 to 1981

During the period of the uranium boom, the GON channeled much of its resources into the creation of urban employment opportunities in government administration, as well as in the private sector and among parastatals. As shown in Table 9, employment in private and public enterprises rose by about 7 percent per year from 1977 to 1981, or from about 26,716 to 37,020 employees. Employment in the mining sector almost doubled during this period — from 2,213 to 4,265. Much of the remaining increase in private and parastatal employment occurred in construction, where employment rose from 10,716 persons in 1977 to 17,214 in 1979, and accounted for almost 50 percent of this employment in 1979. The number of employees in government administration similarly rose at an annual rate of about 8 percent from 1977 to 1981.

Real wages among private and public enterprises also rose from 1977 to 1981 as denoted by the 17 percent increase in the real value of the SMIG, the

Figure 20 — Niger: Indices of Real per Capita GDP, Total, Rural, and Nonrural, 1978-1989



Sources: IMF (1985, 1990b); Ministère du Plan (1990a).

guaranteed hourly wage for people working at least 40 hours per week in the industrial sector (Table 9). Average expenditure on salaries and wages per government employee rose at a much lower rate over the period, about 3 percent, indicating the GON's interest in using uranium revenues more for job creation than for raising real incomes per government worker.

Despite the rise in the value of the SMIG from 1977 to 1981, its rate of increase was less than the increases in the government-determined purchasing prices for cowpeas and millet (Table 9). This fact suggests that while the uranium boom benefited primarily the urban sector, the GON also attempted to share the benefits of the boom with the agricultural sector through its agricultural pricing policy. However, since most purchases were made on the unofficial markets, at prices generally above the official prices, it is not clear that this type of intervention was either effective or efficient in transferring income to this sector.

Labor Policy During the Adjustment Period

Modern-sector employment fell drastically following the slowdown in the uranium market in 1981 and under the GON's successive stabilization programs. The most immediate response to the slowdown was in the construction sector, where employment fell from 17,000 in 1979 to about 3,000 employees in mid-1985. Employment among private and public enterprises continued to fall steadily through 1988 to a level of about 24,000. Government employment, in contrast, stagnated at about 26,000 to 28,000 from 1981 to 1983, but it has risen steadily since 1984. As a result, total employment in the modern sector has declined by about 6 percent from its 1981 level, but the government's share has risen from 42 percent of modern-sector employment to 60 percent.

The increase in government employment, which reflects the shift in the GON's spending pattern from investment to increased current expenditure, has obviously cushioned the effect of the decline in the uranium market and the stabilization program on the modern sector. Although total modern-sector employment remained roughly the same from 1981 to 1988, the labor force has continued to rise at roughly the same rate as the overall population. Thus, the informal sector has had to absorb the additional workers during this period.

Downward adjustments in real wages and salaries played an important role in the adjustment process under the SAP. By 1984, the real value of the SMIG was 15 percent less than its 1981 level (Table 9). Government expenditures on wages and salaries, as deflated by the CPI, also stagnated during the 1980 to 1984 period as the number of workers rose by about 20 percent. Thus, real wages per person employed in the public sector fell during this period.

From 1984 to 1988, the real value of the SMIG and the wages of public-sector workers increased. These increases were due to the decline in the CPI. The

Table 9 – Niger: Evolution of Labor Employment and Real Salaries in Modern Sector, 1977-1988

	1977	1979	1981	1984	1986	1988
Employment						
Private and public enterprises	26,716	36,389	37,020	26,000	23,570	24,000
Government administration	20,645	24,900	27,055	31,010	32,565	36,130
Total	47,361	61,289	64,075	57,010	56,135	60,130
Salaries and Costs (1977=100)						
Real SMIG ^a	100.0	110.1	117.0	99.0	103.4	112.4
Government ^b	100.0	103.7	102.9	89.1	99.1	112.7
SMIG/millet ^c	100.0	97.5	80.3	56.2	—	—
SMIG/cowpea ^d	100.0	86.6	61.0	46.8	66.1	—

Sources: USAID (1986b); Diagne (1988); and ILO (1990).

^a SMIG in CFAF per hour, deflated by the CPI (index for African consumption).

^b Real government expenditure on wages and salaries per person employed in government administration deflated by the CPI.

^c Ratio of the SMIG to the OPVN buying price for millet.

^d Ratio of the SMIG to the SONARA buying price for cowpeas.

Note: — indicates elimination of government-determined prices.

CPI decline has occurred as the prices of food and other (miscellaneous) items, many of which are imported from Nigeria, have fallen.

Real incomes of nongovernment workers were affected by the financial restructuring programs for the parastatals. Under the standby arrangements and the PESAP, the creation of new jobs in parastatals slowed and strict control over nominal salaries was maintained. The World Bank (1987) estimated that 2,000 workers lost their jobs with parastatals between 1983 and 1986. This resulted in a 15 percent decrease in the number of workers over the three-year period. However, the Université de Clermont (1989) estimated that among the 32 public enterprises that were not liquidated or privatized, only 60 workers lost their jobs — a decline of 0.5 percent in the number of parastatal employees over the same period. The Université de Clermont suggests two reasons for this

discrepancy. First, some workers may have been terminated, but others were hired to fill vacancies in other areas. Second, the World Bank's estimate may have included employees in enterprises that were either privatized or liquidated.

The Université de Clermont also notes that the tax burden faced by modern-sector workers rose during adjustment. The nonrevision of the progressive income tax (l'impôt général sur les revenus [IGR]) combined with increased nominal incomes has resulted in more workers being pushed into the higher income tax brackets, which reach 60 percent of salaries for the highest paid workers. The increased tax burden on modern-sector employees and businesses has tended to reduce income disparities between modern- and informal-sector workers because businesses and employees in the informal sector pay little in taxes.

STABILIZATION, STRUCTURAL ADJUSTMENT, AND THE AGRICULTURAL SECTOR

Policy Situation Before Structural Adjustment

Niger's agricultural policy has been marked by a preference for state monopoly and complex regulation. Before the SAP, the GON gave parastatals the legal responsibility for secondary and often for primary marketing of nearly all agricultural outputs. They also had many other advantages over the private competition that was allowed to coexist. Input supply, including provision of credit, was linked to official marketing, reinforcing the primary marketing monopoly. Direct subsidies on inputs had the effect of discouraging legal private competition; entry was limited to those well placed enough to smuggle into Niger heavily subsidized Nigerian fertilizer (Berg and Associates 1983; Berg and Alexander 1986; Zalla, Barokas, and Hemmings 1984).

The major parastatals that have been involved in agricultural output and input marketing in Niger and their responsibilities are summarized in Table 10. At one end of the marketing chain were the parastatals that had the statutory authority for crop marketing at the secondary level such as OPVN (millet and sorghum), SONARA (peanuts and cowpeas), and RINI (rice). The 1979 to 1983 five-year plan also established a national grain reserve stock of 100,000 tons, of which 65,000 tons were to compose a security stock.¹¹ This stock was placed under the management of OPVN to add to its crop purchase responsibilities.

¹¹ The security stock served as a buffer to supply grain to deficit areas until commercial or food aid imports could arrive in the event of a food shortfall. In addition to the reserve stock, stabilization stocks were to be maintained at a level of 50,000 tons with an additional 35,000 tons from the reserve stock available to supplement these stocks.

Table 10 – Niger: Major Parastatal Participants in Agricultural Input and Output Marketing, and Their Status Under Reform

Organization	Responsibility Before Structural Adjustment	Status After Structural Adjustment
ONAHA	Managed rice-growing farm cooperatives; supplied inputs and irrigation services.	Provides technical assistance to rice growers.
OPVN	Official purchaser of millet, sorghum from UNCC and other licensed agents at GON-determined prices; purchased milled rice from RINI; official importer/exporter of millet, sorghum; handled food aid; imported rice alongside other licensed importers, but under preferential circumstances (lower import duties, etc.).	Intervention in millet and sorghum markets limited to managing the national grain reserve; grain purchases and sales are made under a tender and bid system; handles food aid; intervention in rice markets limited to imports in competition with an increased number of licensed importers.
SONARA	Purchased peanuts and cowpeas from UNCC and other authorized agents at official purchase prices; had official monopoly on exports of same crops; sold peanuts to SICONIGER for oil processing at SONARA-determined price; maintained depots for peanut oil sales in Zinder and Maradi.	Purchased and sold peanuts and cowpeas alongside private traders and farmers until 1989/90, SONARA and SICONIGER both liquidated in July 1990.
RINI	Purchased paddy from UNCC at official price and sold milled rice to OPVN at OPVN-determined price; organized improvements in rice marketing; provided assistance for rice production and processing.	Purchases paddy at official price from UNC and sells milled rice to wholesalers (including COPRO-NIGER). Plans are currently being made to privatize RINI under the PESAP.
UNCC	Managed the cooperative movement; supplied farmers with inputs and credit through branch subsidiaries, CA and CNCA; primary agent for SONARA, OPVN, and RINI in primary marketing of crops.	Disbanded in 1984 and reorganized under the UNC.
UNC	—	Replaced UNCC in 1985; promotes the cooperative movement; purchases and sells crops to secondary marketing agents in competition with farmer traders.
CA	Supplied fertilizer, implements, insecticides, and sprayers to farmers on cash and credit basis; inputs sold at prices determined by ministerial committee headed by director of UNCC; received direct (budgetary) and indirect subsidies for input sales from FNI, CSPPN, and CNCA.	Placed under supervision of Ministry of Agriculture following disbanding of UNCC in 1985; remains primary state agency for input supply to farmers; the GON in process of transferring CA to UNC; input subsidies reduced to 15% of wholesale cost.
CNCA	Provided agricultural production and marketing loans, and refinancing for goods eligible for reimbursement under approved loans; transferred from UNCC to Ministry of Finance in 1980.	CNCA activities interrupted in 1984, and suspended in 1986 because of weak credit recovery and bad loans; liquidated in 1988.

OPVN was also responsible for grain sales to consumers at officially determined prices, although the quantity of grain that could be purchased from OPVN at these prices was always limited, particularly in times of shortage when market prices greatly exceed official prices.

