DOCUMENT OF INTERNATIONAL MONETARY FUND
AND NOT FOR PUBLIC USE

FOR AGENDA

SM/83/245

CONTAINS CONFIDENTIAL
INFORMATION

December 2, 1983

To: Members of the Executive Board

From: The Secretary

Subject: Madagascar - Recent Economic Developments

This paper provides background information to the staff report on the 1983 Article IV consultation discussions with Madagascar, which was circulated as EBS/83/235 on November 2, 1983.

If Executive Directors have technical or factual questions relating to this paper prior to the Board discussion, they should contact Mr. Gilman, ext. 74882.

Att: (1)

Other Distribution:
Department Heads

[illegible]/83/245

CONTAINS CONFIDENTIAL INFORMATION
[illegible]

November 2, 1983

To: Members of the Executive Board

From: The Secretary

Subject: [illegible] - [illegible] [illegible]

This paper provides background information to the staff report on the 1983 Article IV consultation discussions with [illegible], which was circulated as EBS/83/232 on November 7, 1983.

If Executive Directors have technical or factual questions relating to this paper prior to the Board discussion, they should contact Mr. [illegible], ext. 74882.

Att: (1)

Other Distribution:
Department Heads

CONTAINS CONFIDENTIAL INFORMATION

INTERNATIONAL MONETARY FUND

DEMOCRATIC REPUBLIC OF MADAGASCAR

Recent Economic Developments

Prepared by a staff mission consisting of Mr. R.J. Bhatia (head-AFR), Mr. R. Stillson (AFR), Mrs. M. Tyler (ETR), Mr. S. Schiavo-Campo (AFR), Mr. M.G. Gilman (AFR), and Ms. C. Kimes (IBRD)

Approved by the African Department and the Exchange and Trade Relations Department

November 29, 1983

Contents | Page

Contents | Page

Contents

Madagascar - Basic Data, 1979-83

Area, population, and GDP per capita

Area	587,041 sq. km
Resident population (1982):	9.2 million
Growth rate (1982)	2.8 percent
GDP per capita (1982)	SDR 281

	1979	1980	1981	1982 Est.	1983 Proj.
GDP (in current prices)					
Total (in billions of Malagasy francs)	595	691	789	996	1,217
			(In percent of GDP)		
Primary sector	35.6	36.0	39.8	41.1	42.6
Secondary sector	19.3	17.9	15.8	15.1	15.4
Tertiary sector	40.8	40.7	40.6	40.8	39.9
Consumption	92.1	93.2	93.0	95.8	95.2
Investment	25.4	23.4	18.1	13.7	11.8
Resource balance	-17.5	-16.6	-11.1	-9.4	-7.0
Gross domestic savings	7.9	6.8	7.0	4.3	4.8
Change in GDP			(Annual change in percent)		
At current market prices	36.4	16.1	14.2	26.2	22.2
At 1970 prices	9.8	0.8	-9.4	-0.8	1.6
Prices					
Implicit GDP deflator	11.4	15.1	25.2	28.3	20.3
Consumer prices	14.0	17.1	29.0	31.2	23.0
Export prices	8.3	30.8	-13.5	-1.5	13.2
Import prices	9.5	23.6	7.5	9.9	1.3
Terms of trade	-1.1	5.9	-19.5	-10.3	11.7
Public finance			(In billions of Malagasy francs)		
Total revenue	114.4	123.3	119.6	151.9	185.8
Total expenditure	-194.3	-250.1	-234.8	-238.9	-267.7
Of which: current budgetary expenditure	(-97.7)	(-112.9)	(-112.2)	(-127.4)	(-147.0)
Overall surplus/deficit (-)	-79.9	-126.8	-115.3	-87.2	-81.9

Madagascar - Basic Data, 1979-83 (continued)

	1979	1980	1981	1982 Est.	1983 Proj.
	(In billions of Malagasy francs)				
Foreign financing (net)	35.3	47.9	55.6	50.4	45.0
Domestic financing (net)	44.6	78.9	59.7	36.8	36.9
Of which: banking system	(41.9)	(78.2)	(57.8)	(33.9)	(37.6)
	(In percent of GDP)				
Revenue	19.2	17.8	15.2	15.3	15.3
Current expenditure	-16.4	-16.3	-14.2	-12.8	-12.1
Capital expenditure and net lending	-11.0	-13.0	-10.7	-7.2	-5.8
Overall surplus/deficit (-)	-13.4	-18.4	-14.6	-8.7	-6.7
Money and credit	(In billions of Malagasy francs; end of period)				
Net foreign assets	-40.1	-93.4	-49.8	-111.5	...
Net domestic credit	234.8	340.1	413.0	484.0	...
Government	104.1	181.1	240.6	268.5	...
Private sector	130.7	159.0	172.4	215.5	...
Broad money	173.0	206.0	249.8	275.6	...
Income velocity (GDP/Broad money)	3.7	3.6	3.5	3.8	...
	(Annual change in percent)				
Net domestic credit	46.5	44.8	21.4	17.2	...
Of which: private sector	19.5	21.7	8.4	25.0	...
Broad money	26.2	19.0	21.4	10.2	...
Balance of payments	(In millions of SDRs)				
Exports, f.o.b.	304.5	335.3	274.3	298.1	295.7
Of which: coffee	(138.6)	(164.0)	92.7	82.9	(111.3)
Imports, f.o.b.	-512.7	-587.3	-433.2	-409.0	-371.1
Trade balance	-207.8	-252.0	-158.9	-110.9	-75.4
Services (net)	-160.9	-211.3	-212.5	-222.3	-224.6
Private transfers (net)	5.5	2.9	3.4	-1.3	-1.1
Current account	-363.2	-460.4	-368.0	-334.5	-301.1
Official transfers	27.3	32.7	53.1	65.5	59.2
Nonmonetary capital (net)	234.3	288.0	274.8	171.1	175.8
Monetary capital	4.7	5.1	-18.1	-23.8	--
Errors and omissions, valuation adjustments, and short-term capital	-10.2	-45.1	9.6	79.9	-12.6
Allocation of SDRs	3.5	3.5	3.5	--	--
Overall surplus/deficit (-)	-103.6	-176.2	-45.1	-41.8	-78.7

Madagascar - Basic Data, 1979-83 (concluded)

	1979	1980	1981	1982 Est.	1983 Proj.
			(In percent of GDP)		
Exports, f.o.b.	14.1	13.3	11.1	11.6	10.8
Imports, f.o.b.	23.7	23.4	17.6	15.9	13.6
Current account balance	-16.8	-18.3	-14.9	-13.0	-11.0
Gross official foreign reserves			(In millions of SDRs; end of period)		
Central Bank	3.9	7.0	21.9	15.8	...
Public and publicly guaranteed external debt			(In millions of SDRs)		
Disbursed and outstanding (end of period) 1/	473.7	862.6	1,243.2	1,662.1 2/	...
In percent of GDP	21.1	34.3	50.5	64.4	...
Repayments of principal 3/	18.3	34.2	64.8	62.7	56.4
Interest payments 3/	9.9	32.0	55.1	64.2	72.6
Debt service ratio 3/	7.8	16.6	36.3	36.5	38.0
Exchange rates			(In Malagasy francs per SDR)		
End of period	264.8	288.0	334.5	405.6	...
Period average	274.8	275.0	320.4	386.1	445.8

1/ Including obligations to the Fund.
2/ Including an estimated amount of SDR 213 million of external payments arrears.
3/ After debt relief obtained under rescheduling agreements; includes IMF repurchases and repayment of consolidated arrears.

I. National Production and Income

1. Introduction

Madagascar, with a land area larger than France, a 1983 population estimated at about 9.4 million, a wide variety of climatic zones, and a sizable and diversified resource endowment, has good overall potential for economic growth. Developments over the past decade, however, have fallen far short of this favorable economic potential. Real GDP was barely higher in 1982 than in 1973, and real per capita GDP consequently fell by an estimated 28 percent over the decade, to a level comparable to the average for low-income sub-Saharan African countries.

The experience of stagnation in the early and mid-1970s led the Government in late 1978 to attempt to stimulate economic expansion by means of a vast investment program. The investment boom was weakly coordinated, projects were inadequately evaluated, and much of the investment was concentrated in projects that added little to the country's productive capacity over the medium term. Thus, after a brief growth spurt in 1979, due mainly to the demand stimulus of the increase in investment combined with a rise in public and private consumption expenditure, real GDP stagnated in 1980 and fell in the following two years. In addition, since the massive investment increase of 1979-80 had been financed almost entirely from borrowed external resources rather than out of domestic savings, the resource gap grew from a modest 3.5 percent of current GDP, on average, in 1972-78 to 17 percent in 1979-80, and the country's external debt mounted precipitously, from about 13 percent of GDP at end-1978 to over one third of GDP barely two years later, and to about 68 percent by the end of 1982. The Malagasy economy thus finds itself today with a productive capacity barely larger than in 1978 and a heavy overhang of external debt. The resulting large burden of debt service payments has, in large part, caused a severe foreign exchange shortage, narrowly constraining the authorities' capacity to stimulate economic recovery.

2. Recent developments in the structure of production and uses of resources

The structure of the Malagasy economy has not changed significantly since 1972 (Table 1 and Appendix Table I). Measured at constant prices, the share of agriculture, about 30 percent of GDP in 1972, fell to about 28 percent in 1979 before rising in subsequent years to an estimated 32 percent in 1983. The pattern of industrial production was almost a mirror image of the relative changes in agriculture: industrial output rose from its 18 percent share of GDP in 1972 to 21 percent in 1979, only to decline subsequently to an estimated 15 percent of GDP in 1983. This reversal reflected the industrial concentration of both the investment spurt of 1979-80 and the economic deterioration of 1981-82. The services sector has been a relatively more stable

Table 1. Madagascar: Gross Domestic Product and Use of Resources, 1978-83 1/

(In billions of FMG at constant prices)

	1978	1979	1980	1981	1982	1983 Est.
Agriculture	71	76	78	75	78	80
Industry	50	57	55	42	37	38
Services	118	130	132	127	127	128
Of which: public sector	37	40	42	43	44	44
Import taxes	9	10	10	5	5	5
Gross domestic product	249	273	275	249	247	251
Increase (in percent)	--	9.8	0.8	-9.4	-0.8	1.6
Net imports of goods and nonfactor services 2/	-7	11	9	0	1	0
Total resources	242	284	285	249	248	251
Increase (in percent)	--	17.4	0.2	-12.6	-0.4	1.2
Private consumption	164	175	176	155	162	166
Public consumption	50	57	60	58	60	60
Gross investment	29	52	49	36	25	24
Memorandum items: (In percent of GDP)						
Agriculture	29	28	28	30	32	32
Industry	20	21	20	17	15	15
Services	47	48	48	51	51	52

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

1/ Components may not add up to totals because of rounding.
2/ Adjusted in light of available data from the balance of payments.

component of real GDP, with an approximately constant share of about 47 percent from 1972 through 1978, rising gradually to about 51 percent in 1983, such growth split about evenly between nonpublic services 1/ and administrative salaries.

After the sharp 9.4 percent contraction of 1981, real GDP in 1982 again declined, by 0.8 percent. There was a small recovery in real agricultural output (back to its 1980 level) and a rate of inflation of 31.2 percent, marginally lower than expected. These slight improvements, however, were more than offset by a continued decline in the terms of trade by 10.3 percent and by the output decline in the industrial sector by more than 11 percent compared to 1981. For the third consecutive year the impact of economic contraction in 1982 fell largely on investment, with real private consumption rising by 4.5 percent and public consumption by 3.4 percent.

In 1983 economic performance is estimated to improve marginally. An expected improvement in the terms of trade and a more efficient allocation of foreign exchange should help reverse the slide in industrial activity. Since favorable weather will help agricultural production, real GDP is expected to show a slight increase in 1983. Gross domestic savings are expected to rise from 4.3 percent of GDP in 1982--their lowest level, in nominal terms, since 1976--to 4.8 percent of GDP in 1983 (Appendix Table II).

Two major developments are worth noting with regard to the use of resources. First, the previously noted surge in investment is apparent, from an average of about 10 percent of real GDP in 1972-78 to almost 16 percent in 1979-80, thereafter declining quickly and sharply under the impact of the external debt difficulties to less than 10 percent of GDP in 1983. Second, consumption, relatively steady from 1972 to 1977, also rose in relative terms beginning in 1978 but, unlike investment, failed to contract after the short-lived boom was over. On the contrary, policies to insulate private consumption (and especially consumption by lower-income urban groups) from the post 1980 economic contraction, 2/ combined with the higher marginal propensity to consume of these groups, led to an increase in private consumption to over 66 percent of real GDP in 1983, compared with 64 percent in 1980. Real public consumption also increased in real terms, from 20 percent of GDP in 1978 to 22 percent in 1980 and an estimated 24 percent in 1983.

1/ The largest component of the services sector is commerce, followed by transportation.

2/ Continued high levels of rice imports, in the face of increasing foreign exchange scarcity, were the single most important element of these policies (see below).

3. Major sectoral developments

a. Agriculture

Agriculture constitutes an estimated one third of GDP and is the largest source of foreign exchange earnings in the economy (83 percent in 1982). The sector produces most of the population's food needs and supplies the bulk of raw materials for Madagascar's manufacturing sector. Production and distribution of agricultural products are dominated by smallholders (85 percent of the population) and by private traders, although state companies play an important role in the marketing of several major commodities. Agricultural sector performance in recent years has been disappointing, with an average annual growth rate in real terms of 1.2 percent between 1979 and 1983. This reflects the stagnation in production of major commodities, such as rice, meat, coffee, and sugar, and wide fluctuation and/or declines in the output of others (e.g., cotton, cloves, groundnuts). The major causes of poor sector performance include government pricing and marketing policies, shortages of imported inputs (due to the foreign exchange crisis), and deterioration of the transport system. To some extent, unfavorable weather conditions have also played a part. Indices on crop output, area cultivated, and yields over the past five years are presented in Table 2, and detailed production data are given in Appendix Table III. 1/

There has been a significant level of government intervention in agricultural trade over the past 10 years, with collection of important crops and prices from farm-gate to retail level being regulated by government authorities. These policies have sought to assure consumer access to staple food items at low prices and to prevent exploitation of producers by traders. However, the ineffectiveness of marketing systems, low producer price levels, and cumbersome price administration systems have had important direct and indirect effects on producer incentives, and, rather than stimulating agricultural production, these policies have contributed to the stagnation of production in recent years; this in turn has contributed to price increases induced by shortages. One indication of the reduction in incentives is the trend in real producer prices since 1979 (Appendix Table IV); an implicit value-weighted index of these prices shows a decline of 9 percent during the four-year

1/ There are discrepancies between the national accounts data, which are still provisional for 1982, and the production statistics for individual sectors. Data on agricultural production gathered by the Ministry of Agriculture extension staff show an overall decline in 1982 (declines in rice and export and industrial crops and slight increases in other food crops), whereas the national accounts show a 4.0 percent increase in agriculture in 1982.

Table 2. Madagascar: Indices of Area Planted, Production, and Yields of Major Crops, 1979-83

(1975 = 100)

	Area planted					Production					Yields				
	1979	1980	1981	1982	1983 1/	1979	1980	1981	1982	1983 1/	1979	1980	1981	1982	1983 1/
Food crops															
Rice	105	111	110	106	113	98	107	102	100	109	94	98	94	96	98
Manioc	131	137	141	141	144	120	127	128	133	132	90	94	90	93	91
Maize	106	117	117	106	132	97	107	100	94	96	91	91	86	88	73
Export crops															
Coffee	92	93	93	93	94	97	95	100	95	97	106	103	107	100	103
Vanilla	83	92	89	94	96	33	43	61	57	59	40	48	68	60	60
Cloves	153	160	161	161	162	84	246	216	316	120	55	155	136	200	73
Cocoa	--	--	--	--	--	123	123	134	120	128	--	--	--	--	--
Pepper	90	98	98	100	102	83	93	97	83	83	92	94	98	82	82
Sisal	--	--	--	--	--	71	76	73	72	60	--	--	--	--	--
Pois du Cap	--	--	--	--	--	40	25	21	26	37	--	--	--	--	--
Industrial crops															
Cotton	112	106	117	107	112	98	75	90	83	91	90	72	79	77	83
Sugarcane	107	118	122	129	129	105	101	103	106	106	98	86	85	82	82
Groundnuts	118	123	104	109	112	96	93	78	81	81	83	78	76	76	76
Tobacco	--	--	--	--	--	85	73	98	98	107	--	--	--	--	--

Source: Data provided by Malagasy authorities.

1/ Projection.

period. Other government interventions in agriculture have concentrated on establishing state control over institutions with a vital role to play in shaping agricultural development: marketing companies, agro-industries, and the banking system. The agricultural credit policy applied by the Government in recent years has favored state firms, and to some extent smallholders, at the expense of medium- and large-scale private investors and firms.

(1) Rice

Paddy is Madagascar's most important agricultural crop, accounting for about 50 percent of the total area under cultivation. Rice is the staple food item in the Malagasy diet, and about 70 percent of the population grows paddy. Of the estimated 1.2 million hectares planted to paddy in 1983, about 75 percent represents smallholder fields and the remaining 25 percent represents government developed and supported irrigation schemes. Production has stagnated over the past decade, hovering around 2 million tons of paddy per year. It is estimated that about 80 percent of production is consumed on the farm, leaving about 20 percent to enter marketing channels. As this level of marketed output has been insufficient to supply urban demand, the Government has imported increasing quantities of rice in recent years, reaching a peak of 356,000 tons in 1982 (about 20 percent of domestic consumption).

(a) Recent production trends. Paddy production has fluctuated over the past five years, growing at an annual average rate of 1.25 percent between 1979 and 1983 (significantly less than the estimated population growth rate of 2.8 percent per year). In 1982 production is estimated to have fallen by about 2 percent from 1981 levels, due largely to the effects of a cyclone that hit Madagascar just prior to the main harvest. However, it is difficult to distinguish between the cyclone's impact on production levels and the impact of other variables, such as the decline in the purchasing power of the official producer price for paddy, shortages of imported inputs, and transport and marketing bottlenecks. With favorable weather conditions experienced this year, production is expected to rebound and to grow by about 9 percent over the depressed 1982 levels. Physical factors contributing to increased production in 1983 include the expansion of areas cultivated (made possible by rehabilitation of irrigation networks) and increased yields (made possible by greater use of fertilizers and pesticides in high production areas). Increases in producer prices announced in 1982 and 1983, as well as the freeing of the domestic paddy and rice trade, are also expected to have a positive impact on paddy output.

(b) Government policy prior to May 1983. Prior to May 1983 the Government exercised considerable control over the paddy and rice market through a variety of mechanisms: (a) establishing a state monopoly over the purchase and distribution of paddy and rice, (b) fixing pan-territorial prices for paddy and rice, (c) imposing severe restrictions (and sanctions) on private trade, (d) controlling rice imports, and (e) distributing domestically produced and imported rice through government outlets (at the fixed official price). The Government's objectives in pursuing this policy were fourfold: it was hoped to (1) increase domestic production, (2) reduce rice imports, (3) assure adequate supplies of rice to urban consumers at relatively low prices, and (4) assure adequate returns to producers. However, the results tended in the opposite direction. Due to domestic inflation, producer prices declined in real terms despite periodic nominal increases. Not only did production stagnate, but output marketed through official channels declined, reducing quantities available for distribution through government outlets in major urban areas. Therefore, to satisfy urban consumption needs, the Government imported increasing amounts of rice. Even so, official sources proved inadequate, and a parallel market developed, with prices substantially higher than those offered through government outlets.

These developments are summarized in Table 3. Even though the Government increased producer prices by 55 percent in nominal terms between 1979 and 1982, returns to the farmer decreased by 10 percent in real terms over this period, and production declined by about 4 percent. Collections by official marketing agencies declined by over 50 percent between 1979 and 1982, and accounted for only 5 percent of national production and 25 percent of estimated marketed production in 1982. Rice imports more than doubled during this period, reaching a high of 356,000 tons in 1982, representing a 124 percent increase over the 1979 level. During this four-year period official rice supplies (both domestically collected and imported) supplied about 20 percent of national consumption, increasing to 25 percent in 1982 with the big surge in imports. However, this aggregate figure masks the importance of official supplies for urban areas, where the bulk of imported and official collections are released. It is estimated that in 1982 rice distributed through official channels in the capital and major ports accounted for between 80 and 99 percent of total rice consumption in those cities. Outside of these urban areas, the private sector was the major outlet for marketed paddy and rice. Prices on the private market fluctuated, reflecting seasonal variations in availability.

(c) Government policy reform of May 1983. Recognizing that government marketing and pricing policy was not achieving its intended objectives, the Government announced and began implementing a major reform of rice policies in May and June of 1983. The major elements of this reform are (1) elimination of the state marketing monopoly for paddy and rice except in the Lac Alaotra and Marovoay basin irrigation

Table 3. Madagascar: Paddy Production, Price, Marketing, and Import Trends, 1979-83

	1979	1980	1981	1982	1983 1/
Domestic production (thousand tons paddy)	2,045	2,109	2,011	1,967	2,147
Nominal official price (FMG/kg)	39	43	47	60	65
Real official price 2/ (FMG/kg)	21	19	16	19	19
Official collections 3/ (thousand tons paddy)	234	235	121	104	151
Official collection as percent of total production	11	11	6	5	7
Official collection as percent of marketed production 4/	55	55	30	25	35
Rice imports (thousand tons)	156	177	192	356	183
Rice imports as percent of total consumption 5/	10	11	13	22	13
Official rice supplies 6/ (thousand tons)	313	334	274	420	295 7/
Official rice supplies as percent of total consumption	21	21	18	25	12 7/

Sources: Ministry of Agricultural Production; Central Bank of Madagascar; and staff estimates.

1/ Estimate.
2/ Deflated by low-income consumer price index (Antananarivo) adjusted to exclude rice.
3/ Collections by state-owned companies: SINPA, SOMALAC, FIFABE, SOMACODIS, ROSO, SICE, COROI.
4/ Marketed production is estimated at 20 percent of total production.
5/ Total consumption is total domestic production, converted to rice equivalent terms (0.67 x paddy), plus imports.
6/ Official collections (rice equivalent) plus imports.
7/ Imports plus end-1982 stocks only; official collections excluded because it is not clear if they will be handled through government agencies.

schemes 1/; (2) allowing fluctuation of domestic rice prices within due to the virtual collapse of government marketing operations in limits set by a band (a floor price of 65 FMG/kg for paddy and a ceiling price of 300 FMG/kg for rice); and (3) use of rice imports as a tool to stabilize domestic prices (the price of imported rice was left unchanged at 140 FMG/kg). The Government considers that the freeing of paddy producer prices should increase returns to producers; in some areas, immediately after the liberalization measures, producer prices were estimated at about 25 percent above the minimum. Production collected by state companies is estimated to increase from 104,000 tons in 1982 to 151,000 tons in 1983, or a 45 percent increase over 1982 levels (Appendix Table V); as of mid-July only 20,000 tons had been collected by state marketing agencies. The Government has contracted for 183,687 tons of rice imports during 1983, which, when combined with outstanding stocks at end-1982, would bring total supplies available through the government distribution system to about 260,000 tons. This represents about 12 percent of national consumption; as indicated earlier, these supplies are used almost exclusively for urban consumption.

It is too early to assess the effect of the marketing and pricing reform on producer and trader behavior. As might be expected with the introduction of a new system, experience has apparently varied from region to region. One particular problem encountered thus far concerns the operation of the state marketing monopoly in the Lac Alaotra basin. SOMALAC (the parastatal responsible for collecting the paddy) was unable to purchase paddy at the beginning of the harvest due to delays in the release of its credit line for the marketing campaign. As a result, purchases in mid-July were six to eight weeks behind schedule and represented about one sixth of normal mid-July levels. The Government is now giving priority to the credit needs of the state companies involved in the rice marketing campaign.

(2) Industrial crops

(a) Cotton. Cotton production has fluctuated widely between 1979 and 1983 and has not regained the output level reached at the beginning of the period. This performance can be attributed to inadequate producer incentives (low fixed producer prices); to shortages of imported inputs, equipment, and spare parts; to restrictive credit

---

1/ These two schemes were excluded because the two parastatals that manage the irrigation networks and input distribution in the two areas are financially dependent on the marketing monopoly they have in the areas. The Lac Alaotra and Marovoay basins account for about 18 percent of national paddy production and, traditionally, for about 55 percent of official marketed production; this share rose to 85 percent in 1982 other parts of the country. See Appendix Table V.

policies applied to large farmers; and to unfavorable weather conditions in certain instances. Under the combined impact of these factors, cotton production declined in 1982 (by 9 percent) as did area cultivated (by 6 percent) and yields (by 3 percent). Recognizing the need to arrest the decline in domestic cotton production, the Government significantly increased producer prices in 1983 (Appendix Table IV) and launched a national cotton development program aimed at removing input supply constraints. Results in 1983 are expected to show considerable improvement as government programs begin to have an impact on farmer incentives and on productivity. It is estimated that production will grow by 10 percent over the depressed 1982 level, with the increase attributable to expansion in planted areas and to increased yields.

(b) Sugarcane. Sugarcane is grown on four estates that are operated by two state-owned sugar refining companies; smallholders in the vicinity of these estates also cultivate sugarcane. Approximately 80 percent of production is estimated to come from the sugar estates and about 20 percent from smallholders. Cane production has stagnated at about 1.4 million tons between 1979 and 1983. Output in 1982 increased slightly (3 percent) over 1981 levels, and 1983 output is expected to remain at the 1982 level; yields and area cultivated are also expected to remain constant. Stagnation of production is linked to shortages of imported inputs, equipment, and spare parts and to inadequate incentives 1/. While production has stagnated, quantities of cane actually processed into sugar declined in 1982 and 1983 because of shortages of spare parts for vehicles and equipment. Sugar exports dropped by about 50 percent from normal levels of about 20,000 tons to 10-11,000 tons in 1981 and 1982, apparently to permit increased supply for the domestic market; ex-factory prices increased by about 12 percent in real terms during these two years. Sugar exports rebounded to previous levels (25,000 tons) in 1983, and supplies available for domestic consumption will decline as a result. The shift in the export/domestic market mix in 1983 may be due to the fact that domestic ex-factory prices for sugar have not been changed since January 1982, resulting in a 25 percent decline in real terms during 1983.

(c) Groundnuts. Groundnut production has declined over the past decade, from a high of about 50,000 tons (1972) to an estimated 34,000 tons in 1983; this latter figure represents virtually no change over 1982 output levels. The decline in groundnut production is explained by inadequate producer incentives (both in absolute terms and in comparison with competing crops) and by transport and marketing bottlenecks. Producer prices have declined about 18 percent in real

---

1/ Producer prices (affecting the 20 percent of production produced by smallholders) have remained constant in real terms over the five-year period; ex-factory prices (affecting the 80 percent of production grown on company estates) also remained constant in the late 1970s, with a sharp increase in 1980 and 1981.

terms over the last 10 years, the drop in 1983 representing almost half of that decline (8 percent). Oil refining companies have been unable to pay more than the official producer price because the ex-factory and consumer prices of edible oil have been fixed at extremely low levels. As a result of these and other factors (such as management difficulties of the refining companies), Madagascar's production of edible oils has declined by about two thirds 1/, from about 6,000 tons in the early and mid-1970s to about 2,000 tons currently. To compensate for this decline, imports have increased dramatically, reaching 15,000 tons in 1983. This represents about 90 percent of domestic consumption.

(3) Export crops

Madagascar exports a variety of agricultural commodities, including coffee, cloves, vanilla, cocoa, pepper, sisal, and butter beans ("pois du cap"). The bulk of export earnings (70 percent) are provided by coffee, cloves, and vanilla, an additional 10 percent being provided by other agricultural exports. The Government fixes producer prices and marketing margins each year for the major export crops (coffee, cloves, vanilla) as well as for pepper and cocoa. Private traders are involved in the collection, processing, and stocking of all of these commodities, but the exports of coffee and cloves are state monopolies. Both private and public sector companies participate in the export of the other crops. As part of the administered price structure for these crops, exporting companies are guaranteed an f.o.b. price that is substantially below the world market price. The difference between the actual price and the guaranteed price is deposited in a stabilization fund for use when and if the world price declines below the guaranteed price. The stabilization funds are, in turn, deposited in the Fonds national unique de pérequation (FNUP) and have, in practice, been used to finance government expenditures in other sectors of the economy.