At the primary marketing level, UNCC, which was in charge of organizing the cooperative movement among producers, was the primary agent for purchasing crops from farmers for delivery to the crop parastatals.¹² Producer prices were fixed each year by the Ministry of Economic Affairs, Commerce, and Industry, on the advice of an interagency group of ministries interested in agriculture. UNCC also played an important role in supplying farm inputs and seasonal credit to cooperative members. The CNCA, created in 1967 as a service of UNCC, was charged with provision of agricultural credit, as well as with financing UNCC, OPVN, SONARA, and development projects. Another division of the UNCC, the Centrale d'Approvisionnement (CA), was created in 1978 to supply agricultural inputs to Nigérien farmers.

Analyses of the Nigérien agricultural policy system before the SAP had found that agricultural pricing and marketing policy reduced the efficiency of agricultural markets and that most of the enterprises involved in the system were fundamentally unsound (Berg and Associates 1983; Zalla, Barokas, and Hemmings 1984; Sedes 1988). Moreover, the existence of a large unofficial network of private traders and transporters made the intervention system generally ineffective in achieving GON objectives for price support and stabilization. Limited competition in marketing and input supply led to excessive cost structures; thus, three agricultural parastatals — OPVN, SONARA, and UNCC — accumulated debts to the government of more than CFAF 22 billion by September 1983, or approximately 60 percent of projected public expenditure for agriculture in that year.

USAID's ASDG, the World Bank's SAC and PESAP, and the IMF's stabilization programs gave special attention to agricultural policy reforms. The institutional changes affecting the crop and input supply parastatals under the SAP are summarized in Table 10. Reforms were instituted in the areas of cereals and export crop marketing, pricing policy, storage, credit, and input policy. Regulations affecting official livestock exports were also reduced and simplified in the later years of the SAP.

12 Other authorized agents have included traditional village chiefs, licensed merchants, or registered stocking agents such as COPRO-NIGER. The agents authorized to purchase crops for the parastatals have often varied from year to year (Berg and Alexander 1986).

Agricultural reforms consisted largely of abolishing the statutory monopolies of the public enterprises, eliminating official intervention prices, and implementing policies to improve the efficiency of private markets. The latter consisted of increasing village-level cereal storage and improving collection of price information in different markets (under the ASDG). In general, the reforms are considered to have had limited effect on agricultural producer prices and incomes, because most farmers had been able to circumvent GON marketing regulations. However, the reforms have been successful in reducing some of the deadweight loss to the economy from inefficient government intervention.

Agricultural Prices and Crop Marketing

Even before the full effect of Niger's financial and economic crisis was felt in 1983, the government had made adjustments favorable to agriculture in its price and income policies. Real official producer prices for all crops, except peanuts, rose substantially between 1980 and 1983 (Table 11). These price increases were implemented largely in response to poor weather, which reduced crop production by about 10 percent per year from 1980 to 1983. The GON increased official crop prices in 1985, following the 1984 drought, despite pressure by donors to eliminate government intervention in pricing altogether. Overall, real official prices rose much more from 1980 to 1985 than during the 1970s. In terms of prices, farmers did better after 1980 than wage earners, with official food crop prices (millet, sorghum, and cowpeas) rising at a much faster rate than prices for nonfood export crops such as cotton.

The effect of government pricing policy on the prices and incomes received by producers of millet, sorghum, peanuts, and cowpeas was quite limited, however, because market prices were generally higher than official prices and because government agencies marketed, on average, less than 10 percent of total production. In certain surplus areas of the country, OPVN purchase prices were always above the market levels, whereas in deficit areas the purchase prices were always below the market levels (University of Michigan 1988a). Moreover, in the case of cereals, when official prices were above market levels, OPVN often delayed its purchases, thus giving the benefits of the pricing policy to those who could delay sales (i.e., merchants and households with surplus grain).

In the case of cotton and rice, where the GON has a fixed investment in terms of irrigation infrastructure and/or processing facilities, official pricing policy has played a more important role in determining producer incomes. Here government purchases take a much greater share — that is practically all cotton production and roughly 30 percent of rice production. Official prices for these crops are established at levels covering production and processing costs. The price levels have resulted in a substantial income transfer to these producers. In

Table 11 – Niger: Evolution of Official Crop Producer Prices in Real Terms and Crop Input Ratios, 1969/70-1987/88

	1969/70	1974/75	1979/80	1982/83	1984/85	1985/86	1987/88
	CFAF per Kilogram ^a						
Food crop prices							
Millet/sorghum	22.2	38.5	30.8	46.0	65.5	50.6	—
Rice	47.7	53.8	34.6	48.8	55.7	57.0	42.0
Export crop prices							
Cowpeas	44.4	61.5	34.6	48.8	78.6	73.0	48.0
Peanuts	46.6	84.6	57.7	57.5	65.5	82.3	57.0
Cotton	52.9	57.4	47.7	69.0	85.1	82.2	60.0
	Price Ratios						
Millet: fertilizer	0.40	0.84	1.33	1.77	1.66	1.23	—
Peanuts: fertilizer	0.84	1.83	2.50	2.22	1.66	2.00	1.46

Sources: Zalla, Barokas, and Hemmings (1984); Sedes (1988); CERDI (1990).

^a Deflated by the CPI (African consumption, 1977=100).

the case of cotton, an export crop, the transfer comes from the GON's tax revenues; in the case of rice, the transfer comes from rice consumers through higher retail prices for rice.

Agricultural Reforms Under the SAP: Cereals and Export Crops

Because the margin between OPVN purchase and selling prices rarely covered its transaction costs, transport, and storage, OPVN usually ran large deficits on its grain operations. Increased official cereal prices in the early 1980s created storage problems for OPVN and exacerbated its financial problems. This problem was because of the large volume of postharvest millet and sorghum sales induced by high official producer prices in the 1982/83 OPVN buying campaign (Berg and Associates 1983). OPVN's stabilization stock remained fairly steady between 1978 and 1982 (except for a fall in 1981), but in one year from 1982 to 1983, the stock more than doubled. This increase was due in part to the purchases of some 88,000 tons of grain in the fall of 1982, of which roughly

nalf was purchased from traders who delivered the grain to OPVN warehouses. These purchases were made by officials worried that sufficient supplies would not be purchased by the cooperatives. When local purchases were added to food imports and to arriving food aid, stocks reached a record high of 174,000 tons.

OPVN had difficulty liquidating its stabilization stock during its 1983 campaign because of its high selling prices. Official prices for millet, sorghum, and maize were CFAF 10 to 25 per kg higher than parallel market prices for these grains. In 1983 market prices for grain fell well below OPVN selling prices, and consumer purchases of OPVN grain were reduced to almost nothing.

The four stabilization accords with the IMF emphasized reducing OPVN deficits and improving its operational efficiency. The specific policy reforms implemented by the GON are discussed more fully in Tables 7 and 10. Specifically, it should be noted that OPVN's official monopoly of millet and sorghum marketing was abolished in late 1984 following the second accord. Under the World Bank's SAC, OPVN agreed to limit its market intervention to maintaining a security stock that would be used in the event of a supply shortfall. The stock was fixed at 80,000 tons or the equivalent of a three-month consumption. OPVN would be limited to renewing a third of this stock every year; 80 percent of the resulting transactions would be conducted under a bid and tender system.

The ASDG evaluation team noted that only in January 1989, with help from the World Bank, was the OPVN actually able to organize a true tender for the purchase of grains (Louis Berger 1989a). The evaluation team also noted that a bid and tender system is not necessary for OPVN grain sales in an environment of liberalized grain markets because all OPVN has to do is sell at the prevailing market price. Nonetheless, the World Bank was active in aiding OPVN stock sales in the spring of 1990.

Despite the fact that SONARA marketed very little of the marketed surplus of cowpeas and peanuts, the monopoly was still considered to have had a negative impact on farm incomes (Berg and Associates 1983). The monopoly limited market outlets at crucial times when cash needs were greatest after the harvest. The exact date that the SONARA monopoly on exports ended is not clear (Berg and Associates 1983). SONARA had exclusive rights up to May 1981 when licensed exports by private traders were authorized. However, this authority appears to have been rescinded two weeks later. Early in 1983, the GON again allowed private exports, but the SONARA monopoly was reinstated in September because Niger officials were swamped with export license requests from people operating as agents for traders in Nigeria. The number of export

licenses granted in both 1982/83 (22,000 tons) and in 1983/84 (30,000 tons) was greater than SONARA's purchases.

The SONARA monopoly on peanuts and cowpea purchases and exports was officially eliminated in October 1984. Official purchase prices announced for the 1987/88 season were for guidance only, and no prices were announced at all in the 1988/89 season.

Agricultural Policy Reforms: Industrial Crops

In contrast to market liberalization measures taken for cereals and cowpeas, GON pricing policy for cotton and rice — crops used as raw material inputs in domestic processing industries — was relatively unchanged by structural adjustment reforms. GON pricing policies for cotton since 1984, and for rice since 1985, have resulted in income transfers to agricultural producers of these crops. GON pricing policy for peanuts also resulted in income transfers to producers who sold their crops to SONARA until SONARA's official producer prices were eliminated after the 1987/88 marketing season. GON's producer pricing policy was designed to ensure supplies of domestic raw materials to domestic processing industries despite declining world prices for some products (rice and peanut oil) and high domestic production costs.

Nominal protection coefficients measure the divergence between the domestic producer prices for rice, cotton, and peanuts and their international border price equivalents. The coefficients for all three crops indicate that producer prices in Niger were maintained above border prices between 1984 and 1988, thus transferring income to producers that would not have been transferred had there been no intervention (Table 12). In the case of cotton production, effective protection rates, which measure the net effect of government taxes and subsidies on the prices of outputs and inputs used in agricultural production, are even higher because the GON provides seeds and insecticides to cotton farmers at no cost (Rassas and Loutte 1989).

For peanuts, the actual income transfer to producers was small because SONARA generally marketed less than 5 percent of production in any given year. An increase in the official producer price for peanuts in 1986/87 resulted in an increase in SONARA peanut purchases from 2,500 tons in the previous year to more than 51,000 tons. The bulk of those purchases, however, probably came from Nigeria where peanut prices were lower.

Peanuts purchased by SONARA in the past were sold to SICONIGER for processing into peanut oil and meal. As shown in Table 12, the producer price for peanuts fell from approximately equal to the border price in 1982 to around 50 percent of the border price in 1984 as SONARA's marketing costs nearly doubled between the two years. By 1988 the import price of peanut oil had fallen

Table 12 – Niger: Calculation of Nominal Protection Coefficients for Production of Rice, Peanuts, and Cotton, Various Years

Commodity	1982	1984	1988
	Per Ton		
Rice			
C.i.f. import price milled rice ^a	442.9	402.9	333.3
Import cost ^b	163.0	197.1	111.2
Import cost at producer level ^c	129.0	160.1	75.2
Producer price ^d	129.0	129.0	108.4
Nominal protection coefficient ^e	1.00	0.806	1.44
Peanuts			
C.i.f. import price peanut oil ^f	978.0	1,430.0	500.0
Import cost ^b	360.0	700.0	166.8
Import cost at producer level ^g	290.0	609.0	75.0
Producer price ^d	269.0	332.0	314.0
Nominal protection coefficient ^e	0.92	0.54	4.19
	Per Ton		
	1986	1988	
	Per Ton		
Cotton			
Export price cotton fiber ^h	893.4	1,099.4	
Export cost at producer level ⁱ	165.3	138.1	
Producer price ^d	321.5	236.5	
Nominal protection coefficient ^e	1.95	1.71	

Sources: *Rassas and Loutte (1989); Louis Berger (1989a), FAO (various years).*

^a US dollars per metric ton.

^b Import price X 1.12 wholesale markup (1,000 CFAF).

^c Milled equivalent per ton, assuming a milling ratio of 0.66 and milling costs of CFAF 25,000 per ton.

^d Processed equivalent per ton.

^e Import cost producer level divided by producer price.

^f For 1982 and 1984, the import price of peanut oil c.i.f. Nigeria, for 1988, import price of peanut oil c.i.f. Niger, US dollars per metric ton.

^g Milled equivalent, deducting for SONARA marketing costs, assuming a 0.43 oil milling ratio, and milling costs (net of cake value) of CFAF 10,000 per ton.

^h Export price, Cotonou, US dollars per metric ton.

ⁱ Export price in CFAF per ton less intervening processing and marketing costs as described in *Rassas and Loutte (1989)* and using a processing ratio of 0.395.

dramatically with the result that producers were highly protected given the small producer price adjustment from 1984 to 1988. The official producer price (peanut oil equivalent), as well as SONARA's fixed *prix de cession* to SICONIGER of CFA 160,000 per ton for shelled peanuts were both greater than the import cost price of peanut oil at the producer level.

Rice paddy producers were also important beneficiaries of increased protection to the rice milling industry that has occurred since 1984. Rice milling costs tend to be very high at RINI, the agency that purchases paddy from the cooperatives and then mills and distributes it to wholesale markets. Costs are high because RINI's mills do not operate at capacity. Low world rice prices in 1983 and 1984 made it cheaper for OPVN, which had special exemptions from rice import taxes, to import milled rice than to buy it from RINI with the result that RINI accumulated large inventories. A *taxe de péréquation* on rice imports of CFAF 5,000 per ton was instituted in 1984 to protect RINI from lower cost imports; the tax was raised to CFAF 10,000 per ton in 1986. Importers were then required to purchase 25 percent of their total rice supplies from RINI. The *taxe de péréquation* was raised to CFAF 20,000 per ton in early 1987 and then lowered to its previous level in June. It was raised to CFAF 25,000 per ton in April 1990 (Université de Clermont 1990). The purchase requirements were eliminated in 1989 under pressure from the World Bank and the IMF in connection with an increase in the ad valorem custom duty on rice from 14.0 to 22.5 percent.

Effective protection rates calculated at the industry level indicate that there has been a net tax on cotton lint and peanut processing, and a net subsidy to the rice processing industry. This tax has resulted from a combination of the agricultural producer price policy, the tariff and taxation policies applicable to other inputs used in the processing industries, and the protection policy on competing end-product imports (Louis Berger 1989b). The effective protection rates are analyzed at the level of SICONIGER (peanuts), Société Nigérienne des Textiles (SONITEXTIL) (cotton), and RINI (rice processing). The tax on vegetable oil processing contributed to the virtual disappearance of the industry. In early 1989 SONARA, which had argued that its fixed selling price was too low to cover its costs, refused to supply peanuts to SICONIGER and the processing mill was closed. Both SONARA and SICONIGER were liquidated in July 1990, and the previous ban on vegetable imports was rescinded.

Although rice processing has received an effective protection subsidy, this subsidy is still much smaller than the nominal protection to rice producers. For example, Louis Berger (1989b) calculated an effective protection subsidy of 29 percent of value added in 1988/1989 for RINI compared with the 1988 nominal

protection of 144 percent shown for rice producers in Table 12. RINI is currently undergoing financial rehabilitation under the World Bank's PESAP, and plans are being formulated to privatize it in 1990/91. The GON also plans to gradually reduce rice as well as cotton prices toward world market levels (IMF 1990b).

Agricultural Inputs and Credit Policy

The ASDG, and later the World Bank's SAC, had two goals for input policy reform: (1) to reduce input subsidies, and (2) to increase the level of competition in input supply (Louis Berger 1989a). Before the initiation of agricultural input reforms, fertilizers, insecticides, and agricultural implements were supplied primarily by the input supply agency, CA, one of two divisions of the UNCC. In the past, the CA acquired fertilizer from a variety of sources, including commercial non-African imports from Europe, and purchases from private importers using Nigerian sources, but since 1984, most fertilizers have been supplied by grants from donors. Farm implements were purchased from state-owned local manufacturing facilities in Tahoua, Zinder, and Dosso.

It has been estimated that before the SAP, the private sector supplied about 10 to 25 percent of the fertilizer market, depending on the year (Ministère de l'Agriculture 1986). Nigerian government fertilizer subsidies and the depreciation of the naira on the parallel foreign market stimulated cross-border Nigerian imports from Nigeria. Fertilizer is subsidized by more than 80 percent in Nigeria, thus the CA price was never below the Nigerian free market border price (Sedes 1988). In addition to the fertilizer sales that were made to the CA, which supplied farmers with fertilizer in the more northern areas of Niger, the private sector has been the primary supplier of fertilizer to farmers in southern Niger.

Information on inputs is incomplete—information on inputs supplied through public-sector agencies is available, but not for inputs supplied through the private sector. However, the data that are available show that consumption of most inputs rose during the 1970 to 1980 period (Table 13). Until 1980 GON's policy was to keep input prices low and stable. This stabilization was done partly through budgeted subsidies allocated to the Ministry of Rural Development from the Fond National d'Investissement (National Investment Fund [FN!]) and the Caisse de Stabilisation des Prix et de Péréquation du Niger (CSPPN) to cover the CA's operating costs and to subsidize input prices directly. Other subsidies came from bank credit provided through the CNCA.

Following the emergence of Niger's financial difficulties, the GON raised the prices of most inputs by about 50 percent in 1981. However, it is estimated that approximately one-half of the cost of the average input (implements and fertilizers) sold from 1981 to 1983 was still subsidized through direct budgetary

Table 13 – Niger: Real Input Prices, Estimated Subsidies, and Use, 1970-1987

	1970	1975	1980	1982	1984	1987 ^b
Real Prices ^a						
Equipment (CFAF 1,000)						
Plow	14.2	15.4	3.0	3.8	8.3	12.7
Cultivator	16.9	6.2	3.0	5.2	11.3	17.4
Seeder	27.1	15.4	9.2	15.8	27.3	44.0
Fertilizer (CFAF/kg)						
Urea	66.7	53.8	26.9	28.1	42.6	42.8
15-15-15	55.5	46.1	23.1	25.3	36.9	42.8
Phosphate	—	—	21.5	16.1	22.9	24.3
Fungicides (CFAF/25g)	0	23.1	19.2	33.7	46.1	46.0
Units						
Input distribution						
Equipment	—	1,385	13,594	27,488	9,972	1,728
Fertilizers	602	2,079	7,819	12,945	6,504	4,812
Fungicides	—	—	1,629	1,373	1,875	729
Percentages						
Estimated subsidy						
Implements	70	0	60	49	29	79
Fertilizers^c						
Average A	0	61	49	35	—	—
Average B	—	—	—	85	83	75
Average C	—	—	—	9	0	-40
Insecticides	—	—	—	—	35	0

Sources: Zalla, Barokas, and Hemmings (1984); Louis Berger (1989a); Sedes (1988).

^a Prices deflated by the CPI (African consumption 1977=100).

^b Farm implements were actually sold at prices below the levels shown under the *vente promotionnelle* from 1986 to 1988. The financial subsidy on new equipment was eliminated in late 1985.

^c Average A refers to the average fertilizer subsidy using the weighted average cost of fertilizer to the CA as the reference price. Average B refers to the average fertilizer subsidy using international prices to value the cost price of fertilizer. Average C refers to the average fertilizer subsidy using Nigerian prices as the reference cost price.

Note: — denotes data not available.

subsidies or through bank credits (Zalla, Barokas, and Hemmings 1984). Despite increased prices, however, fertilizer and implement use rose steadily from 1980 to 1982 as agricultural crop prices, particularly for millet and cowpeas, rose relative to input prices (Table 13). Declines in the official input deliveries that occurred after 1982 were linked to the financial problems of the CNCA, to declines in budgeted subsidies and to higher input prices, as well as to other factors cited below.

Because the budgetary subsidy was provided as a lump sum, declines in its amount effectively limited the volume of inputs supplied through the CA.¹³ Moreover, the CNCA, which was the principal source of farm credit, was virtually bankrupt by mid-1983. It had ceased giving animal traction credit in some departments in 1982, and it ceased providing all loans in 1984. The CNCA's difficulties arose in part from its loans to financially strained parastatals, including the CA, which owed CFAF 1 billion to the CNCA at the close of the 1985 fiscal year. Other difficulties derived from flaws in the organization and management of the farm credit system (Zalla, Barokas, and Hemmings 1984). Despite being a part of the Ministry of Finance, CNCA needed the help of UNCC agents in identifying farmers and their credit needs. This made CNCA responsible for giving credit to and recovering credit from producers chosen by UNCC. Repayments rates for CNCA loans were very low, averaging 55 percent in 1981, 58 percent in 1982, and 43 percent in 1983 (Zalla, Barokas, and Hemmings 1984).

A study by the Nigérien Ministère de l'Agriculture (1986) has noted that while official input deliveries declined after 1982, overall farm level input use may not have declined. According to this study, fertilizer deliveries in 1981 and 1982 were well over effective demand, and it is considered that farmers obtained some fertilizer supplies during 1982 to 1985 from stocks that were built up in previous years. Fertilizer deliveries to irrigated plots also increased as the government continued its policy of rehabilitating and expanding areas under irrigation.