(a) Coffee. Coffee ("Robusta" variety) is grown primarily by smallholders and is the single largest earner of foreign exchange (28 percent of exports in 1982). The trees are old, and yields are declining in many areas; replanting programs affect a small portion (8 percent) of total area cultivated. Government statistics indicate that production has fluctuated around an average of 81,000 tons since 1979. Production in 1982 is estimated at 80,000 tons (a 5 percent drop from 1981 levels) and at 81,000 tons in 1983. These figures may be overestimated, however, as marketed output has steadily declined, dropping 25 percent between 1979 and 1982 (the last year for which

1/ Edible oil production comes from cottonseeds, groundnuts, and oil palm.

complete information is available) 1/. These trends are explained by a number of factors: inadequate price incentives, marketing difficulties due to transport constraints, and the already-mentioned aging of coffee plantations. Although producer prices have increased by about 50 percent in nominal terms since 1979 (from 185 FMG/kg to 280 FMG/kg), returns to producers have steadily declined in real terms; the 1983 real producer price is only 83 percent of the 1979 level. Producers receive a relatively small share of the world price, as coffee exports are heavily taxed by the Government. In 1982 producers received 43 percent of the actual f.o.b. price, and in 1983 it is estimated that they will receive about 31 percent. Madagascar has had difficulty in recent years in selling all of its coffee output, and significant unsold stocks have accumulated (estimated at 30,000 tons in April 1983).

(b) Cloves. Cloves, the second most important export crop, are also grown by smallholders. Production follows an irregular cycle, with high production years interspersed with low years. Cyclical fluctuations are aggravated by a number of factors, most notably lack of fertilizer applications and the practice of harvesting leaves (for distillation into clove oil). Output in 1982 reached a three-year high of 15,800 tons, up from 10,800 tons in 1981 (45 percent increase); 1983 is expected to be a low year in the production cycle, and output is estimated at about 6,000 tons. Although price incentives have been decreasing in real terms over the past five years (by 40 percent), returns have still been attractive when compared with other crops and the labor input required under current production techniques. Another reason for clove's attractiveness to producers is the plant's versatility: in addition to the clove itself, the leaves and stems are marketable commodities, bringing in additional income. The official producer price represents an even smaller share of the f.o.b. value than in the case of coffee; this was 19 percent of the f.o.b. price in 1981 and 17 percent in 1982, and it is projected to decrease to 14 percent in 1983. The Government does not wish to encourage further production increases, given the crop's unfavorable world market prospects (see Section IV below). In 1982 cloves accounted for 24 percent of total export value, but this share will decrease in 1983 as the Government has been unable to conclude a sales agreement with its principal client. The low volume of exports this year has resulted in the accumulation of substantial stocks from the bumper 1982 harvest.

(c) Vanilla. Madagascar is the world's leading producer of natural vanilla, accounting for about 80 percent of world production. The crop is cultivated by smallholders and is generally interplanted with tree crops, resulting in low yields. The official data show that

---

1/ Marketed output dropped from 69,000 tons to 51,000 tons. The Government projects an increase to 55,000 tons in 1983, but this does not appear assured, given the above-mentioned trends.

marketed production has increased since 1978, although these levels are very low in comparison with past performance; 1983 estimated production is only about 15 percent of output recorded in the early 1970s. However, data on historical trends are not considered reliable, as they contain numerous inconsistencies. 1/

The major variable explaining production levels during the past 10 years appears to be the trend in real producer prices, with returns to farmers declining in real terms during the earlier period and increasing by about 10 percent between 1979 and 1983. As with coffee and cloves, producers receive only a small portion of the world market value; in 1981 the producer price represented about 27 percent of the actual f.o.b. value, decreasing to 17 percent in 1982; the producer share is expected to increase slightly to about 19 percent in 1983. Export quotas are agreed upon each year by the three vanilla production countries (Madagascar, Comoros, Réunion), but they have proved difficult to enforce, as substantial "unofficial" exports have taken place in recent years (particularly 1980 and 1981). Export volume in 1982 was about 1100 tons and is expected to decline to about 1000 tons in 1983. The Malagasy authorities estimate that 1,100 tons of prepared vanilla is the maximum sustainable level of exports for Madagascar in the future, given competition from synthetic vanillin. Vanilla exports accounted for 17 percent of total export value in 1982 and are projected to remain at the same level in 1983.

(d) Other export crops. Four other crops provide small but steady amounts of foreign exchange: sisal, pepper, butterbeans, and cocoa. Of the four, sisal is the most important in terms of export earnings, bringing in about FMG 1.7 billion per year. The crop is cultivated on estates by private companies, and production has stagnated over the past five years. Output in 1983 is expected to decline by about 15 percent due to adverse weather conditions in 1982. Pepper is next in order of importance, earning about FMG 1 billion per year. Pepper is cultivated by smallholders and is generally interplanted with tree crops. After production increases in 1980 and 1981, output fell by 15 percent in 1982 to about 2,500 tons of dried pepper and is expected to remain at this level in 1983. This decline followed a particularly severe deterioration in real producer prices (about 25 percent) in 1981, and returns have continued to deteriorate since then (an additional 15 percent drop during 1982 and 1983). Butterbeans ("pois du cap") consistently provided about FMG 1 billion in foreign exchange earnings in the mid-1970s, but between 1975 and 1982 production dropped by 75 percent and exports fell even further (85 percent). Factors contributing to this situation have included the deterioration

---

1/ In particular, marketed output greatly exceeds estimated production when converted to green vanilla equivalents, suggesting that either production has been seriously underestimated or that marketing agencies are overstating their collections.

in real producer prices (about 15 percent) and the unreliability of marketing services. The Government recently abolished the state monopoly for this crop and redefined the producer price as a minimum price; marketing companies have also begun providing inputs to farmers. With these increased incentives, production appears to be increasing, and exports are expected to follow suit. Cocoa is grown on smallholdings as well as on large estates; it is a light colored variety appreciated by manufacturers of fine chocolate. Production appears to have increased slightly between 1979 and 1983 (about 5 percent), but export volumes have fluctuated. Cocoa earnings have averaged about FMG 660 million over the past three yerars; they are projected to increase to about FMG 900 million in 1983.

(4) Livestock and fisheries

(a) Livestock. Cattle raising is the most important livestock activity, and domestic beef consumption is relatively high in comparison with other African countries (Appendix Table VI). Production techniques for cattle raising are traditional, and the cattle herd has stagnated at about 10 million head for the past five years. Considerable potential exists for increasing productivity, however, as Madagascar has vast natural pastures (60 percent of total land area) and is free of major cattle diseases. Meat and meat products were once an important export commodity, but in recent years they have steadily declined in both volume and value terms, from 10 percent of export value in 1973 to 1 percent in 1983. Physical quantities have declined from 6,000 tons in 1980 to an estimated 675 tons in 1983, or a 90 percent drop. These trends are explained by a variety of factors, notably strong domestic demand and high cattle prices, making it relatively unprofitable to export for the world market compared to the domestic market.

(b) Fisheries. Madagascar's fresh water and sea fishing remain largely underexploited; offshore fishing potential is estimated at 150,000 tons per year, and high value crustaceans offer an additional potential catch of 8,000 tons per year. Traditional fishing is pursued by some 6,000 fishermen, while commercial maritime fishing is carried on by four jointventure companies that operate along the northwest coast of the island. These companies provide most of the supply for export, which consists primarily of prawns but also includes lobster, crabs, and, increasingly, saltwater fish. Marketed fish output (particularly of export species) declined in volume terms between 1979 and 1981 but strongly recovered in 1982. The 1983 catch is expected to continue this upward trend, and output levels for all major categories are expected to surpass 1979 levels (Appendix Table VI). Despite the stagnation in export volume apparently as a result of higher domestic consumption, the value of fish exports increased between 1979 and 1982, from about 4 percent of total export earnings to about 7 percent; fish earnings are expected to stay at this level in 1983. The Government is currently exploring possible joint-venture arrangements with foreign partners (Japan, Spain) as a way to improve technical and financial performance and to exploit new species (e.g., tuna).

b. Mining

Madagascar's mining potential is usually described as good, with important nickel and bauxite deposits known to exist and substantial reserves of chromite and graphite. Extractive industries, however, have declined in importance since the early 1970s, owing to external demand factors and internal supply and transportation problems. The principal mineral products are graphite, chromite, and mica, and production is almost entirely for export 1/ (Appendix Table VII).

Graphite is the most important mineral in terms of foreign exchange earnings. Madagascar has been the leading world supplier of high-grade graphite for over a decade, and its reserves remain large. Production has fluctuated around a fairly stable trend, varying from 20,000 tons produced in a good year (such as 1974) to a low of 12,200 tons in 1980, and a normal production level of 14,000-15,000 tons. Until 1980 the primary constraint on exports, and thus on production, stemmed mainly from external demand; in recent years internal supply problems have become increasingly important, particularly the poor state of mining equipment and the difficulties of transporting the mineral to the main port of shipment. Thus, average yearly graphite production has stagnated since 1979 at around 15,000 tons, and exports at around 14,000 tons, despite an increase in the unit value of exports from SDR 320 per ton in 1979 to SDR 449 per ton estimated in 1983.

Chromite is the second leading mineral export. On the production side, in addition to equipment difficulties similar to those affecting graphite, production has suffered from the progressive exhaustion of the deposits and a fall in external demand for chromite, resulting mainly from the economic difficulties of the world steel industry. where demand has switched from chrome concentrate, the country's major form of chromite exports, toward chrome pellets. The consequent large decrease in the volume of exports in 1982-83, to less than 50 percent of the 1979-81 average, has been aggravated by a significant decline in unit value, leading to a steep drop in chromite export earnings in 1982-83 to just over 40 percent of their average level in the previous three years. The activities of KRAOMA, the public enterprise responsible for chrome production, have thus been curtailed; production fell in 1982 to barely one third the 1973 level, and the excess stocks accumu lated since 1979 have been somewhat reduced in 1982.

1/ The contribution of mica exports to foreign exchange earnings has become almost insignificant with the competition from synthetic substitutes reflected in a decline in unit values despite a small increase in output over the last decade.

c. Manufacturing

Despite some diversification of industry in the twenty years since independence, manufacturing activity is still heavily concentrated in food processing, textiles, and clothing (which account together for some two thirds of total manufacturing production) and, with the major exception of textiles, is oriented mostly to the domestic market (Table 4). Government policy toward industry changed in the early 1970s in the direction of nationalization and state control, and at present all large industrial enterprises are majority-owned (directly or indirectly) by the Government, which also has equity in almost all medium-sized enterprises. The principal objective of industrial policy in 1982 and 1983 has been the rehabilitation of existing capacity and the increase in the low rate of capacity utilization.

Total industrial output grew to a peak of 20.1 percent of real GDP in 1979 and declined for the following three years in both relative and absolute terms, along with the rate of capacity utilization, resulting in large part from the scarcity of imported inputs. According to official estimates, the rate of capacity utilization in industry fell from 73 percent in 1979 to 55 percent in 1982. In 1982 shortages of imported materials and spare parts, difficulties in procuring local inputs (themselves partly dependent on imports), and internal transportation difficulties combined to result in an 11 percent drop in total industrial output compared to 1981, and the curtailment or suspension of many companies. The industrial decline has apparently been arrested in 1983, in part because of the beginning of a selective policy of allocation of scarce foreign exchange toward the relatively more efficient enterprises, in line with the Government's new priority on rehabilitating existing capacity as opposed to capacity expansion. 1/

In 1982 the decline in manufacturing production, while smaller than the dramatic 14 percent drop of the previous year, was large and widespread enough to affect all industries, with the single exceptions of construction materials and tobacco (Table 4). The sharpest single decline occurred in transport equipment, by 73 percent, bringing output to less than one seventh its 1970 level. The contraction was relatively more severe in producer goods industries than in the consumer goods sectors, 2/ although much of the differ-

---

1/ The import program for 1983 aimed at providing inputs for an industrial capacity utilization greater than in 1982.

2/ The weighted average decline in output for industries producing mainly consumer goods (food processing, textiles, clothing, tobacco, leather) was 5.9 percent, compared to a 15.0 percent decline for manufacturing industries producing mainly producer goods (construction, oil refining, chemicals, printing, paper, wood, transport equipment, and rubber).

Table 4. Madagascar: Indices of Manufacturing and Mining Production, 1978-83

(1970 = 100)

	Weight 1/	1978	1979	1980	1981	1982	1983 Proj.
		Annual average					
Food processing	38.0	96	94	89	77	68	69
Textiles	19.5	156	165	158	149	144	151
Clothing	7.4	115	118	131	121	90	90
Construction materials	7.4	47	44	42	31	33	33
Petroleum refining	4.8	63	59	89	63	61	60
Chemicals	4.6	201	213	173	124	94	89
Extractive industries	3.9	115	119	137	91	55	69
Tobacco	3.8	164	164	161	138	144	147
Printing	3.6	79	78	81	87	78	78
Paper	2.3	205	212	197	170	151	143
Wood	1.8	78	74	68	62	57	57
Transport equipment	1.8	83	81	112	52	14	14
Leather	0.7	333	379	345	307	292	277
Rubber	0.4	175	216	227	140	82	82
Overall	100.0	115	117	115	99	88	90

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

1/ Based on 1970 values.

ence is explained by the comparatively better performance of textiles -- the only manufacturing industry of current export importance. Production of textiles in 1982 was only 3.5 percent lower than in 1981, and 8.9 percent lower than in 1980, compared to a cumulative 1980-82 decline in total manufacturing output of almost 22 percent. Food processing, the second most important manufacturing subsector, declined slightly more than in proportion to the rest of manufacturing.

In addition to the factors of shortages of inputs and transportation difficulties mentioned above, price controls contributed to the difficulties of the sector. For example, the low level of the controlled consumer price of edible oil made it unprofitable for the edible oil manufacturers to pay more than about half of the effective market price of groundnuts. The ensuing problems in procuring groundnuts for processing were partly responsible for holding production down to less than 20 percent of the estimated domestic market for edible oil.

As noted above, prospects for 1983 appear to be less unfavorable, and, at a minimum, no further decline in manufacturing output is expected. This is attributable mainly to a projected increase in textile production (linked to the expected greater availability of local cotton) and a continuation of the growth of cattle slaughtering activity.

d. <u>Transport</u>

The dispersal of the population and the large distances between agricultural and mining producing areas, on the one hand, and the major local markets or shipping centers, on the other, have caused endemic transport problems. For over ten years, moreover, the geographic difficulties have been aggravated by a progressive deterioration in transport infrastructure, largely attributable to insufficient maintenance and rehabilitation. In addition, since 1981 shortages in imported spare parts have immobilized a large part of the rolling stock--including more than half of the heavy truck fleet. As a result, transport problems created economic difficulties in 1982 and 1983 second only to the scarcity of foreign exchange itself, to which they were, in turn, partly related.

Despite these difficulties, the level of activity of public enterprises in both air and maritime transport expanded steadily from 1978 to 1981. Railroad traffic, by contrast, declined. All forms of transport, with the exception of road traffic, 1/ picked up slightly in

---

1/ There are no reliable data on road traffic, only a fraction of which is carried out by state enterprises. Available data on employment, energy consumed, and imports by public enterprises engaged in road transport, however, suggest some increase in activity through 1981, followed by a contraction in 1982.

1982 (Appendix Table VIII). Overall, the volume of traffic accounted for by public transport enterprises in 1982 was higher than the 1978 level by 175 percent in shipping and by 41 percent in air transport, and lower by 17 percent in railroads.

Public transport enterprises appear to have avoided the substantial decline in capacity utilization experienced by the industrial sector. While not high, capacity utilization rates in air and rail transport have remained about constant from 1978 to 1982. 1/ This is partly because, unlike manufacturing, air and rail transport did not experience a buildup in capacity during 1979-80. 2/ Also, air and rail freight and passenger rates were raised substantially during the period in real terms, allowing public transportation enterprises to avoid some of the serious financial difficulties of the industrial enterprises.

In 1983 the authorities established a clear priority on the rehabilitation and maintenance of transport infrastructure, and, in a change from the previous investment pattern, over one fourth of public investment proposed for 1983-85 is to be allocated to the transport sector. Substantial improvements, however, cannot be achieved quickly, and in the near future transport problems are likely to remain the single most important internal constraint to an expansion of production in other sectors.

e. Energy

Madagascar has significant potential energy sources, including coal, lignite, oil shale and tar sands, and hydroelectricity. However, most of this potential has not been utilized. Coal reserves are estimated at one billion tons, but high mining and transportation costs have prevented exploitation. The cost of recovery from the oil shale deposits is also too high at present for economical exploitation. More promising are the tar sands deposits, which are estimated to hold 5 billion to 20 billion barrels of oil equivalent in two locations. Both locations are in the preparatory stages of exploitation, with external assistance from the IBRD, the KFW, and, in January 1983, the OPEC Fund. Exploration for lighter crude has been under way since the late 1960s, with prospects consistently described as promising, but with no significant development beyond the exploratory stage emerging as yet.

1/ No data are available on capacity utilization in shipping. Purchases of new ships in 1979, however, make it likely that capacity utilization in maritime transport has not held up as well as in air or rail transport.

2/ With the exception of the 1979 purchase of a Boeing 747.

Total energy consumption in 1982 is estimated at about 1.2 million tons of oil equivalent. The traditional dependence on fuel wood, accounting for about 60 percent of total consumption in 1980, has almost certainly increased over the last three years, in parallel with the decline in petroleum consumption associated with the contraction in crude oil imports (Appendix Table IX). The contribution of hydroelectricity has also increased somewhat, to about 3.5 percent of total consumption, due to the opening in July 1982 of a new generating plant. Coal, used almost exclusively in the cement industry, accounted in 1982 for about 2 percent of energy consumption.

Imports of crude oil, and thus production of refined petroleum products, have been falling since 1980 and are projected to decline further in 1983. Some of the decline in 1982, however, represented substitution of locally produced hydroelectricity for import-dependent thermal power generation (Appendix Table X). Nevertheless, as noted, the economy continued to be heavily dependent on fuel wood, with the ensuing problems of deforestation.

4. Development policy, saving, and investment

a. Development policy

There was a reorientation of economic and social policies embodied in the Four-Year Development Plan for 1974-77, which centered on improving the distribution of income and on eliminating what was seen as the dominant economic position of foreign interests. The instruments were to be a greatly increased government role and the progressive integration of Malagasy nationals in the direction and management of economic activities. The long-term objective was industrialization, with agricultural development viewed as performing a supporting role. These features were incorporated in December 1977 into an overall development strategy that included a widespread expansion of publicly-owned enterprises and financial institutions, in large part through nationalization of foreign-owned enterprises. 1/

The first medium-term plan within the long-term strategy covered the period 1978-80. The plan, called for, among other things, a major expansion in investment--concentrated in manufacturing industry and infrastructural development--with per capita private consumption held constant and public services envisaged to be the slowest-growing sector. As noted earlier, however, while the increase in investment took place, the containment in private consumption and in public services did not. Furthermore, the actual composition of investment

---

1/ A long-term strategy was defined in Les Options Fondamentales pour la Planification Socialiste, adopted in December 1977, and planning targets, including a doubling of real per capita income through an investment-led expansion of industry, were outlined in La Stratégie Globale du Développement 1978-2000.

differed markedly from that envisaged by the plan. In particular, administrative and social services, and transport and communications, accounted in 1979 for a much larger share of investment than that called for by the plan. 1/ A new development plan covering 1982-87 was approved in December 1981, but the growing financial crisis, associated with the external debt incurred to finance the 1979-80 investment expenditure, made the plan inoperative virtually from the outset.

In early 1982 another significant reorientation of economic and social priorities was begun, designed to reduce the internal and external financial imbalances and thus to reshape the public investment program in a manner consistent with the severe resource constraints. This reorientation is reflected in Development Prospects, Policies and Programs, 1983-85, of March 1983. Its two major elements are an emphasis on rehabilitation, maintenance, and higher capacity utilization, rather than capacity expansion, and a view of industry as fundamentally supportive of agriculture. Also highlighted are the progressive elimination of administrative obstacles to the functioning of the economy and a more significant and consistent participation of the private sector in economic development. While these new policy directions have not yet been fully translated in sufficiently concrete programs, particularly as regards the role of the private sector and the establishment of clear priorities within the diverse set of objectives, significant movement in this direction has in practice occurred in 1983.

The 1983-85 public investment program comprises investments by the Central Government and by parastatal enterprises, with the Central Government accounting for about 40 percent. The program amounts to a total of FMG 396 billion (about SDR 890 million at the 1983 exchange rate), of which about 60 percent is to be financed from external resources--a lower percentage than that for 1979-82. Of the total, at constant 1982 prices, 31 percent is slated for agricultural investments, 17 percent for mining-energy-water, 23 percent for industry, 19 percent for transport and communications, and 9 percent for social investments.

b. Saving and investment

Recent developments in saving and investment are shown in Table 5. Aside from a small increase in 1981, nominal gross domestic savings have remained about stagnant from 1978 through 1982. In real terms, savings have declined substantially in 1981 and 1982 and have fallen

---

1/ A crash program was launched for the construction of regional university centers, which was not included in the plan. The increase in transport expenditure went largely for the purchase of a Boeing 747 aircraft and of a number of ships, also not included in the original plan, rather than for an improvement in internal transport infrastructure.

Table 5. Madagascar: Investment and Savings, 1979-82 1/

(In billions of Malagasy francs at current prices)

	1979	1980	1981	1982
Gross domestic investment	150.8	162.4	142.5	136.4
Nongovernment 2/	99.0	99.4	94.1	100.8
Government	51.8	63.0	48.4	35.6
Gross domestic savings	47.8	47.4	55.3	42.4
Nongovernment	51.8	65.3	65.0	40.1
Government 3/	-4.0	-17.9	-9.7	2.3
Current budgetary deficit	(-7.0)	(-12.5)	(-7.9)	(-5.7)
FNUP receipts (net) 4/	(15.0)	(3.4)	(4.2)	(20.3)
Rice import operations (net)	(-7.5)	(-4.1)	(-5.0)	(-12.2)
Adjustment for float 5/	(-4.5)	(-4.7)	(-1.0)	(-0.1)
Net imports of goods and nonfactor services 6/	103.0	115.0	87.2	94.0

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

1/ Components may not add up to totals because of rounding.
2/ Includes on-lending by the Government, which is included in Table 6.
3/ On a cash basis, from budgetary data (see Table 9), except for adjustment for float.
4/ Not including FNUP capital expenditure.
5/ On a transactions basis; includes both deferred payments and deferred receipts.
6/ Adjusted on the basis of available data from the balance of payments.

steadily as a percentage of GDP from an average of 8.6 percent in 1978-79 to 6.9 percent in 1980-81 and 4.5 percent in 1982-83. Until 1981 the decline in savings was due in part to the deterioration in the terms of trade, which manifested itself in part in a fall in net FNUP (stabilization fund) receipts, and hence in increased government dissaving. A major additional factor, however, was the dissaving stemming from the substantial current budgetary deficit of 1980 and 1981 (Section III.1 below). From 1981 the positive effect on saving resulting from larger net FNUP receipts was more than offset by the impact of the economic contraction. Nongovernment savings, therefore, which had shown an increase from 1979 to 1980, declined slightly in 1981 and plummeted in 1982 to a nominal level lower than that of 1978, implying a halving of the average propensity to save from about 11 percent in 1980 to 4.7 percent in 1982.

The behavior of total investment in recent years was described above. The sectoral allocation of investment in 1979-82 (Appendix Table XI) points up the comparative neglect of agriculture and transport discussed earlier. Combined investment in soil improvement and in transport, which was in 1979 an already low FMG 39.8 billion (26.4 percent of total investment), declined every year thereafter to only FMG 13.6 billion (10.0 percent of investment) in 1982. Investment in transportation dropped to less than one third of its level in 1979. By contrast, total construction investment was the same in 1982 as in 1979 and increased in relative terms from 40 percent to 45 percent of total investment; residential construction expenditure increased between the same years, in absolute terms and even more so relative to total investment, from 7.6 percent to 12.5 percent.

The functional allocation of public investment (Table 6) shows how the emphasis is changing to some degree toward rehabilitation and maintenance of existing capital and away from capacity expansion. While data comparable to those presented in Table 5 are not available prior to 1982, indications are that the capacity expansion component of public investment was higher in previous years than the two thirds evidenced in 1982. For 1983, capacity expansion is estimated to account for just over half of total public investment, with about 40 percent of expenditure dedicated to rehabilitation and the remaining 9 percent going to maintenance. Investment in capacity expansion is being financed from external resources to a greater degree than external financing of rehabilitation and maintenance.

Insufficient coordination and supervision, and inadequate appraisal of projects, had been a major weakness of the 1979-80 investment program. In 1982 the Government gave to the Planning Directorate an expanded role in the selection and approval of new projects, and responsibility for evaluating the economic feasibility of all projects. Proposals

Table 6. Madagascar: Structure of Public Investment, 1982 and 1983

(In billions of Malagasy francs at current prices)

	1982			1983		
	Cadre I 1/	Cadre II 2/	Total	Cadre I 1/	Cadre II 2/	Total
Rehabilitation expenditure	11.7	4.9	16.6	17.9	9.3	27.2
Of which: local resources	5.6	--	5.6	9.8	--	9.8
Maintenance expenditure	4.1	--	4.1	6.4	--	6.4
Of which: local resources	2.0	--	2.0	4.5	--	4.5
Capacity expansion expenditure	18.5	23.0	41.5	17.8	18.1	35.9
Of which: local resources	11.2	--	11.2	10.1	--	10.1
Total expenditure	34.3	27.9	62.2	42.1	27.4	69.5
Of which: local resources	18.8	--	18.8	24.4	--	24.4
Memorandum items:						
Ratio of public investment to GDP (in percent)			6.2			5.7
Ratio of total gross investment to GDP (in percent)			13.6			11.8

Source: Data provided by the Malagasy authorities (General Planning Directorate).

1/ The official investment budget (Fonds National de Développement et d'Equipement - (FNDE).
2/ On-lending, mostly to public enterprises.

for the establishment of an inter-ministerial investment coordination committee, and of an investment financing committee to review external borrowing decisions, are expected to be formally adopted by the Government in the fall of 1983.

Another public investment agency is the Fonds National d'Investissement (FNI - National Investment Fund), which encourages the mobilization of finance for small- and medium-size industrial projects (including taking equity stakes in these projects), assists in the preparation of dossiers on potential projects (for consideration by the Ministry of Industry and by the Planning Directorate), and provides some management assistance to enterprises. 1/

5. Public enterprises

The public enterprise sector grew rapidly in the late 1970s under the impetus of the policy reorientation initiated in 1972, and by the end of the decade comprised the nationalized banks and insurance companies, about 90 parastatal organizations active in agriculture -- including the state marketing agencies -- and virtually all large industrial enterprises, in addition to the more traditional state operation of transport and public utilities. A detailed description of this sector, including a listing of major public enterprises, is given in Appendix II. This section describes the main policy orientation of the Government toward the sector.

Partly owing to the rapid growth and insufficient supervision of the rapidly expanding public enterprise sector, there was until recently a lack of firm quantitative evidence regarding its economic and financial performance. It is clear, however, that until 1981 the nonfinancial public enterprises (NPEs) constituted a serious drain on the country's fiscal resources, benefiting both from substantial direct state subsidies and advances and from implicit subsidies in the form of preferential access to imports and credit. Around the end of 1980, however, there emerged the beginning of an attempt to supervise more closely and coordinate the activities of the NPEs and to place them on a more even footing vis-à-vis private entities. 2/ This effort continued in 1982, when large price increases were allowed and direct budgetary subsidies were eliminated, and reportedly has accelerated in 1983. At the same time, some improvement was taking place in the appraisal and coordination of public investment projects--many of which are carried out by NPEs.

1/ The FNI was created in 1979 and became operational in mid-1981. Its resources in 1982 came mainly from earmarking of 2.5 percent of the value added tax (TUT) and from 30 percent of the special company tax (TASCAF, abolished at the end of 1982). The FNI spent about FMG 1 billion in 1982 and FMG 400 million in the first six months of 1983.

2/ It was only at this time that the Government began to require financial audits of several public enterprises.