The initial ASDG agreement was implemented in late 1984. It required that by the end of the program (1987) budgetary outlays for input subsidies should have declined, and that the average rate of subsidy on all inputs should be not more than 25 percent of cost (USAID 1987). The initial agreement was later amended to require the average rate of subsidy to decline to 15 percent or less of cost by December 1989 (USAID 1989). This amendment made the ASDG consistent with the World Bank's SAC, which also required the 15 percent

¹³ The budgetary constraint was not strictly binding on overall fertilizer use as large supplies of fertilizer imported were available from Nigeria (University of Michigan 1989).

subsidy commitment. The ASDG also required that at no time would the subsidy on any individual item exceed 50 percent without a specific exemption. To improve competition in input marketing, the ASDG required that the CA be turned into a cooperatively owned input supply organization and that it compete with private traders. The UNCC disappeared in December 1984, and since 1985 the GON has been making arrangements for the CA to be turned over to the UNC that was created at the beginning of 1985.

The ASDG mid-term and final evaluations noted satisfactory progress in the GON's commitment to meeting the timetable for reductions in input subsidies (Laurent, Negash, and Weber 1986; Louis Berger 1989a). Nominal fertilizer prices were raised by 8 to 15 percent, and implement prices were raised by 20 to 30 percent in 1984. Moreover, the GON announced the elimination of agricultural implement subsidies in late 1985. Despite this announcement, however, subsidies on the purchase of many types of implements actually increased because large unsold inventories had accumulated and existing stocks were sold off at bargain prices at the request of the donors. The GON's budgetary contribution to the CA through the FNI and CSPPN was effectively eliminated in the 1986/87 fiscal year (Louis Berger 1989a).

Despite satisfactory progress, the GON continues to supply crop protection chemicals (pesticides and fungicides) to cotton farmers at no cost. This policy does not result in a budgetary subsidy because the chemicals are supplied by donors. The subsidy levels on pesticides and fungicides sold in the market, however, were eliminated at the start of the ASDG.

The extent to which price policy reforms improved efficiency in fertilizer use by moving Nigérien fertilizer prices closer to their economic cost is not well established because of difficulties in measuring the true cost of fertilizer. More than 90 percent of the fertilizer supplied to the CA has been provided through grants from donors since 1984. The remainder consists of supplies that enter from Nigeria. To deal with the economic pricing issue, the GON and USAID agreed to adopt as a measure of the subsidy, the difference between the price paid by the CA to its commercial suppliers and the price the CA charges to farmers. If the landed price of Nigerian fertilizer in Niamey is used as a benchmark, fertilizer price increases resulted in negative subsidy levels for all fertilizers. This result indicates that farmers using official fertilizers are being taxed through current GON input policy because official fertilizer prices are higher than the prices of fertilizers imported from Nigeria (Table 13).

The ASDG's final evaluation argued, on the other hand, that Nigeria may decide to eliminate fertilizer subsidies in the future. Thus, the international prices of fertilizer, rather than the Nigerian price, should be used as the true

economic cost of fertilizer (Louis Berger 1989a). International prices used as a benchmark show a graduation reduction in fertilizer subsidy levels since the ASDG started in 1984, but, on average, the level of the subsidy appears to exceed the ASDG criteria.

Cross-border Trade

GON policy reforms aimed to reduce administrative and fiscal restrictions on cross-border trade, particularly with respect to exports of livestock and cowpeas. Support was provided under the ASDG, USAID's NEPRP, the World Bank's SAC, and the various IMF programs. Before the SAP, export taxes applicable to principal agropastoral exports varied between approximately 8 and 50 percent of the export value of the goods. The rates were 8 percent for cattle, 20 percent for cowpeas, 17 percent for sheep and goats, and 50 percent for onions during the main export season (USAID 1988). In addition to export taxes, numerous administrative and regulatory procedures substantially raised the cost of legal exports in terms of both exporter time and money. For instance, it has been estimated that administrative costs and export taxes for cattle taken together represented roughly 20 percent of expected revenue from cattle exports (Development Alternatives Inc. 1988). Export taxes and administrative controls tended to raise the price of Niger's official exports to consumers in importing countries and/or to lower the producer price, depending on the degree to which export costs were passed through to the consumers.

It has been argued that burdensome administrative and fiscal restrictions on the official cross-border trade tended to concentrate this trade in the hands of a few large traders and forced small traders to operate outside official market channels (USAID 1988). While the small traders were able to escape the official regulatory and tax burden, however, the system still raised their export costs by forcing them to bear the risk of illegal exports and to export in small lots. By forcing a large part of Niger's external trade onto the unofficial market, the system also reduced the social benefits of cross-border trade to the country.

The GON took steps to reduce restrictions on cross-border trade in the early years of its SAP. It did this by eliminating SONARA's legal monopoly for cowpeas and peanut marketing, and by privatizing the Société Nigérienne de Collecte des Cuirs et Peaux (SNCP) and the Société Nigérienne de Tannerie (SONITAN). Both bodies had previously been responsible for exports of hides and skins (Cook 1989). However, participation by farmers, cooperatives, and small traders in the formal cowpea trade continued to be limited. This limitation was due to the high cost of meeting the fiscal and administrative procedures for exporting through the formal sector, and to the fact that SONARA and a few larger traders were exempted from the export tax.

At the same time that the GON was under pressure from donors to expand the cross-border trade, two significant external events occurred: (1) Nigeria closed its land border with Niger and banned cross-border imports from December 1983 to May 1986, and (2) the 1984 drought occurred. Most analyses have concluded that the border closure may not have had much effect on unofficial cross-border trade because of difficulty on the part of both countries in policing the border (Cook 1988). Moreover, the Nigerian government temporarily opened its border during the drought to accommodate drought-induced livestock sales from Niger. The GON eased customs regulations for livestock exports in early 1984 to encourage herd destocking. It also provided substantial help in exporting livestock later in the year once the full extent of the drought became known. To promote herd reconstitution, in August 1985 the GON banned exports of all livestock species.

Because the restrictions placed on livestock exports were temporary, the GON was granted a waiver in meeting the conditions for release of the second tranche of the ASDG in December 1985. By June 1987, the GON had liberalized livestock exports by establishing export quotas, which allowed release of the third tranche of the ASDG. For release of the fourth ASDG tranche (June 1988), the livestock quotas were abolished and export duties on cattle, camels, goats, and sheep were reduced. To meet conditions for release of the fifth ASDG tranche (December 1988) as well as those of the NEPRP grant, all export duties on agropastoral products were eliminated in October 1988.

The GON's livestock export ban was justified on the grounds that exports during a period of herd reconstitution would otherwise lead to shortfalls in reproductive stock and increased local meat prices. Because of the low proportion of exports controlled by the government, however, the effect of the export ban was probably negligible. Price trends for livestock in Nigérien border markets indicate that the biggest influences on export prices for livestock from 1984 to 1987 were the 1984 drought and the devaluation of the Nigerian naira in September 1986, not GON policies (Cook 1988). The drought contributed to a substantial price hike for all livestock species. The naira devaluation, however, substantially reduced real purchasing power in Nigeria for imported goods and contributed to slow growth in demand for Niger's livestock exports. More specifically, cattle prices declined by about 50 percent from October 1984 to November 1985, rose by 200 percent from November 1984 to September 1986, and then fell by about a third from September 1986 to May 1987.

Social Effects of Agricultural Reforms

Analysis of the effects of Niger's agricultural reforms on the agricultural sector, as well as on different social groups, is difficult for several reasons. First,

the economic benefits of policies that improve efficiency often take several years to emerge, and thus it is not possible to isolate the effects of such policies in the short to medium term. This is especially true in the case of Niger where exogenous factors, such as Nigerian economic policies and rainfall variations, exert such an important influence on the economy; effects of these influences can swamp any marginal improvements in efficiency in any one year. Second, a key beneficiary of agricultural policy reforms, the cross-border trade, is largely undocumented. Thus it has not been possible to monitor systematically the effects of policy reforms on this activity. Third, some policy reforms were important steps toward reducing government intervention, but did not in themselves constitute a complete removal of an objectionable policy. For example, although some liberalization has occurred in grain marketing through the reduction of OPVN's role, the movement of grains within Niger is still subject to strict control by police, *gendarmérie*, *garde républicaine*, and customs officials (Louis Berger 1989a). Moreover, despite elimination of livestock export duties, substantial regulatory and administrative costs still remain.

Price and Marketing Reforms. Studies have analyzed the effects of Niger's agricultural price and marketing reforms on the agricultural sector. They have generally concluded that the reforms had a marginal effect on the overall incentive structure for the agricultural sector as a whole or on the incomes earned by specific rural households (University of Michigan 1988a and 1989; Université de Clermont 1989). Nigérien price support policies had generally been ineffective in stabilizing and raising producer incomes in the past. Thus their elimination resulted largely in some budgetary savings to the state and in a loss of rent to a small number of wholesalers or agents who had traditionally sold grain and other crops to the crop parastatals.

To assess whether or not the grain pricing reforms had resulted in improved pricing efficiency and grain price stability, the University of Michigan analyzed monthly retail price changes (in constant terms) for cereals from 1970 to 1987. Their findings revealed that interannual fluctuations had been dampened since the start of the reforms. However, they also found that the period since the reforms (1985 to 1987) was much too short to establish a trend or to draw conclusions about the possible determinants of this price stability (University of Michigan 1988a). Moreover, correlation coefficients estimated by the University of Michigan for retail price movements in Dosso, Maradi, Niamey, and Zinder revealed that spatial integration is good between markets. They also showed that there was no significant change in integration between the pre-reform (1982 to 1985) and the post-reform period (1985 to 1988). This study also found a slight decrease in marketing margins between Zinder and Niamey,

which would indicate improved marketing efficiency, but the decline was not found to be statistically significant (University of Michigan 1988a).

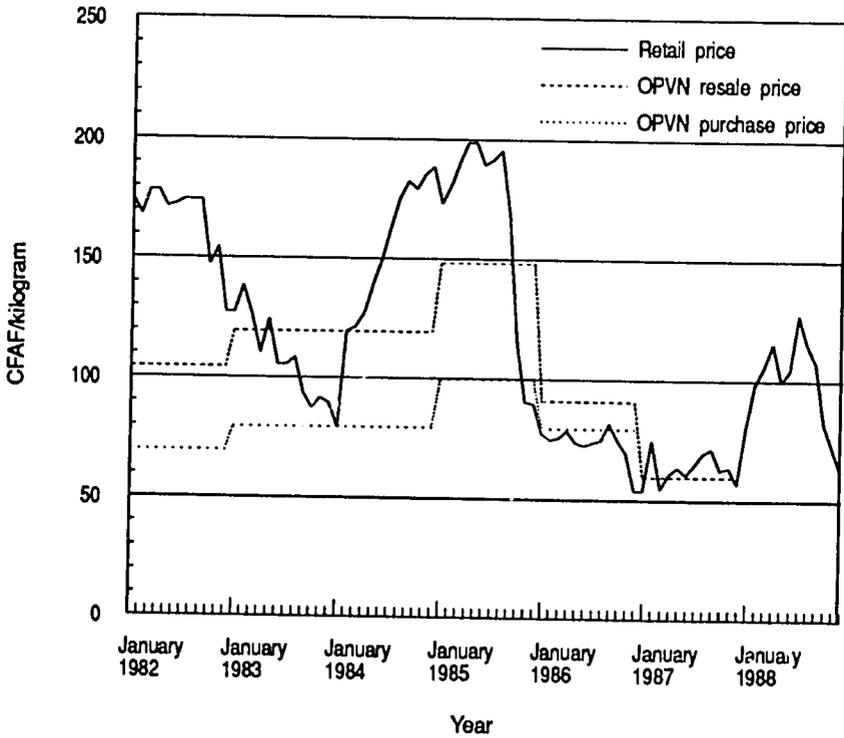
Figures 21 and 22 show comparisons of retail (free market) prices for millet and cowpeas in Niamey with OPVN and SONARA official purchase and selling prices from 1982 to 1988. OPVN and SONARA purchase prices are not expected to be the same as Niamey prices because the former are priced at the producer level while the latter are priced at the retail level. Berg and Associates (1983) estimated that there is a 65 percent markup from open-market producer prices to Niamey retail prices.

The data indicate that in the particular case of cowpeas, there was little relation between SONARA purchase prices and free market retail prices, thus confirming the view that the elimination of SONARA's intervention in this market, plus its subsequent liquidation, had little effect on this market. The data reveal a closer relationship between free market retail and OPVN purchase prices for millet. This relationship is particularly close during the period from late 1983 to mid-1984 when OPVN raised its purchase prices ostensibly to support producers in the face of a declining trend in millet prices. OPVN evidently had little success in using its stocks to stem the increase in millet prices that followed from mid-1984 to early 1986. In 1986, OPVN purchase prices were for indicative purposes only and were set at the level of prevailing market prices.

It has been noted that OPVN's stock-holding activities had tended to increase aggregate demand for grain, thus raising cereal prices (University of Michigan 1988a). The limits placed on the volume of OPVN stock purchases by the World Bank under the SAC thus could have a negative effect on grain prices, all other things equal. It is interesting to note that OPVN's millet consumers generally benefited from lower than free market prices during periods of high retail prices. But when retail prices were low, those who purchased millet from OPVN paid higher than free market prices. Those purchasing grain under such conditions might include institutional customers such as the army or other government agencies that buy in bulk.

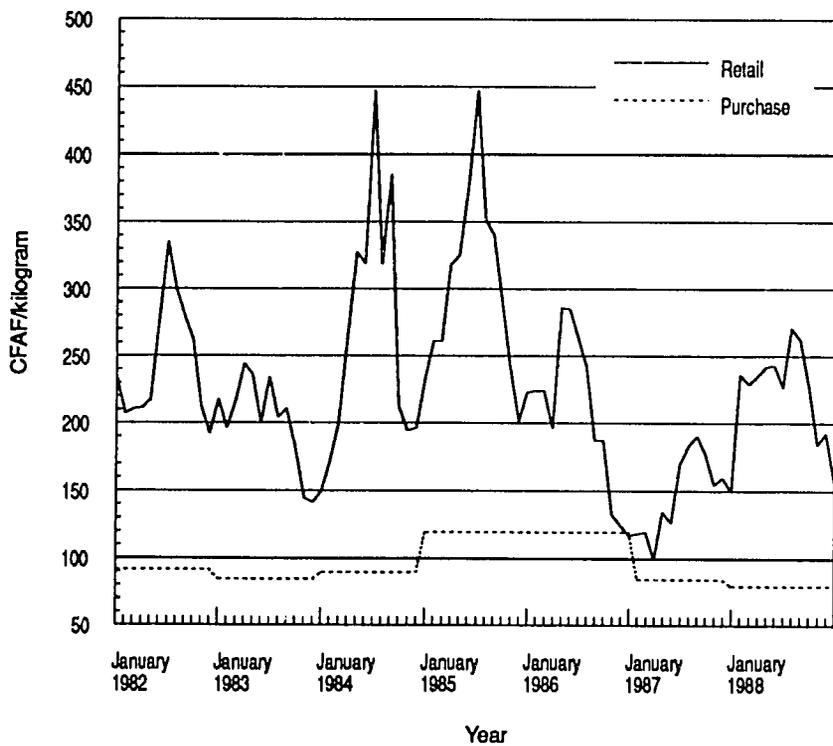
Evidence suggests that certain wholesalers who were able to qualify for grain sales to OPVN under the bid and tender system may have reaped the most benefits from cereal marketing reforms (University of Michigan 1988a). Analysis of OPVN's 1985/86 and 1987/88 operation of the bid and tender system for purchase of grain stocks indicated that some contracts were awarded to wholesale traders at prices above prevailing retail levels. Moreover, only a few large grain traders were able to benefit from the system, because most farmers had already sold their marketable surplus by the time OPVN entered the market and because only a limited number of wholesalers were eligible to participate.

Figure 21 — Niger: Monthly Niamey Retail and OPVN Purchase and Resale Prices for Millet, 1982-1988



Sources: CERDI (1988); BCEAO (1989).

Figure 22 — Niger: Monthly Niamey Retail and SONARA Purchase Prices for Cowpeas, 1982-1988



Sources: CERDI (1989); BCEAO (1989).

To the extent that small rural traders used to have access to OPVN direct purchases at official prices, the removal of official prices has meant a loss to small traders.

The University of Michigan's analysis noted that because OPVN's purchases are largely financed by foreign donors, the budgetary effect of removing official prices and carrying out tender and bid grain purchases has been very slight (University of Michigan 1988a). With its purchases limited, OPVN tends to buy less grain for its security stock, but at higher prices. The proceeds from sales of this grain, minus some fixed transportation and/or handling expense per ton are placed into a counterpart fund. Both the University of Michigan study and the ASDG final evaluation recommended that future purchases and sales be made directly after the harvest and at prevailing market prices rather than under a bid and tender system.

Agricultural Input Reforms. Input price increases under the SAP primarily affected fertilizers because equipment was sold under *vente promotionnelle* from 1986 to 1988 and because pesticides continue to be supplied at no cost to cotton farmers, who use them regularly. The GON also provides pesticides at no cost for use on food crops in the event of a pest attack. It is generally agreed that increases in official fertilizer prices had little overall impact on Nigérien farmers, because other than rice and cotton cultivation in irrigated areas, use of all inputs by farmers is very small (Sedes 1988; Louis Berger 1989a).

Because of the importance of fertilizer supplies from Nigeria, however, input reforms resulted in income distribution effects among those farmers using fertilizers (University of Michigan 1988b). In southern areas where rainfall is more abundant and where farmers are relatively better off compared with their counterparts to the north, fertilizer pricing reforms had no effect, because southern farmers are supplied by the private sector with fertilizers imported from Nigeria. Official fertilizer is supplied primarily to farmers located on ONAHA irrigation plots and on riverine areas along the Niger River. It is also supplied to northern farmers for whom transportation costs from the Nigerian border have made the private-sector trade uncompetitive with CA operations.

For farmers who grow irrigated crops, fertilizer price increases probably had a minimal effect on income because rice policy has offered positive and effective protection for rice producers, and because other irrigated crops are highly valued. Thus the effect of higher fertilizer prices on farm incomes was probably proportionately larger in the more northern areas where rainfall is less and farmers are relatively poor.

Cross-border Trade. Reforms affecting the cross-border trade are generally considered to have had a relatively small impact on increasing this trade and,

thus, on farmers' incomes for several reasons (University of Michigan 1988c). First, the forces affecting this trade are largely external and principally include the economic situation in Nigeria and grazing conditions in Niger. Second, despite the elimination of export taxes on cowpeas and livestock, administrative and regulatory requirements still continue to limit the participation of farmers, cooperatives, and small traders in official cross-border trade. The elimination of export licensing requirements in July 1990 may accomplish more completely the objectives of the cross-border trade reforms.

STRUCTURAL ADJUSTMENT, STABILIZATION, AND CONSUMER PRICES

Up until Niger's SAP, administratively controlled prices for many consumer goods caused high distribution and marketing costs. Administered prices were based on cost of production, and thus the system did not incite increased efficiency or cost reduction. Price controls reduced the competitiveness of the formal sector, which had to pay controlled prices for intermediate goods and which, in turn, was subject to price controls on its output (Université de Clermont 1989). Prices in the informal sector, in contrast, were not subject to price control and tended to adjust without delay according to market realities.

Before Niger's SAP, consumer prices were subject to three types of regulation. First, prices subject to the system of *homologation* were fixed by decree. In 1981, this regime affected 27 domestic and imported goods and services that were considered to be necessities or strategic for the economy. These products included gasoline and other petroleum products; water; electricity; and transport; as well as products imported exclusively by COPRO-NIGER, such as bread, flour, sugar, tea, salt, cigarettes, tomato paste, milk, soap, and jute bags.

Second, prices of other imported products were subject to the system of *taux de marque*, which regulated the difference between the supplier's purchase price and the selling price to consumers. In 1981, the 200 products that were subject to the *taux de marque* were limited to a fixed markup of between 22 and 45 percent of cost, depending upon the product. Third, all other products were subject to system of *marge bloquée* in which the price markup was limited to no more than 60 percent of cost.