The change in policy emphasis toward public enterprises produced a substantial degree of rationalization and contraction of the non-financial public enterprise sector, particularly among the state marketing agencies. Some agencies have been all but closed, and others have been suspended in their activities pending financial restructuring and a redefinition of their role. An example of the former is SONACO (Société Nationale de Commerce), dissolved by a decree of July 5, 1983; an example of the latter is SINPA, previously the major rice marketing organization. 1/

In 1983 public enterprises were subject to the same customs, tax, and fiscal benefit treatment as that applied to private firms. 2/ Concerning salaries, the only restriction imposed by the Government, in some cases, was to assure comparability with civil service salaries. Aside from price control, government policy called for public sector enterprises to be managed like any private company, and generally no budgetary subsidies were being granted or were intended to be granted in the future. In keeping with this policy orientation, a number of public sector enterprises significantly increased their tariffs (e.g., JIRAMA, RNCFM, AIR MADAGASCAR) and rationalized their services; for example, AIR MADAGASCAR has cut unprofitable local routes, and special railroad fares for "priority" consumer goods have been eliminated. In a few special cases, for various reasons, the Government has continued to provide direct financial support (e.g., SECREN, for regional development objectives). However, this was seen by the authorities as an interim measure, and the intention was to undertake studies that would permit redefinition of the companies' role, organization, and financial structure. Such exercises have already been carried out for several important parastatals (SOMALAC, FIFABE, RNCFM) and are contemplated for others (SINTP, SINPA).

II. Employment, Wages, and Prices

1. Employment

Comprehensive labor statistics for Madagascr are not available. Table 7 shows nongovernment wage employment from 1979 to 1982, based on numbers contributing to the social security fund, and Appendix Table XII shows approximate estimates of the distribution of the labor force by economic sector. In 1982 about 88 percent of a total estimated

---

1/ SONACO and SINPA were originally designed as the centerpieces of the program of direct state intervention in agriculture.

2/ There are no data on tax arrears, and some difference in practical fiscal treatment cannot be ruled out. However, it is also possible that some NPEs may not have been receiving payments due from the Government on a timely basis. On the other hand, productive enterprises operated by the military, while subject to the same customs treatment as other entities, are exempt from direct taxation.

Table 7. Madagascar: Nongovernment Wage Employment, 1979-82 1/

	1979	1980	1981	1982
Primary sector	61,881	62,806	63,545	64,416
Of which:				
Agriculture	55,750	56,511	56,737	57,533
Manufacturing and mining	68,153	77,369	81,879	78,033
Mining	3,004	3,184	3,354	3,317
Food processing	6,432	6,953	7,291	7,035
Tobacco	1,778	1,880	2,077	2,050
Textiles and leather	14,380	15,475	16,587	15,882
Wood and furniture	2,712	2,943	2,960	2,802
Paper and printing	2,715	3,116	3,243	3,178
Chemicals	3,532	4,218	4,380	3,669
Nonmetallic minerals	1,263	1,282	1,270	1,011
Metal products	1,259	1,587	1,836	2,231
Construction	22,966	27,738	29,783	27,613
Water and electricity	4,429	5,084	5,332	6,107
Other	3,683	3,909	3,766	3,138
Services	87,474	93,345	96,636	94,806
Trade, insurance, banking	29,970	31,640	32,472	31,427
Transport	18,465	20,269	21,476	21,454
Other services	39,039	41,436	42,688	41,925
Total	217,508	233,520	242,060	237,255

Source: Data provided by the Malagasy authorities.

1/ Based on the number of contributions to the Caisse Nationale de Prévoyance Sociale (CNAPS; social security fund).

labor force of 4.5 million were employed in agriculture, with Government accounting for a further 3.5 percent and industry for less than 1.5 percent. From 1979 to 1982 the proportion of the labor force working in agriculture dropped slightly (by about one percentage point); while the contribution of agricultural output to GDP increased from 28.5 percent in 1979 to 31.6 percent in 1982. This may be evidence of improvements in agricultural labor productivity in recent years, or that subsistence agriculture has increased in relative importance. This latter explanation of an increase would be consistent with the dampening effect on marketed agricultural production of various official restrictions and controls, combined with the declining levels of official producer prices in real terms over this period. To the extent that this is correct, there may be an increase in labor force participation rates in agriculture due to the effects of the liberalization in that sector.

The tentative nature of sectoral labor force data makes it difficult to arrive at estimates of unemployment rates. Also, as the coverage of the social security fund, the Caisse Nationale de Prévoyance Sociale (CNAPS), on which the data in Table 7 are based, has widened in 1980 and 1981, the data on nongovernment wage employment do not reliably reflect actual employment changes in those years. Thus, the 11 percent increase in wage employment between 1979 and 1981 may partly or entirely result from expanded CNAPS coverage. It appears, however, that until 1981 the downturn in production was not accompanied by a decline in numbers employed.

A policy of cushioning the impact on employment of production declines seems to have been followed, particularly in the manufacturing sector, as wage reductions and cuts in hours worked served to convert potential unemployemnt into underemployment. This buffer mechanism began to weaken to 1982, however, when nongovernment wage employment declined by 4.7 percent in manufacturing, mining, and construction and by 1.9 percent in the private services sector. 1/ No data are available for 1983, but indications are that employment has declined further, both in private firms and in public enterprises. Significant staff layoffs, for example, have been undertaken in about ten public enterprises in agriculture (including the major employers), in some cases affecting 50-60 percent of the work force. 2/

1/ With no change in CNAPS coverage after 1981, this contraction may be taken as a reasonable proxy for the underlying actual decline in employment in these sectors.

2/ Employment reductions, other than individual layoffs for disciplinary reasons, call for an obligatory declaration by the employer to the Government of the measures affecting employees. When staffing reductions are approved, the only compensation to the employee is a one- or two-month severance payment by the enterprise itself. There is no system of unemployment insurance.

2. Wages

In 1982 and 1983 the Government has continued a policy of wage restraint, through direct measures as regards public wages and through encouraging wage reduction as an alternative to layoffs in nongovernment activities.

Private sector minimum wages are controlled for a wide variety of skill categories by fixing the minimum wages for each category. For unskilled laborers, minimum monthly wages are higher, but hourly wages lower, in agriculture than in nonagricultural occupations (Appendix Table XIII). The latest increase in minimum wages for unskilled laborers was in June 1982, by about 18 percent, or just about half of the recorded rise in the low-income cost of living since the time of the previous increase in April 1981.

Public sector wages were raised by 3.7 percent across all skill categories in June 1982 and kept constant since then. Prior to June 1982, in contrast to the policy followed on private sector minimum wage increases, raises in public wages tended to favor the higher skill categories. From January 1978 through May 1982 public wages were raised by about 19 percent for the highest skill categories and by less than 6 percent for the lowest skill category, compared to an average (unweighted) public wage increase of 11.2 (Appendix Table XIV). Overall, public sector wages have eroded substantially in real terms since 1978 for all skill categories. Between 1978 and 1983 public sector wages, as measured by the public services deflator, rose by 86 percent, while consumer prices increased by 222 percent. Over the period, public sector wages lost about half of their purchasing power, with the bulk of the loss occurring after 1980. 1/

3. Prices

Trends in consumer prices in recent years are shown in Table 8. 2/ Price developments in Madagascar are consistent both with the emergence of financial and economic difficulties from 1980 onward and with the

---

1/ A similar result is obtained if the trend in administrative wages is measured from budgetary data on the Central Government's average expenditure per employee.

2/ It should be emphasized that the CPI for Madagascar suffers from several weaknesses as an indicator of actual consumer prices in the country: it covers only prices in the capital city, Antananarivo; data collection methods are inadequate, and it is partly based on officially controlled prices. However, an analysis of consumer prices of selected marketed goods of major relevance for rural consumption suggests that, while prices of these goods in 1981 did appear to be higher in the rural areas than in Antananarivo, the relative price differential was only about 10 percent. Also, since 1982 there have been major increases in officially controlled prices.

Table 8. Madagascar: Consumer Price Index, 1978-83

(Average August 1971-July 1972 = 100)

	Weight	1978	1979	1980	1981	1982 I	1982 II	1982 III	1982 IV	1982 Annual average	1983 I	1983 II 1/	1983 III 2/	1983 IV 2/	1983 Annual average 2/
(Low-income families)															
Food	60.35	175.8	201.1	238.8	315.3	370.8	398.2	431.2	454.6	413.7	466.8	483.2			
Fuel and electricity	9.14	145.2	166.9	213.1	285.8	327.6	376.9	405.5	409.0	379.7	409.1	409.2			
Domestic services	1.82	133.3	133.3	133.3	150.8	159.5	165.8	178.3	178.3	170.5	178.3	178.3			
Maintenance, clothing, and medicine	14.85	160.1	170.9	185.1	215.1	267.9	286.5	320.0	335.2	302.4	356.3	380.7			
Miscellaneous	13.84	133.0	163.1	199.2	271.4	297.1	316.5	372.6	379.3	341.4	468.9	476.5			
General index	100.00	164.0	187.0	221.1	288.6	337.5	364.2	399.6	417.3	379.6	440.2	454.7	475.8	496.9	466.9
(High-income families)															
Food	45.15	178.9	198.8	229.0	290.1	336.6	376.3	439.0	463.8	403.9	499.7	522.6			
Fuel and electricity	6.08	125.6	154.2	191.7	252.1	317.5	325.0	333.0	333.6	327.3	333.6	336.0			
Domestic services	11.26	153.4	169.0	179.7	206.6	213.8	222.1	238.6	238.6	228.3	238.6	238.6			
Maintenance, clothing, and medicine	17.99	164.9	174.9	183.2	205.3	238.3	255.3	276.6	289.6	265.0	311.9	320.9			
Miscellaneous	19.51	173.5	191.4	225.1	292.4	315.4	341.9	366.3	371.1	348.7	379.4	382.8			
General index	100.00	168.7	187.0	212.2	263.6	299.8	327.3	366.6	381.1	343.7	403.0	415.7	427.8	444.7	422.8
Weighted CPI 3/		165.1	187.0	218.9	282.4	328.1	355.0	391.4	408.3	370.6	430.9	444.9	463.8	483.9	455.9

Source: Data provided by the Malagasy authorities (National Institute of Statistics and Economic Research).

1/ Estimated, on the basis of April and May data.
2/ Projected, on the basis of the observed relationship in December 1980-March 1983 between quarterly changes in money supply and quarterly changes in CPI, as well as on the basis of the 1982 ratios of quarterly to annual average CPI.
3/ Weights are 0.75 for low-income CPI and 0.25 for high-income CPI.

Government's undertaking of adjustment measures since 1981. As measured by the weighted CPI, the rate of inflation in Madagascar accelerated markedly until 1981, from 13 percent in 1979 to 17 percent in 1980 and 29 percent in 1981. After a further slight acceleration in 1982 to just over 31 percent, the pace of consumer price increases slowed significantly, to 28 percent in the first half of 1983 (compared to the first half of 1982) and a projected 23 percent for 1983 as a whole. 1/

Concerning price developments in the three major commodity groups, food prices rose at a slightly higher rate than the CPI until 1982, and at about the same rate in the first half of 1983; the increase in fuel and electricity prices was substantially higher than the overall rate of inflation until 1981, about the same in 1982, and much lower in the first half of 1983; 2/ and the increase in the prices of maintenance goods, clothing, and medicines--less than half the inflation rate in 1979-81--accelerated sharply in 1982 and continued to be faster than overall consumer price inflation in the first half of 1983.

Madagscar has, in principle, a comprehensive system of price controls. In practice, since 1982 it has become clear that such a system of comprehensive price controls could not be effectively maintained, and the authorities have embarked on a policy of simplification and lessening of controls. Enterprises have been solicited to present applications for price increases, based on a predetermined formula taking account of cost increases, a certain profit margin, and agreed objectives concerning production and investment. Although formal authorization is still required, in many cases the authorities' approval of specific price increase requests that conform to such a formula are only a formality. However, there has been a problem that many companies, especially the smaller ones, did not have the cost data needed for completing the price increase application, or agreement on a formula could not be reached. For most products and services, the price control system is maintained and enforced, with only periodic increases allowed. The Ministry of Industry undertakes to act upon a price increase application within 30 days when the case for the increase is substantiated, and sometimes only two weeks elapse.

1/ The consumer price index is a weighted average of "low-income" and "high-income" price indices.

2/ These developments reflect the large burst in fuel prices in the second half of 1979 as a result of the pass-through of higher world prices, a second sharp increase in the second quarter of 1981 following the introduction of large new taxes on petroleum products, and, in late 1982 and 1983, the moderating influence of lower world prices of oil.

III. Domestic Financial Developments

1. Government finance

The public sector in Madagascar comprises the Central Government, various levels of local governments (collectivités décentralisées) ranging from the basic unit of the Fokontany (about 11,400 groups of villages) to the Faritany (six provinces), and the public enterprises. The Central Government consists of ministries and a number of nonautonomous agencies whose financial accounts are included with the Treasury (i.e., mainly the Post Office, the National Printing Office, and the Port Authority), as well as some operations of the Central Bank. Since 1977 the local governments have had a certain degree of financial autonomy, with a number of taxes and fees being earmarked for their respective budgets (i.e., the professional tax, property taxes, the meat tax, and license fees) and a proportion of the receipts from other taxes being transferred from the Central Government (i.e., the tax on motor vehicles, value-added taxes, and, until 1983, the special turnover tax). Other public institutions include nine public financial institutions, including the Central Bank and the three commercial banks, and the nonfinancial public enterprises described in Appendix II.

The central government general budget as approved by the National Assembly consists of current and capital expenditures. Capital expenditure included in the budget represents only investment that is financed from domestic sources and by foreign loans; projects that are financed by external grants and from the sales proceeds of commodity aid are executed outside the budget. Moreover, certain investment projects may be undertaken on an urgent basis pending parliamentary approval and are only incorporated into the budget retroactively.

All cash transactions of the Central Government are made by the Treasury. In addition to the general budget, the Treasury maintains the accounts of the annexed budgets, in which are recorded the financial transactions of the nonautonomous bodies. The Treasury also provides certain banking functions to public entities; for example, public enterprises maintain deposit accounts at the Treasury from which payments can be made directly. 1/ Banking services for the Treasury are provided by the Central Bank, although the Treasury holds a small amount of working balances at the national banks. The Treasury also holds an account at the Central Bank, the Fonds national unique de pérêquation (FNUP), in which the commodity stabilization funds are required to

---

1/ Credit to the private sector is also advanced by the Treasury in the form of customs duty bills (obligations cautionnées), which are short-term obligations of the private sector on account of delayed payments of customs duties and other indirect taxes that are, in turn, eligible for rediscounting at the Central Bank.

deposit their receipts in excess of working balances. 1/ The Treasury floats bills and bonds with the national banks, the insurance companies, and the general public. Furthermore, it may obtain direct overdraft facilities from the Central Bank.