Under the SAP, price liberalization was introduced to promote competitive product distribution and marketing. The elimination of administrative price controls forced parastatal monopolies, such as COPRO-NIGER and OPVN, to adjust their price levels in relation to the prices in the local market. Price reforms resulted in the number of products under *homologation* to fall from 27 to 7 in late 1985, and to 5 in 1987. The remaining five include bread, petroleum

products, water, electricity, and transportation. The number of products subject to the *taux de marque* was gradually reduced from 200 to 20 from 1986 to 1989, and the markup limits increased to between 35 to 50 percent of cost. The *taux de marque* was eliminated for all commodities in June 1990. The system of *marge bloquée* was eliminated in 1985.

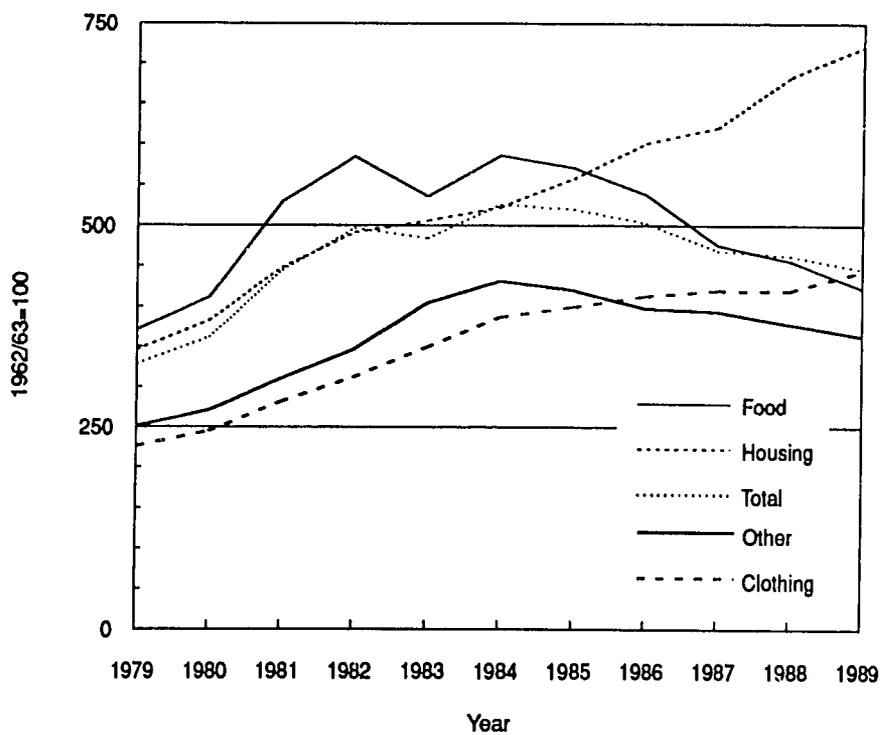
Trends in the aggregate CPI (African consumption) and in the individual indexes for food, clothing, housing, and other products and services from 1979 to 1989 are shown in Figure 23. The data indicate a generally rising trend in the overall index from 1979 to 1984, and in all of the individual price indexes as well. Led by falling prices for food and other goods and services, the overall consumer price index declined by 10 percent from 1984 to 1989. The aggregate price indexes for clothing and housing rose from 1984 to 1989, however, with housing prices exhibiting the largest increase — 40 percent. Although housing costs had increased from 1979 to 1984, the rate of increase has been much faster since 1984. This sharp upturn in housing costs may be related to the decline in construction and public works that has occurred under the SAP.

Although consumer price declines from 1984 to 1989 coincided with structural adjustment reforms, it is not possible to attribute the declines to liberalization measures alone, because of the 1984 drought and because markets for food and other manufactured goods are dominated by imports from Nigeria. Thus, the 66 percent increase in the real value of the CFAF in terms of naira (parallel market) from 1984 to 1988 was undoubtedly an important factor in limiting price increases for many products that are imported from Nigeria.

Rice consumers in Niamey benefited somewhat from the decline in international rice prices that began in early 1986 (Figure 24). To protect the rice industry, import tariffs and other duties applicable to rice increased from about 29 percent of the international price during 1982 to 1985 to about 60 percent of the international price from 1986 to 1989. However, as shown in Figure 24, both RINI's wholesale prices and the free market retail prices in Niamey decreased from early 1986 to early 1987 to reflect the partial pass through of the international price decline to consumers. Declining rice prices from 1986 to 1987 affected mostly urban professionals living in Niamey, who are the largest consumers of imported rice. Retail prices for rice in Niamey rose in 1988, but this rise also reflects the 30 to 35 percent increase in international rice prices that occurred that year.

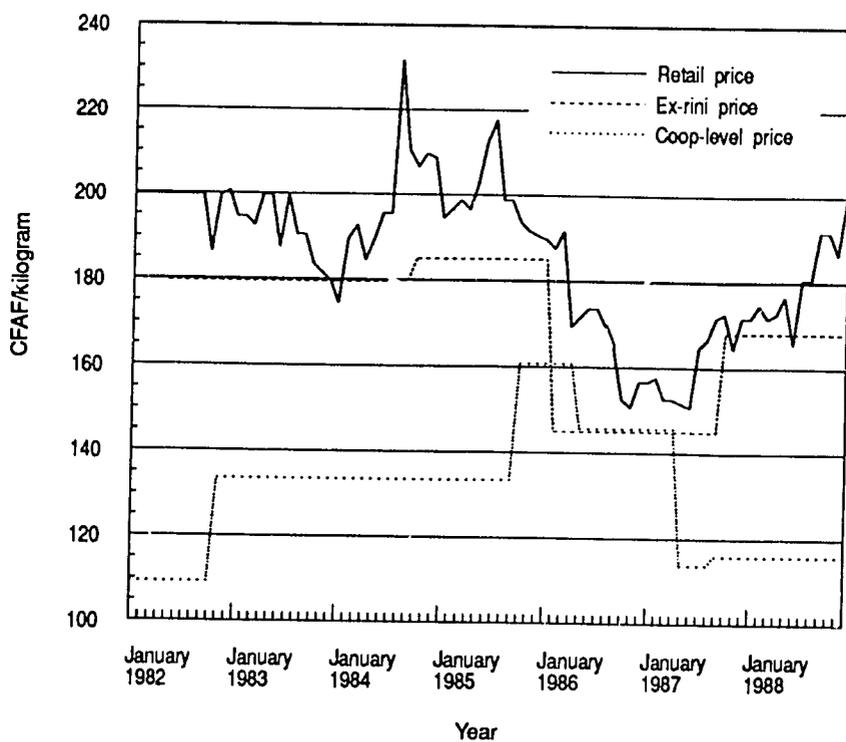
Nigérien trade policies have also affected the level of consumer prices in Niger. After increasing import tariffs steadily from 1982 to 1983, the GON lowered them on a wide range of imported intermediate and final goods in May 1987. In addition, following the closure of SICONIGER's oil processing mill in

Figure 23 — Niger: Indices of Consumer Prices/African Consumption, 1979-1989



Sources: IMF (1985, 1988c); BCEAO (1989).

Figure 24 — Niger: Niamey Retail, ex-Rini, and Cooperative-level Prices for Milled Rice, 1982 - 1988



Sources: CERDI (1989); BCEAO (1989).

early 1989, the import ban on vegetable oils was eliminated. The administered price of wheat flour, which had remained at 160,000 CFAF per ton since 1982, was raised by 26.3 percent, to 202,000 CFAF in 1990. In addition, the import duty on flour was adjusted upward from 12.3 percent to 33.9 percent and a *taxe de péréquation* of CFAF 5,000 per ton introduced.

STRUCTURAL ADJUSTMENT, TRADE, AND TAX REFORM

Tariff and International Trade Reforms

Ad valorem duties on imports and specific taxes that apply to imported goods, such as petroleum products, alcoholic drinks, and cigarettes, were raised steadily from 1982 to 1986. The purpose of these tax and tariff changes was to increase government revenues.¹⁴ Export duties on livestock products, cowpeas, and other exports were also raised during this period. In addition to the tax changes, the GON abolished COPRO-NIGER's import monopolies in 1985 and increased the number of authorized importers that are allowed to import rice and cement.

To the extent that import tax changes raised the prices of imported goods in Niger, these increases affected primarily the higher-income consumers in the urban areas, along with the industries that operate in the formal sector. Duties and taxes on basic consumption necessities, such as grains, flour, tea, sugar, and dairy products, but not including rice, remained relatively low. Moreover, the unofficial cross-border trade with Nigeria has ensured that prices of some goods that were subject to import taxes or that were affected by import prohibitions at one time or another, such as grains, wheat flour, peanut oil, and rice, did not rise proportionately with increased taxes on the official trade.

Changes in import duties and export taxes had a number of effects on Niger's official trade. First, the value and volume of imports with the highest tax rates (petroleum products, alcoholic beverages, tobacco products, clothing, and intermediate goods) declined relative to imports with lower tax rates. Second, higher tariff or tax levels resulted in increased customs fraud and fiscal losses through tax evasion. These levels also provided greater incentives to exporters and importers to smuggle their goods into Niger through unofficial markets. As a result and despite increased tax rates, the tax receipts from imports fell from 20.6 percent of the total value of imports in 1983 to 16.0 percent in 1987 (Louis

¹⁴ Exceptions to this include increases in the taxes applicable to imported vegetable oil and to imported rice, which were raised specifically to protect the local rice and vegetable oil processing industries during this period. The value-added tax, which was introduced in 1986, is not considered protectionist because it applies equally to domestic goods and to imports.

Berger 1989b). Export tax receipts as a percentage of total official exports fell from 2.6 percent in 1983 to 0.7 percent in 1987.

To reduce customs fraud, the GON lowered the fiscal tax applicable to exports (*droit fiscal*); to VAT; and to specific import taxes on alcoholic beverages, tobacco products, cigarettes, and petroleum products in May 1987. Since then, the GON has focused its tariff policy on broadening the tax base to include the informal sector in tariff collection. Export taxes on all agricultural products were eliminated in late 1988.

Trade measures undertaken in July 1990 should contribute to lower prices and increased trade opportunities. The GON discontinued the system of import and export licenses, reduced the number of prohibited imports from five to three, and replaced all remaining quantitative import restrictions by tariff protection.

Income Taxes

Increased revenue from personal income taxes (*l'impôt sur les traitements et salaires [ICTS]* and *l'impôt général sur les revenus [IGR]*) has also played an important role in replacing lost government income from uranium operations. The share of government revenue from taxes on salaries and employee benefits increased from 8.8 percent of total revenue in 1982 to 13.9 percent in 1988 (Louis Berger 1989b). Most of the increase in revenue from personal income taxes has come from the progressive IGR. Personal tax rates were not revised under the SAP, but rising nominal salaries subjected more workers to the IGR, from which workers with annual incomes of CFAF 100,000 or less are exempt. At the same time, more workers found themselves in the upper tax brackets of the progressive IGR. Thus, in 1980 approximately 5,000 workers were subject to the IGR compared with 30,000 in 1988. Increased personal income taxes, particularly through the IGR, have affected primarily those employed in the formal sector. These workers, on the average, tend to be better off than those employed in agriculture-related activities and those employed in the informal sector.

Income taxes paid by formal-sector businesses also rose under the SAP. In 1985/86 the tax system applying to private-sector enterprises was extended to cover the parastatal enterprises as well. Moreover, in 1989 the GON introduced a special 2 percent levy that is on sales receipts from imports, that is applied at the wholesale and retail level, and that is creditable against the income tax. The purpose of this tax is to improve the government's tax collection from informal-sector businesses. The GON also increased the minimum business license tax as well as property taxes.

Other Indirect Taxes

The most notable tax reform in the early years of Niger's SAP was the introduction of the VAT in January 1986. This tax, which replaced the production tax and the turnover tax, was designed to provide increased incentives for exports and investment, and to promote production and sales by smaller enterprises. Only the value added at each stage of the production process is taken under the VAT rather than the full value of the product at each stage of turnover. This tax has fallen primarily on the formal sector, however, as most informal enterprises do not maintain adequate accounts and records for the GON fully to monitor and collect the tax.

The following activities and sectors are not subject to the VAT: agriculture, fishing, meat, cereals, fruit and vegetable sales, water and electricity, the medical profession, ground and air transport, and leasing of buildings. Since the VAT is passed on to the consumer, these exemptions make the tax more progressive. The VAT was lowered along with other import duties and taxes in May 1987.

STRUCTURAL ADJUSTMENT, STABILIZATION, AND BUDGETARY EXPENDITURE

The overall public expenditure level in real terms (as deflated by the GDP deflator) has declined by about 25 percent from its peak 1981 level under Niger's SAP. All this adjustment occurred in the development budget. Real total recurrent expenditure was 32 percent higher, on average, from 1986 to 1989 compared with the level in 1981. If debt service is excluded from the recurrent budget, then average recurrent expenditure for 1986 to 1989 was 16 percent higher than in 1981. In contrast, real development expenditure declined, on average, by 53 percent during 1986 to 1989 compared with the 1981 level.

The Recurrent Budget

As shown in Table 14, debt service payments have been the most rapidly growing item in Niger's recurrent budget. Debt service payments in 1989 averaged 22 percent of recurrent spending compared with 13 percent in 1981. The rapid growth of interest payments in the current budget has resulted in declines in expenditure shares for agriculture, mining, transportation and communication, and others in the recurrent budget during the same period.

The real value of expenditure on education, health, and other social services has increased or been maintained since the SAP. Because of this, the social cost of the expanding debt service has not been as great as it has been in countries that have suffered absolute real expenditure cuts. In value terms, real education expenditure from 1986 to 1989 was 24 percent higher, on average, than in 1981. Similarly, health expenditure from 1986 to 1989 averaged 32 percent above the

1981 level, and other social expenditure was about the same, on average, between the two periods. However, the level of education and health services in Niger, particularly at the primary level, was already low before the SAP. Thus, budgetary reforms have perhaps had some social cost by preventing an even faster rate of expansion had the GON not been suffering financial difficulties. Moreover, the amount spent by the Ministry of Health to ensure drug supplies to the rural areas appears to be insufficient as shortages of drugs and medicines in these areas are widely reported.

The GON's recurrent expenditure under the SAP has also been characterized by an increasing wage-to-materials ratio. In 1987 wages and salaries constituted 58 percent of public expenditure – up from 44 percent in 1981 (IMF 1988c). Real remuneration per public-sector worker remained constant or declined from 1981 to 1987, however, as increased recurrent expenditure went largely for recruitment of new public-sector personnel. In 1988 real remuneration per worker increased, but this was largely due to the decline in the consumer price index.

Structural Adjustment in Health Care: Cost Recovery

Increased cost recovery in health care has been an important component of Niger's SAP. In 1984, the rate of cost recovery for the entire health-care system (excluding personnel expenditure) was estimated to be 4.5 percent (USAID 1986a). Fees were collected in hospitals only, for which the rate of recovery reached 10 percent. A differentiated fee system had been in place since 1962. The differentiated fee system was designed to protect vulnerable groups, but in practice it failed to do so because the exemptions were not applied uniformly to all categories, and some of the tariffs were actually higher than the real costs of providing services (Tingui 1990).

The GON issued a decree in October 1985 that ordered the hospitals to apply the appropriate hospital fees by requiring outpatients to pay for services before being examined. This policy change resulted in an increase in the recovery rate for outpatient consultation from 7 percent in 1986 to 40 percent in 1988 (Tingui 1990). Increased cost recovery for hospital outpatient services probably affected households in the urban areas the most because these households spend two to eight times more on health services than those located in rural villages, depending upon the zone (Ministère de la Santé Publique 1989c). However, it has been noted that hospitals still have much discretion in the fees they apply and how they apply them. Weaver, Handou, and Mohamed (1989) note that outpatient fees increased at the departmental hospital centers and in Zinder National Hospital in January 1989.

The Ministry of Health and ONPPC lowered the prices of 60 medicines in January 1989 (Ministère de la Santé Publique 1989b). The new prices reflected the elimination of customs taxes and the VAT on imports of drugs and medicines. The prices of these products were reduced, on average, by 29 percent. The new prices also resulted in a budgetary savings to the Ministry of Health.

Budgetary Reforms: The Education Sector

To help reduce its fiscal deficit, the GON placed a ceiling on the amount of scholarship funds available to university students in the early 1980s. Despite this real decline in scholarship funds, education expenditure in the recurrent budget rose under Niger's SAP. The share of the recurrent education budget allocated to primary education increased from 33 percent in 1981 to 44 percent in 1989. This transfer occurred at the expense of resources that otherwise would have been allocated to superior education.

Increased resources for primary education will benefit less well off households because those students who are able to complete their education to the secondary and university levels come from wealthier households. In July 1989, the GON and the World Bank agreed to a series of education reforms to meet the GON's requirements for an education sector loan. These reforms include the goal of raising the rate of primary school enrollment. This goal will be accomplished by increasing the budgetary resources allocated to primary students at a rate of 7 percent per year from 1988 to 1995.

Development Expenditure

Development expenditure under the 1979 to 1983 five-year development plan benefited primarily transportation, education, agriculture, and mining and industry (Table 14). Over the five-year period, total public investment reached CFAF 450 billion in current prices. Ninety-five percent of total planned public investments were realized under the plan, but the implementation rate declined progressively from 157 percent in 1979 to 46 percent in 1983 as the economy reached the limit of its capacity to absorb investment, and the GON's financial constraints started to emerge. Financing by domestic resources also decreased from a peak of 39 percent of total financing in 1980 to about 20 percent in 1983. By 1983 total development spending was about half what it had been in the 1980 to 1981 period.

Development expenditure was cut further under the interim consolidation program (interim plan), which guided public investment for two years, 1983/84 and 1984/85. Development expenditure under this plan placed more emphasis on expenditure for directly productive activities, including agriculture and irrigation, and for rehabilitation of existing infrastructure, and less on mining

Table 14 – Niger: Public Expenditure in the Recurrent and Development Budgets, 1979-1989

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
	Constant Million CFAF ^{a,b}									
Recurrent expenditure										
Agriculture	2,656.0	2,451.0	2,473.0	2,448.0	1,978.0	1,634.0	1,783.0	1,689.9	1,973.7	2,662.9
Mining	657.0	646.8	526.7	376.2	98.1	127.3	136.1	122.9	144.3	156.5
Transportation and communication	2,317.0	2,482.6	2,184.2	1,989.2	1,721.7	1,991.4	1,121.9	1,170.7	1,323.8	683.8
Education	11,409.0	10,689.9	11,930.0	11,670.3	11,124.0	11,793.7	12,338.7	12,417.4	13,779.1	14,502.4
Health		3,106.4	3,020.8	3,109.9	3,524.9	3,390.3	3,939.9	3,932.7	4,163.4	4,366.8
Social services	551.0	523.9	480.0	504.6	152.8	541.4	632.5	535.6	592.5	674.1
Debt service	4,545.0	5,963.3	5,914.2	7,151.7	9,805.3	12,806.7	15,612.5	14,786.2	15,231.2	14,205.5
Defense	3,219.0	3,331.2	3,160.0	3,253.1	3,394.4	3,562.9	3,912.7	3,908.4	4,228.0	4,547.4
Other	17,299.0	17,364.2	18,040.0	17,573.5	15,105.9	17,929.9	20,557.1	21,014.9	20,887.2	22,646.8
Total	42,653.0	46,559.3	47,728.9	48,076.5	46,905.1	53,777.6	60,034.4	59,578.7	62,323.2	64,446.2
Development expenditure										
Agriculture	13,400.0	15,412.8	12,916.7	8,668.7	11,365.5	11,090.5	16,333.1	16,131.6	16,848.7	15,417.3
Mining, industry, and energy	19,700.0	15,688.1	9,583.3	11,687.3	4,763.5	2,997.7	1,921.5	1,252.9	858.0	2,616.4
Commerce	2,500.0	3,119.3	3,333.3	0.0	144.2	2,546.0	3,538.8	595.0	530.0	1,043.3
Transport	26,900.0	24,495.4	17,916.7	8,281.7	8,524.2	9,217.0	7,383.6	9,710.3	7,332.3	10,409.3
Telecommunication	4,900.0	15,871.6	3,833.3	928.8	1,153.6	1,487.7	1,682.6	1,354.7	241.8	521.7
Water supply	3,400.0	4,036.7	4,666.7	1,857.6	3,509.7	5,769.9	6,244.9	6,342.9	5,382.2	8,138.0
Education	14,300.0	13,394.5	13,083.3	1,780.2	1,922.1	2,247.7	2,642.1	2,349.2	1,482.1	3,041.7
Health	1,700.0	3,394.5	2,666.7	0.0	919.3	824.4	2,161.7	2,036.0	2,028.1	2,078.6
Housing	5,300.0	3,669.7	1,000.0	154.8	0.0	1,798.3	1,160.9	1,166.8	881.4	1,337.0
Other	8,400.0	1,376.1	1,116.7	15,789.5	6,351.0	1,498.5	7,325.9	6,585.7	6,372.8	3,821.0
Total	100,500.0	100,458.7	70,116.7	49,148.6	38,653.1	39,477.7	50,395.1	47,525.1	41,957.4	48,424.3
Total R&D expenditure	143,153.0	147,018.0	117,845.6	97,225.1	85,558.2	93,255.3	110,429.5	107,103.8	104,280.6	112,870.5