Since 1980 a monitoring system has been established that permits the incorporation of extrabudgetary receipts and expenditure in a consolidated statement of financial performance of the Central Government (Table 9). These extrabudgetary items are reflected in accounts at the Central Bank and can be integrated readily on a cash basis with receipts and expenditures of the Treasury. The extrabudgetary items include the receipt of external grants less the related outlays of the domestic counterpart funds. The operations of the FNUP are consolidated into the reporting system. These operations include receipts as well as expenditures on the development, transportation, storage, and marketing of the traditional export crops. Net expenditure of the Central Bank related to the marketing of imported rice, which in most years has represented a consumer subsidy to rice and which is financed through direct advances from the Central Bank, is also consolidated in the overall government operations. 2/ In the accounts of government operations, capital expenditure comprises both outlays by ministries that are authorized in the development budget (Cadre I) and on-lending by the Treasury to state enterprises in the framework of Treasury operations (Cadre II).

a. Overall fiscal performance, 1979-81 3/

The financial performance of the Government deteriorated markedly in the late 1970s, when an investment policy "à l'outrance" was launched, as described in Section I (Chart 1). Total expenditure, 4/ which had

---

1/ The commodity stabilization funds are derived from the difference between the guaranteed f.o.b. export price of coffee, cloves, and vanilla paid to exporters of those crops and the actual export earnings (the producer price is fixed as the guaranteed export price less the costs of collection, storage, and marketing). It amounts to an implicit tax on these exports; in 1982 the implicit tax, as a percentage of exports f.o.b., was 20 percent for coffee, 50 percent for cloves, and 35 percent for vanilla. A certain proportion of this revenue (18 percent in 1982) is spent by the commodity stabilization funds in ways directly benefiting the exporters; the remainder is available to finance general government expenditure.

2/ In the accounting for rice operations, the cost of all purchases are included as expenditure and the proceeds from all sales as receipts, irrespective of changes in stocks. Therefore, the deficit on rice operations includes the consumer subsidy, the administrative costs of the operation, and the value of changes in stocks.

3/ The fiscal year is the same as the calendar year.

4/ Budgetary and extrabudgetary expenditure of the Central Government.

Table 9. Madagascar: Overall Government Operations, 1979-83

	1979	1980	1981	1982 Prog.	1982 Est.	1983 Prog.	1983 Est.
	(In billions of Malagasy francs)						
Total revenue	114.4	123.3	119.6	157.8	151.9	189.4	185.8
Budgetary receipts	90.7	100.4	104.4	127.6	121.9	139.5	138.4
Direct taxes	(15.4)	(19.9)	(23.5)	(24.2)	(22.1)	(25.2)	(25.8)
Indirect taxes	(70.6)	(77.3)	(76.9)	(100.3)	(96.7)	(110.8)	(108.1)
Nontax revenue	(4.7)	(3.2)	(4.0)	(3.1)	(3.1)	(3.5)	(3.5)
Other	23.7	22.9	15.2	30.2	30.0	49.9	47.4
FNUP receipts	(19.3)	(15.6)	(15.2)	(26.6)	(26.4)	(34.7)	(36.0)
Grants	(...)	(...)	(...)	(3.6)	(3.6)	(9.3)	(11.4)
Treasury operations (net)	(4.4)	(7.4)	(...)	(...)	(...)	(...)	(...)
Central bank rice import operations (net)	(...)	(...)	(...)	(...)	(...)	(5.9)	(...)
Total expenditure	-194.3	-250.1	-234.8	-266.5	-238.9	-265.5	-267.7
Current budgetary expenditure	-97.7	-112.9	-112.2	-134.1	-127.4	-144.5	-147.0
Wages and salaries	(-50.8)	(-60.9)	(-68.6)	(-77.4)	(-80.7)	(-84.0)	(-82.0)
Interest on external debt	(-1.5)	(-2.8)	(-4.5)	(-9.3)	(-9.1)	(-9.6)	(-11.9)
Interest on domestic debt	(-0.4)	(-1.2)	(-2.2)	(-0.4)	(-1.8)	(-2.1)	(-3.1)
Other current expenditure	(-45.0)	(-48.0)	(-36.9)	(-47.0)	(-35.8)	(-48.8)	(-50.0)
Capital expenditure	-65.7	-89.6	-84.1	-99.8	-72.1	-78.3	-70.6
Development budget 1/	(-56.4)	(-74.4)	(-62.1)	(-70.8)	(-44.1)	(-51.3)	(-45.8)
On-lending	(-9.3)	(-15.2)	(-22.0)	(-29.0)	(-28.0)	(-27.0)	(-24.8)
Other	-30.9	-47.6	-38.5	-32.6	-39.4	-42.7	-50.1
Deferred payments 2/	(-12.7)	(-12.9)	(-14.6)	(-16.8)	(-13.6)	(-16.0)	(-22.1)
Grant-financed expenditure	(-0.7)	(-0.3)	(-0.3)	(-0.3)	(-0.4)	(-12.3)	(-6.0)
FNUP expenditure	(-10.0)	(-30.3)	(-18.0)	(-6.9)	(-6.1)	(-8.9)	(-13.4)
Treasury operations (net)	(...)	(...)	(-0.6)	(-1.0)	(-7.1)	(-5.5)	(-5.4)
Central bank rice import operations (net)	(-7.5)	(-4.1)	(-5.0)	(-7.6)	(-12.2)	(...)	(-3.2)
Overall deficit	-79.9	-126.8	-115.3	-108.7	-87.2	-76.1	-81.9
Of which:							
Treasury deficit 3/	(-81.7)	(-108.0)	(-107.5)	(-120.8)	(-95.3)	(-107.8)	(-101.2)
Foreign (net)	35.3	47.9	55.6	68.8	50.4	40.6	45.0
Domestic (net)	44.6	78.9	59.7	39.9	36.8	35.5	36.9
Banking system	(41.9)	(78.2)	(57.8)	(35.0)	(33.9)	(36.6)	(37.6)
Nonbank	(2.7)	(0.7)	(1.9)	(4.9)	(2.9)	(-1.1)	(-0.7)
Memorandum items:	(As a percent of GDP)						
Budgetary receipts	15.2	14.5	13.2	12.8	12.2	11.5	11.4
FNUP receipts	3.2	2.3	1.9	2.7	2.7	2.9	3.0
Total receipts	19.2	17.8	15.2	15.8	15.2	15.6	15.3
Current budgetary expenditure	-16.4	-16.3	-14.2	-13.5	-12.8	-11.9	-12.1
Capital expenditure	-11.0	-13.0	-10.7	-10.0	-7.2	-6.4	-5.8
Total expenditure	-32.7	-36.2	-29.8	-26.7	-24.0	-21.8	-22.0
Overall deficit	-13.4	-18.4	-14.6	-10.9	-8.7	-6.2	-6.7
Banking system	7.0	11.3	7.3	3.5	3.4	3.0	3.1

Sources: Ministry of Finance and Economy; Central Bank of Madagascar; and staff estimates.

1/ Including capital expenditure financed from reserved funds.
2/ Including arrears payments.
3/ Excluding FNUP and rice import operations.

CHART 1

MADAGASCAR

TRENDS IN PUBLIC FINANCE, 1971-83

(In per cent of GDP)

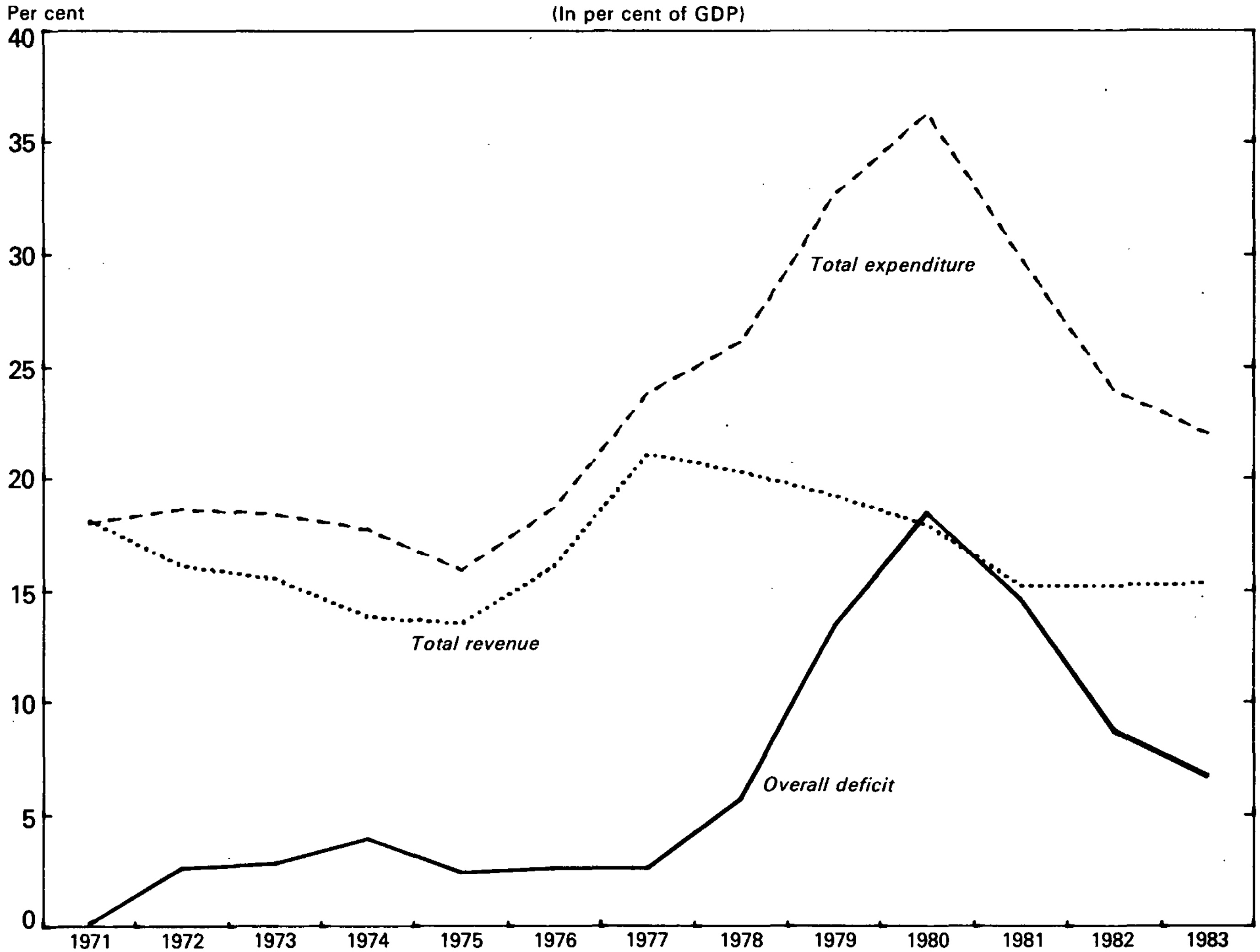
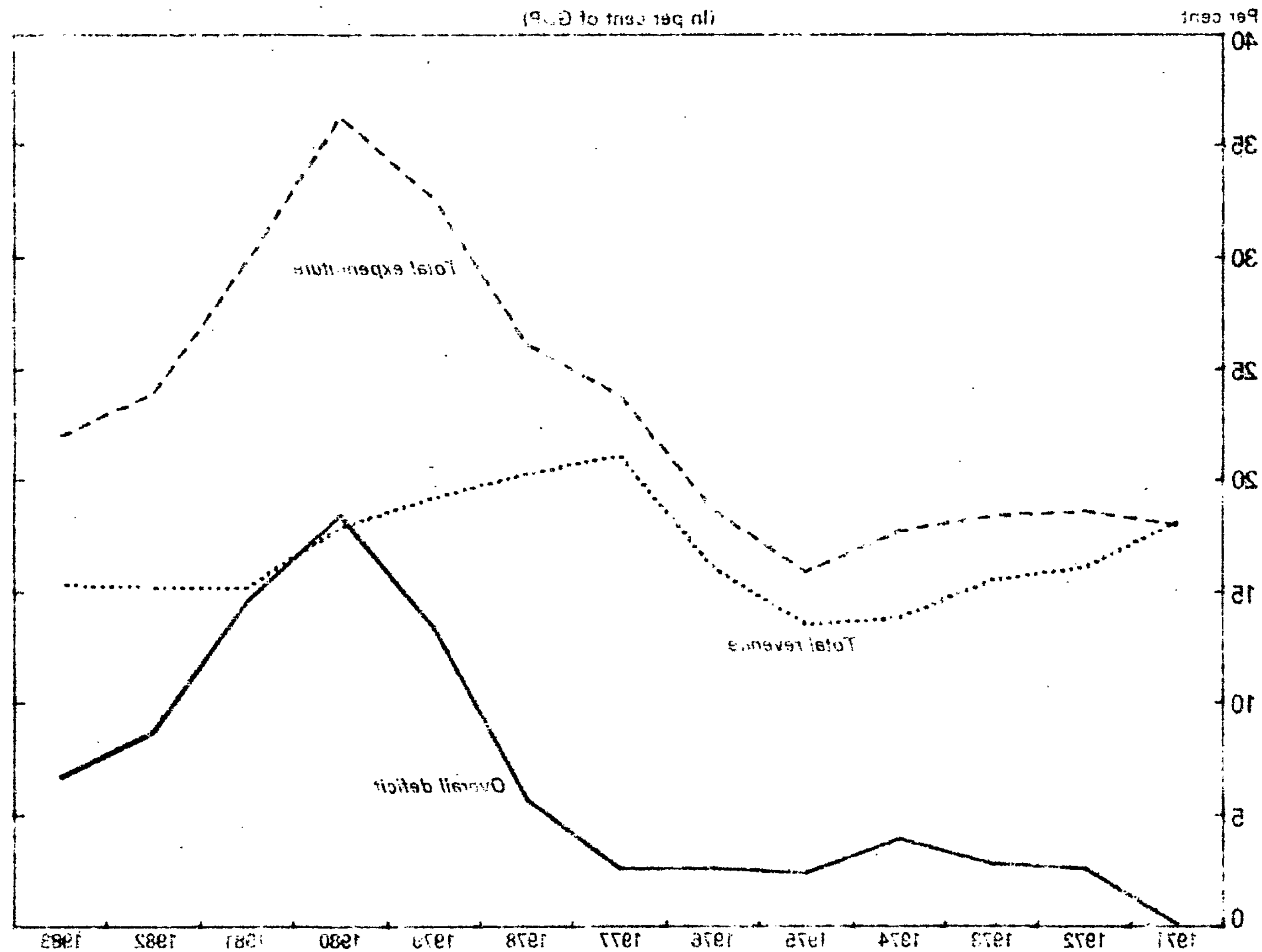


CHART 1

MADAGASCAR

TRENDS IN PUBLIC FINANCE, 1971-83

(In per cent of GDP)



averaged less than 19 percent of GDP from 1971 through 1977, rose to 33 percent in 1979 and to a record 36 percent of GDP in 1980. Total receipts, as a share of GDP, fluctuated under 20 percent of GDP except in 1977-78 and declined to 17.8 percent by 1980. As a result, the overall government deficit, which averaged less than 3 percent of GDP through 1977, widened to 13 percent by 1979 and to more than 18 percent of GDP in 1980. By that time, the administrative controls on expenditure had broken down. Subsequently, in 1981, the authorities moved to redress the large fiscal imbalances. The overall deficit was brought down to under 15 percent of GDP, mainly through cutting back on non-personnel current expenditure and capital investment financed through the development budget and the FNUP. Some of the larger projects, which had been initiated in late 1978, were coming to completion in any case.