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
	Percentage Shares									
Recurrent expenditure										
Agriculture	6.2	5.3	5.2	5.1	4.2	3.0	2.9	2.8	2.3	4.2
Mining	1.5	1.4	1.1	0.8	0.2	0.2	0.2	0.2	0.2	0.2
Transportation and communication	5.4	5.3	4.6	4.1	3.7	3.6	2.0	2.0	0.9	1.1
Education	26.7	23.0	25.0	24.3	23.7	21.9	20.6	20.8	16.8	22.5
Health		6.7	6.3	6.5	7.5	6.3	6.6	6.6	5.2	6.8
Social services	1.3	1.1	1.0	1.0	0.4	1.2	1.1	0.9	0.7	1.0
Debt service	10.7	12.8	12.4	14.9	20.9	23.8	26.0	24.8	23.9	22.1
Defense	7.6	7.2	6.6	6.8	7.2	6.6	6.5	6.6	5.1	7.0
Other	40.6	37.2	37.8	36.5	32.2	33.4	34.1	35.3	44.9	35.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Development expenditure										
Agriculture	13.3	15.3	18.4	17.6	29.4	28.0	32.4	33.9	40.2	31.6
Mining, industry, and energy	19.6	15.6	13.7	23.8	12.3	7.6	3.8	2.6	2.0	5.4
Commerce	2.5	3.1	4.8	0.0	0.4	6.4	7.0	1.3	1.3	2.1
Transport	26.8	24.4	25.6	16.9	22.1	23.3	14.6	20.4	17.5	22.0
Telecommunication	4.9	15.8	5.5	1.9	2.9	3.8	3.3	2.9	0.6	1.1
Water supply	3.4	4.0	6.7	3.8	9.2	14.6	12.4	13.3	12.8	16.7
Education	14.2	13.3	18.7	3.6	4.9	5.7	5.2	4.9	3.5	6.2
Health	1.7	3.4	3.8	0.0	2.4	2.2	4.3	4.3	4.8	4.3
Housing	5.3	3.7	1.4	0.3	0.0	4.6	3.3	2.6	3.4	2.7
Other	8.3	1.4	1.4	32.1	16.7	3.8	13.7	13.8	13.9	7.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Sources: IMF (1985, 1990b).

^a Nigérien fiscal year, October-September: 1980 refers to 1979/80, and so on.

^b Deflated by the implicit GDP deflator, 1980=100.

and development of new infrastructure. Development expenditure on education and health was also slashed during this period. This plan called for "development society" institutions, such as cooperatives and youth groups, to mobilize their resources to replace the public sector in supplying certain services. As shown in section 3, the sharp decline in health spending in the development budget during this period resulted in the GON virtually abandoning further construction of health dispensaries in the rural areas.

The GON introduced a three-year rolling PIP that takes into account the recurrent costs of development expenditure in 1985/86 in consultation with the World Bank. The GON's development strategy, which is implemented through the PIP, was presented in its five-year development plan (1986/87 to 1990/91). This plan continues the goals of the interim plan in giving priority to directly productive activities and to rehabilitation of existing infrastructure. The five-year plan also places more emphasis on health care in the development budget. Development expenditure for education should increase once negotiations with the World Bank for an education loan are complete.

From 1985 to 1988, real development spending increased by an average of 20 percent over the levels of the interim plan. The GON provides about 7 percent of development budget financing, concessional loans provide 39 percent, and grants provide about 54 percent.

6.

Conclusions

The series of stabilization and structural adjustment programs initially introduced by the GON in late 1983 were triggered by a declining uranium market and by an economy that had overspent its resources in the middle to late 1970s. The government's efforts were first aimed at reducing its fiscal and external deficits through successive stabilization programs. In later years policy reform programs concentrated more on structural adjustment measures to increase productivity. As a member of the UMOA, Niger was unable to make a nominal exchange rate adjustment to bring its external current account into balance. The GON also lacked explicit authority to manipulate interest rates. In the absence of these specific policy adjustments, stabilization and structural adjustment reforms attempted to lower Niger's real exchange rate by other means. These means have included limiting wage increases, raising the prices of imported and exported goods through price reforms and tax policy, and making the formal economy more open to trade. Because of the large concentration of Niger's productive resources in the agricultural and livestock sector, structural adjustment reforms focused largely on this sector, as well as on improving the performance of the parastatals.

Stabilization and structural adjustment reforms to reduce domestic absorption would have had to be made by the GON with or without IMF and World Bank reform programs because Niger's formerly important uranium revenues had declined with world demand for uranium. The assistance of foreign donors has helped to cushion the impact of declining revenues on the economy and to stretch out the adjustment period. This assistance has included the uranium price subsidy provided by the French companies that purchase Niger's uranium exports. It also included repeated rescheduling of debt owed to bilateral donors through the Paris Club and to the commercial banks through the London Club. Assistance has also come through the provision of grants and structural adjustment and standby loans by multilateral and bilateral donors. However, the companies that buy Niger's uranium have decided to eliminate the uranium price subsidy by gradually lowering Niger's export price until it reaches a level more commensurate with the world price level. Structural adjustment in Niger is thus far from over. Indeed, many of Niger's financial problems may be starting anew.

The social effects of Niger's stabilization and structural adjustment reforms are not well established because of a lack of data on the characteristics of

different income groups and because of the importance of the exogenous forces that have influenced Niger's economy over the past seven years. These forces included the following: (1) a severe drought in 1984; (2) economic policy reforms in Nigeria, which have involved an official exchange rate devaluation, border closure, official restrictions on imports and exports, and a significant overvaluation of the CFAF in terms of the Nigerian naira on the parallel foreign exchange market; (3) a sharp drop in the world rice price in 1986; and (4) a continuous decline in the world uranium price since 1984.

Real prices, employment numbers in the formal sector, the tax burden, and government spending have changed during the course of the SAP. Despite the lack of hard data on specific effects of adjustment, it appears that the social effects have not been large, considering the GON's financial situation. The theoretical literature suggests that Niger's emphasis on reducing its unsustainable fiscal and external current account deficits through reductions in imports, rather than through reductions in nontraded goods or through higher taxes alone, tended to lessen the need for an adjustment in its real exchange rate and served to soften the effect of the adjustment on real wages.

Consumer prices actually declined during Niger's SAP. However, it is not clear if this decline is due more to policy reforms that eliminated government regulation and distribution monopolies or to the sharp depreciation of the naira in terms of the CFAF on the parallel market. Increased tariff and tax protection for the rice industry starting in 1984 raised retail rice prices to levels that were higher than they would have been without the protection during the SAP period. But this protection resulted from the desire of the GON to preserve the rice industry and not from any specific structural adjustment requirement. Retail rice prices actually fell from 1986 to 1988 with the decline in the international rice price.

The reduction in public-sector spending was largely concentrated in the development budget, because real recurrent expenditure increased over pre-SAP levels. Combined recurrent spending on education, health, and social services in real terms is currently higher than it was before the SAP. However, the level of education and health services provided in Niger, particularly at the primary level, was low at the start of the SAP. Budgetary reforms have perhaps had some social cost by preventing an even faster rate of expansion in services. In particular, shortages of medicines and drugs provided through the public health-care system exist in the rural areas, and the number of rural dispensaries has remained about the same since 1982.

The decline in development spending under the SAP resulted in a relatively large decline in employment in the private modern sector. Employment in the

public sector rose rapidly from 1983 to 1988, however, with the result that modern-sector employment is roughly at the same level as before the SAP. Given that Niger's urban population has been expanding at an annual rate of about 7 percent, this expansion still implies that an ever-increasing proportion of employment must be found in the informal sector where wage levels, on average, tend to be lower than in the formal sector. The minimum wage, which has been held constant since 1980, fell by 15 percent in real terms from 1981 to 1985, but then increased from 1986 to 1988 as the overall price level declined.

The modern sector has also borne the burden of GON's efforts to increase tax revenues by broadening the tax base and by raising taxes and import tariffs. The upward adjustments in rates for telecommunications, water, and electricity rates and the higher import tariffs on consumer and investment goods have primarily affected urban households and businesses. On the surface, the increase in the tax burden appears to have been progressive. Thus it has increased relatively more for people working in the modern sector where average incomes are higher. Within the modern sector, the tax burden has increased relatively more for those with higher incomes. At the same time, however, large numbers of wealthy businesses operate in the informal sector and manage to avoid paying a large share of the applicable taxes.

Agricultural policy reforms played an important role in Niger's structural adjustment. Such reforms included reduction in input subsidies and elimination of almost all government interventions in pricing and marketing for millet, sorghum, cowpeas, and peanuts. Government intervention in these markets is now reduced to the operation of a grain reserve stock by OPVN. GON's intervention in domestic cotton and rice markets, on the other hand, is still extensive.

Agricultural policy reforms resulted in reduced budgetary costs to the GON, but the extent to which the reforms have improved agricultural income and the prices received by producers are not well established. This is because many of the agricultural reforms eliminated policies that had little direct effect on economic incentives. Before the SAP, most farmers had found that they could easily circumvent GON's market regulations, although with varying costs to themselves. Farmers in marginal areas may have been the worst affected by increased agricultural inputs prices because they have depended more on the GON for input supplies in the past.

The social effect of structural adjustment in Niger as well as its effect on the Nigérien economy can best be assessed through a more formal analytical framework. This assessment should link specific policy changes to specific income groups and sectors of the economy. To do this, CFNPP plans in the next

phase of the project to develop a computer model that is based on a social accounting matrix for Niger.

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