Over the three-year period 1979-81 the current budgetary operations of the Government were also in deficit, with the current deficit almost doubling in 1980. In particular, expenditure on salaries and wages rose by 20 percent, whereas budgetary receipts increased by only 11 percent. Budgetary capital expenditure, including on-lending of foreign loans by the Treasury to state enterprises, increased by over 36 percent in 1980, reflecting the Government's attempts to catch up with the investment targets of the 1978-80 Development Plan, as described in Section I. Capital outlays related to ongoing projects executed from the reserved funds 1/ also increased sharply. Operations of the FNUP account were important during this period, as expenditure rose threefold to over 12 percent of total expenditure, and receipts declined by 20 percent, leaving a deficit of FMG 14.7 billion. The increase in expenditure was due in large part to capital outlays on the construction of a series of regional university centers and of higher payments of consumer subsidies on local rice sales and higher outlays related to the current operations of the commodity stabilization funds. At the same time, FNUP receipts declined by 19 percent as a result of declining export receipts and delays in payments to the FNUP by foreign trading companies. The surplus on other net Treasury operations, excluding on-lending, rose slightly, as government lending and capital subscriptions to state enterprises declined from 1979 to 1980, in part offset by a decline in the surplus on other operations. Recourse to the banking system to finance the deficit almost doubled to FMG 78.2 billion in 1980, when it accounted for over 70 percent of the increase in domestic credit.

In 1981 the modest improvement in the Government's financial situation was attributable to lower nominal expenditure, as revenues

---

1/ Budgetary allocations for capital expenditure that were not fully utilized by the end of the fiscal year were transferred to the reserved funds through the end of 1982, at which time no new credits were transferred but existing funds could still be utilized for two more years.

also declined. The substantial contraction in economic activity and the reduction in the volume of Madagascar's foreign trade accounted for most of the 3 percent revenue decline. On the expenditure side, other current outlays were substantially reduced and the increase in salaries was limited to 13 percent over the previous year, due to the decision to limit recruitment during the second half of the year to students graduating from government professional schools. The cuts in capital expenditure compared to 1980 were insufficient to bring actual outlays down to the budgeted levels, and the development budget was exceeded by some 54 percent. A large proportion of these outlays took place in the last quarter of the year, to accommodate higher-than-budgeted commitments of the ministries, in particular those of Rural Development, Public Works, and Defense. In addition, project implementation under the reserved funds was three times larger than forecast.

The receipts of the FNUP declined slightly from the previous year. Most of the shortfall was due to the deterioration in export earnings from coffee. On the other hand, FNUP expenditures declined by almost one half. Capital expenditure financed by the FNUP, of FMG 7.0 billion, was related mostly to government transfers to the rural development agencies at the end of the year to redress their financial situation as stipulated by foreign lenders. The deficit on central bank rice import operations widened as the volume of rice imports was raised to supplement the unanticipated low domestic production, and the transfers of sale proceeds by the marketing agencies remained below projections due to collection difficulties. Other Treasury operations, excluding on-lending, became slightly negative on a net basis.

The overall deficit of FMG 115.3 billion, while an improvement over 1980, was almost two thirds above the authorities' revised projections. Although foreign financing increased by more than 16 percent, partly as a result of substantial bilateral assistance received toward the end of the year, more than half of the deficit was financed by recourse to the domestic banking system. Nonbank financing increased only marginally, and credit to the Government represented over 80 percent of the total increase in domestic credit.

b. <u>The 1982 fiscal year</u>

Fiscal developments in 1982 resulted in a significant reduction in the overall budget deficit. From the equivalent of 14.6 percent of GDP in 1981, the overall government deficit was reduced by almost six percentage points to 8.7 percent of GDP in 1982 (FMG 87.2 billion). The outcome was also an improvement upon the authorities' revised budgetary target of 10.9 percent of GDP (FMG 108.7 billion). 1/ Total revenue increased by 27 percent over the previous year, even though it

1/ Inclusive of central bank expenditure on imported rice financed by concessionary loans (FMG 8.4 billion), which was originally treated as grants.

was almost 4 percent below the authorities' target. The improvement in the overall deficit came mainly through holding total expenditure at just 2 percent above the 1981 level and a little more than 10 percent below the official estimates. Large cuts were made in nonpersonnel current expenditure (by 24 percent) and especially in capital expenditure (by 38 percent) compared to the previous year. The current budget deficit was reduced by about 30 percent.

In relation to GDP, total revenues remained unchanged from 1981 to 1982, at 15.2 percent, although the authorities had projected an increase to 15.8 percent. The shortfall of FMG 5.7 billion in budgetary revenue was attributable in about equal proportions to lower customs duties, in line with lower imports, and to difficulties in the recovery of the targeted amount of overdue direct tax receipts. Nonbudgetary revenue, consisting of external grants and the receipts of the FNUP, was more or less on target.

Total expenditure declined with respect to GDP, from 29.8 percent in 1981 to 23.9 percent in 1982, considerably below the revised expenditure projection of 26.7 percent. After the large cost overruns of the previous two years, this reversal was due the enforcement of limits on nonpersonnel expenditure, in which budgetary allocations were phased over the year to spending ministries with 15 percent of allocations being withheld altogether. Expenditure on wages and salaries exceeded the budgeted level by 5 percent. Cost-of-living increases in the government sector were limited to 4.5 percent and the expansion in personnel recruitment kept within the budgeted 4 percent limit, but there were additional, unforeseen expenditures related to the maintenance of law and order. However, this excess was more than offset by savings on other current expenditure.

The substantial reduction in capital expenditure resulted from a number of factors, namely the completion of several large undertakings such as the acquisition of a Boeing 747, while recourse to foreign commercial bank credit was sharply curtailed by mid-1980, causing an acute shortage of foreign exchange (the Central Bank could no longer honor requests for foreign exchange in September 1980), which in turn led to delays in project implementation associated with transportation and absorption difficulties, linked to the shortage of imports. Moreover, the shortage of foreign exchange led to the cancellation of some projects and to efforts by the authorities to centralize the coordination of the investment program. An administrative pause resulted, in which to reassess the country's investment needs.

Among the other major expenditure items, the financial balance on the Central Bank's rice import operations was adversely affected by a large accumulation of stocks, even though the 87 percent increase in the consumer price of ordinary rice created a positive margin on these operations in the second half of 1982.

Foreign financing covered 58 percent of the overall deficit and included the counterpart of concessionary loans received at the special Aid Donors' conference in June 1982, which were channeled through the budget.

c. The 1983 fiscal year

(1) The program for 1983

The original budgetary target for 1983 was to reduce the overall government deficit to 7 percent of GDP. This target was subsequently revised, in view of the deterioration in the external accounts, to 6 percent of the then estimated GDP, or FMG 76.1 billion. The main instrument for achieving the fiscal target was further expenditure restraint leading to a decline in total expenditure relative to GDP (by over 2 percentage points) while allowing some increase in investment expenditure; total revenue was expected to rise by almost one half a percentage point of GDP as a result of new measures.

Under their financial program for 1983, the Malagasy authorities sought to increase total revenue almost 25 percent over the previous year's outturn. As a result, revenues were to rise to 15.6 percent of GDP, compared to 15.2 percent in 1982. New discretionary revenue measures, excluding the impact of the February 1 devaluation of the exchange rate, were to provide about FMG 6.0 billion (the equivalent of 0.6 percent of GDP) in budgetary receipts. The principal measures included a new unified duty on petroleum products, which was to replace the previous specific excise taxes at the wholesale level, raising an additional FMG 3 billion; increases in, and introduction of, new excise taxes, especially on electricity consumption, yielding an additional FMG 1 billion; a new system of prepayment of direct company taxes on a bimonthly basis starting in February 1983; and further measures projected to yield, in aggregate FMG 2 billion (namely, the extension of the value-added tax to the retail trade and liberal professions, the unification and an increase of the average company tax rate to 45 percent; the inclusion of all interest and dividend income in taxable income; the introduction of a withholding tax on dividends; the stipulation that depreciation allowances will lapse after three years if not fully utilized for replacement expenditure or new investment; and an upward revision of tax rates on nonsalary incomes, with a 60 percent maximum marginal level but an increased maximum exclusion of disposable income). In addition, prices charged by the fiscal monopoly for cigarettes, alcohol and flour were raised.

Total expenditure was expected to rise by 11 percent in 1983, entailing a real decline. As a percentage of GDP, it was budgeted to decline from 23.9 percent to 21.8 percent. The attainment of the target was to be achieved through strict adherence to highly constrained expenditure levels. The Malagasy authorities undertook to limit the total size of the central government labor force to 127,500 positions, an increase of 1.1 percent over the number authorized in the revised 1982 budget. Only graduates of the Government's professional schools would be eligible for recruitment. At the same time, expenditure on wages and salaries was to be limited to FMG 84.0 billion for the year as a whole, entailing a complete freeze on cost-of-living wage increases in the government sector. Most of the budgeted increase in current expenditure was attributable to planned increases in other current expenditure, such as supplies and maintenance, which were severely curtailed in 1982, with a detrimental impact on government operations. With respect to the latter expenditure, a new, computerized system of monitoring nonsalary current expenditure through the centralization of billing was established on January 3, 1983. 1/

(2) Expected outturn

(a) Revenue. Most of the above revenue measures were introduced as planned. There was a delay in securing passage of the legislation on the new petroleum tax. This delay, combined with the cash flow difficulties of SOLIMA, the state petroleum monopoly, will make it unlikely that tax arrears of FMG 1.8 billion owed in 1982 will be collected before 1984. The extension of the value-added tax to the retail trade has been postponed until 1984 as a result of the need to establish a census of retail operations with the minimum sales threshold of FMG 10 million subject to the tax. There was also a delay in obtaining passage of the necessary implementing legislation for the new bimonthly withholding tax system on company profits. However, underfiling of February 1983 returns was already largely corrected by the April 1983 filing date.

After a strong revenue performance in the first half of the year, total budgetary revenue for 1983 is estimated to fall short of the target of FMG 139.5 billion, by less than 1 percent. Direct tax receipts should exceed the initial target by 2 percent, as a result of a higher rate of recovery of past taxes than had been originally assumed. The shortfall in indirect taxes is estimated at FMG 2.7 billion, resulting entirely from lower export duties attributable to delays in shipments of clove exports. Other indirect taxes are expected to be on target: despite a further decline in import volume, import duties should yield FMG 43.2 billion, as the currency depreciations have kept the FMG value of imports at programmed levels; taxes on domestic goods and services should exceed budget estimates by about 2 percent, due to the effects of the new excise taxes.

1/ The new system to centralize all current payments was intended to improve timely expenditure control and to ensure that no domestic arrears would be accumulated at the ministry level. Payment would be effected when expenditure authorizations approved by the Treasury match invoices submitted by suppliers; any mismatching or delays would lead to a prompt investigation at the ministry level.

Despite the problems associated with the clove exports (see Section IV), FNUP receipts are estimated to exceed the initial targets as a result of more favorable prices for coffee and vanilla than had been assumed. FNUP receipts are estimated at FMG 36.0 billion for 1983, having yielded FMG 18.4 billion in the first half of the year.

Receipts related to external grants should be somewhat higher than originally projected before the convening of the April 1983 Consultative Group. Additional receipts of FMG 2.1 billion are expected. On the other hand, expenditures financed by the domestic counterpart funds of the grants, including those received in earlier years, have been delayed pending completion of bilateral agreements with donors on projects to be financed. As a result, on a net basis, grant operations should show a surplus of FMG 5.4 billion instead of a negative FMG 3.0 billion originally projected. The buildup of counterpart funds in the grants account of the Treasury at the Central Bank has reached FMG 40.7 billion.

Net central bank expenditure on rice import operations was originally projected to show a significant surplus in 1983 as a result of large sales from stocks that were paid for (and charged to expenditure) in the previous year and of the full year's impact of the higher consumer price for rice announced in mid-1982. In the event, sales from stocks were lower than expected with resulting higher stock-holding charges, especially of more expensive luxury rice, the price of which had to be downgraded from FMG 300/kg to FMG 140/kg in order to promote sales. As a result, an anticipated surplus of FMG 5.9 billion will be reversed, turning into a deficit of FMG 3.2 billion on rice import operations.

(b) Expenditure. Current expenditure is estimated to exceed the budgeted level by 2 percent due to higher than originally estimated interest payments and higher outlays for priority nonpersonnel expenditure, such as domestic travel allowances, which had not been raised in recent years. Expenditure on wages and salaries is expected to be below the program level, as recruitment is likely to fall short of the budgeted level. Capital expenditure in 1983 is now expected to be about 10 percent less than budgeted and about 2 percent less than the 1982 outcome, even after the large reduction in 1982. From an all-time peak equivalent to 13 percent of GDP in 1980, capital expenditure has been reduced to less than 6 percent of GDP in 1983. Both the development budget (the Fonds national de développement et d'équipement, where expenditure is carried out by ministries, especially the Ministries of Public Works and of Agricultural Production) and the on-lending to state enterprises are lower than the original 1983 estimates. This is due largely to a shortfall in external financing of projects by about 25 percent, which led to delays in project implementation as well as a reassessment of certain investment projects by the Planning Directorate, the coordinating agency that is directly attached to the Presidency. There has also been a change in the statistical methodology for recording investment expenditure, heretofore a major weakness in the public finance statistical apparatus. 1/ Previously, what was recorded as investment expenditure was the value reported by ministries of the work undertaken; the new method implemented in mid-1983 is to record as expenditure the amount notified by creditors as having been paid, with an adjustment for estimated average payment periods for each creditor.

Net Treasury operations other than on-lending are expected to be as assumed initially, but the expenditure on FNUP operations will be substantially higher than the FMG 8.9 billion assumed by the authorities, as the stocking charges on the unexpectedly large holdings of cloves have led to a revised estimate of FMG 13.4 billion in FNUP expenditure.

There were no arrears outstanding at the level of the Treasury at the end of 1982, i.e., there were no bills presented to the Treasury for payment within the normal commercial terms that were unpaid. A committee had been established in mid-1982 to assess the amount of unpaid bills still owed by the spending ministries that had not yet been presented to the Treasury for payment. The committee surveyed separately expenditure undertaken by ministries and unpaid invoices presented by suppliers. After reconciling the two sets of data and deleting those amounts representing normal accounts payable, a stock of domestic arrears of FMG 19.1 billion was established at end-December 1982. Two thirds of the arrears represent amounts owed to state enterprises for investment expenditure. With the new expenditure control system instituted in early 1983, it will be possible to monitor the flow of invoices submitted and bills paid on a timely basis and to avoid any further accumulation of arrears. The original budget appropriation of FMG 6 billion in 1983 to reduce outstanding arrears was subsequently increased by a revision to the 1983 finance law to FMG 10.3 billion in the light of the survey.

The overall government deficit is now estimated at FMG 81.9 billion, a decline of about 6 percent in 1983 compared to the previous year. Such an outcome would be almost 8 percent higher than the original target of FMG 76.1 billion. As a percentage of GDP, the 1983 outcome is expected to decline to 6.7 percent, from 8.7 percent in 1982, compared to a target of 6.2 percent. The revised estimate for the 1983 overall government deficit is predicated upon the assumptions of no fiscal or FNUP receipts from clove exports in the fourth quarter of 1983 and an unchanged consumer price of imported rice. With net foreign financing some FMG 4.4 billion higher than originally projected as a result of additional external support pledged at the Consultative Group meeting in April 1983, the net domestic financing is expected to exceed the target figure by FMG 1.4 billion, of which FMG 1.0 billion would be additional bank financing.

1/ The change in statistical methodology is estimated to reduce recorded capital investment in 1983 by approximately 10 percent.

d. Government revenue

Government revenue is derived in large part from the imposition of taxes on international trade, which accounted for about 50 percent of total revenue in 1982 and 1983 (including fiscal receipts on imports and exports as well as FNUP receipts). FNUP receipts by themselves have been an increasingly important source of revenue, rising from 13 percent of total revenue in 1981 to 17 percent in 1982 and an estimated 20 percent in 1983.

The structure of budgetary revenue, as defined in Appendix Table XV, is dominated by indirect taxes, particularly taxes on international trade and taxes on domestic goods and services. During the period 1979-81, however, the contribution of direct taxes to budgetary revenue rose steadily from 17 percent to almost 23 percent before retreating to 18 percent in 1982. While there has been a sustained effort to enforce tax collection, especially of arrears, and to extend and improve assessment, the poorer performance of companies beginning in 1981 and the limits on wages have resulted in a relative decline in direct taxes. In 1983 direct taxes are expected to yield around 19 percent of budgetary revenue.

The contribution of taxes on goods and services to budgetary revenue fluctuated with the level of economic activity during the period 1979-81. In 1982 the domestic sales tax was raised from 10 to 15 percent, and specific excise duties were raised. Even so, as a percent of GDP, taxes on goods and services remained constant at about 4.5 percent.

The relative share of taxes on international trade in budgetary revenue has declined throughout the period, from 54 percent in 1979 to about 40 percent in 1982-83. This relative decline reflected both the increasing share of total government revenue (as against budgetary revenue) accounted for by FNUP receipts, which, in practice, function as a form of export duty, and the relative increase in taxes on domestic goods and services in relation to budgetary revenue. Import taxes (including the sales tax on imports) accounted for about 44 percent of budgetary revenue in 1979 but fell to around 30 percent by 1982-83, due to the sharp decline in imports, accentuated by an increasing proportion of exempt and lightly taxed goods reflecting the greater concentration of reduced import volumes on necessities and essential imports. The ratio of import taxes to total imports c.i.f. fell steadily from 24 percent in 1979 to a low of 20 percent in 1982 before recovering to an estimated 23 percent in 1983. This decline occurred despite substantial tariff increases on a broad range of investments and intermediate products in 1981 and 1982.

The ratio of total government revenue to GDP had declined steadily during the period under review from 19.2 percent of GDP in 1979 to 15.2 percent in 1982, despite the strengthening of the tax system. In

1983 the ratio is expected to remain at 15.3 percent of GDP. The decline was due mainly to the fact that most indirect taxes (other than the sales tax) are specific rather than ad valorem. The relative improvement in performance in 1983 is attributable to greater expected profits of the state fiscal monopoly on domestic cigarette and alcohol production, which had been constrained in 1982 due to a lack of imported inputs, and to the introduction of the ad valorem tax on petroleum products. Relative to the c.i.f. value of petroleum imports, the new tax should yield 23 percent of 1983 value compared to 14 percent in 1982. In general, the new fiscal measures introduced at the beginning of 1983 should leave the relative shares of the various taxes stable with respect to budgetary revenue.

e. <u>Government expenditure</u>

The economic and functional classification of government expenditure is shown in Appendix Table XVI. The bulge in central government expenditure that occurred in the late 1970s has been considerably reduced, although not to the average share of GDP that it was in the early 1970s. From 1971 through 1977 total expenditure averaged 19 percent of GDP, whereas from 1978 through 1981 the ratio rose to an average of 31 percent, with a peak of 36 percent reached in 1980. From 24 percent of GDP in 1982, the share of total expenditure is estimated to decline further to 22 percent of GDP in 1983 (Chart 1).

During the period 1979-81 current budgetary expenditure accounted for an average of 48 percent of government outlays on a cash basis. The share of current budgetary expenditure in the total rose to 53 percent in 1982 and is estimated to reach 55 percent in 1983. This trend results entirely from the large decline in capital expenditure from the very high levels of the 1979-80 investment boom, as current expenditure has also been declining as a proportion of GDP, from an average of 16 percent in 1979-81 down to 12 percent in 1983. Capital expenditure has declined in nominal terms since 1980, from FMG 89.6 billion to an expected FMG 70.6 billion in 1983. As a proportion of total government outlays, capital expenditure has declined from an average of 35 percent in 1979-81 to 26 percent in 1983.

Within current budgetary expenditure, wages and salaries have grown as a share of the total, as have interest payments. Wages and salaries increased by 20 percent in 1980, of which 8 percent was due to wage increases, with the remainder due to new recruitment. During 1981 an average 3.4 percent cost-of-living adjustment, combined with growth in personnel by about 10 percent for most of the year, resulted in a 12.6 percent rise in salary expenditure. In 1982 a 3.5 percent increase in cost-of-living pay compensation and a further net recruitment of 4 percent, combined with the exceptional outlays for law and order and payments for past services, resulted in an acceleration of wages and salaries expenditure by almost 18 percent. Given the sharp increase in the Antananarivo CPI, where most civil servants live, average real wages declined significantly. In 1983 there has been no wage increase, and net recruitment has been limited to a 1 percent increase (1,200 positions) over the end-1982 level. The total wage bill is expected to rise by less than 2 percent in 1983.

Interest payments have risen significantly, from less than 2 percent in 1979 to over 10 percent in 1983, reflecting the large increase in foreign borrowing, the rise in interest rates abroad, and the recent efforts to mobilize domestic nonbank financing. 1/ External interest payments have consistently accounted for about three quarters of the total. Along with capital expenditure, other current expenditure, including outlays for materials and supplies, has taken the brunt of the overall fiscal adjustment; this category of expenditure has declined precipitously, from 46 percent of current budgetary expenditure in 1979 to 28 percent in 1982, and, in nominal terms, was 25 percent less in 1982 than in 1980. This has caused a scarcity of materials and supplies and the provision of services that has threatened to compromise the normal operations of the Government. In 1983 other current expenditure is expected to rise to FMG 50 billion, including an almost 250 percent increase in outlays on materials and supplies, or to 34 percent of current budgetary expenditure.

The functional classification of current budgetary expenditure reveals that, while administrative and social services show their combined share remaining relatively stable at around 75 percent from 1979 through 1982, the share of economic services has shown a downward trend over the period from almost 15 percent to less than 10 percent (Appendix Table XVI).

Government capital expenditure, including expenditures financed from the reserved funds as well as on-lending to state enterprises, represented 11 percent of GDP in 1979 before rising to 13 percent in 1980. Subsequently, the proportion of government capital expenditure to GDP has steadily declined from 11 percent in 1981 to 7 percent in 1982 and to an estimated 6 percent in 1983. The proportion of these expenditures sustained by foreign financing has increased from an average of around 50 percent from 1979 through 1981, to about 60 percent in 1982 and about 70 percent in 1983. The increasing share of capital expenditure financed from external sources reflects a scaling down of locally financed projects in response to greater centralization of development planning in collaboration with foreign development agencies to coordinate project selection and implementation. In 1982 two thirds of capital expenditure went to expand productive capacity, whereas 7 percent was spent on maintenance and 27 percent on rehabilitation. For 1983 the emphasis has shifted further to the more efficient use of existing

1/ Especially the issue of a national loan, "LOVA," in 1982, which bore relatively high coupon rates of 15 and 18 percent.

capacity, with 9 percent spent on maintenance, 39 percent on rehabilitation, and 52 percent on new capacity. The relative importance of onlending to state enterprises has grown from about 15 percent of capital expenditure in 1979-80 to 26 percent in 1981, to 39 percent in 1982, and to an estimated 35 percent in 1983, reflecting the increasing preference for using existing executing agencies for project implementation as opposed to the creation of new administrative structures.

2. Money and credit

a. Structure of the financial system

The present stucture of Madagascar's banking system was established in 1977, when the then existing commercial banks and development banks (all of which had been nationalized in 1975) were reorganized into three new national banks, each specializing in a particular sector. The National Bank for Rural Development (BTM) and the National Bank for Industrial Development (BNI) provide credit for agricultural and industrial purposes, respectively, while credit for internal and external commerce is provided by the National Bank of Commerce (BFV). 1/ Apart from these banks and the Central Bank, there is also a postal checking system, under the control of the Treasury, and the Madagascar Savings Fund (Caisse d'Epargne de Madagascar), which operates under the Ministry of Posts and Telecommunications and is concerned with the promotion of small savings. 2/ A National Investment Fund (FNI) was established in late 1979 to mobilize domestic savings for the financing of long-term development projects that were beyond the range of the traditional short- and medium-term financing functions of the commercial banks. Its role has been relatively limited (see Section I). There are also two state-owned insurance companies, "NY Havana" and "ARO."

b. The instruments of credit policy

The Central Bank relies exclusively upon quantitative credit controls as monetary policy instruments. These include global credit ceilings for each of the three banks, the requirement of prior authorization for credit extended by banks to an enterprise whose total outstanding bank credit exceeds FMG 100 million, and limited access by individual banks to the Central Bank's rediscount window. Since 1981 the Central Bank has re-established ceilings for specific loan categories (discontinued in 1977) for each bank on a quarterly, cumulative basis for three types of credit: import credit and overdrafts; consumer

---

1/ All of the banks are permitted to provide credit to other sectors, but only as cofinancier and when the designated specialized bank participates as the lead bank.

2/ At the end of 1982 the assets of the Savings Fund were the equivalent of 1.5 percent of the total assets of the domestic banking system.

loans and normal commercial credit; and advances to contractors in connection with government projects. Crop financing and export credit remain free from specific ceilings, although the banks must remain within their global ceilings. Adherence to global ceilings, which for surveillance purposes are subdivided into short-, medium- and long-term, is monitored monthly. Penalties for exceeding the ceilings consist of a warning for the first infraction; the requirement to make a noninterest bearing special deposit at the Central Bank equivalent to 50 percent of the excess credit for the second infraction; and for any further breach of the ceilings the bank concerned is required to make special deposits at the Central Bank, equal to one half of the excess of actual credit over the ceilings, on which a monthly interest rate of 3 percent is charged. As the banks are normally in a position of excess liquidity that can be lent to a deficit bank in the "face-to-face" market, 1/ banks rarely exceed the global ceilings.

The access by the national banks to the rediscount facilities of the Central Bank has been sharply curtailed. Access by the BFV was canceled in February 1981 and by the BNI in September 1981, at which time the BTM's access to the rediscount window was reduced from FMG 4.6 billion to FMG 2.1 billion and then was formally canceled in June 1983. The suppression of the rediscount facilities results from a normal situation of excess bank liquidity, at least for the BFV and BNI until the late spring of 1983, where access to the Central Bank had been excessive (see below). Even though normal rediscount facilities no longer exist, the banks are allowed possible recourse to the Central Bank for up to 2 days at a rate of 14.5 per cent, i.e., the normal discount rate plus 2 percentage points. Moreover, there are limited rediscount facilities outside the normal rediscount ceilings totaling FMG 590 million for the three banks. These can be used to rediscount export bills and small, medium-term credits of less than FMG 5 million. A rediscount rate of 11 percent is charged. The liquidity situation of the national banks tightened considerably during the summer of 1983, and the Central Bank allowed greater access to the rediscount window at that time, but on a discretionary basis.

The quantitative credit controls also apply to individual enterprises where total bank credit already exceeds FMG 100 million. Prior authorization for further credit is required, with the Central Bank establishing credit ceilings for each enterprise, usually on a quarterly basis. The aim is to control the ultimate use of credit. The allocation of all credits, except for export credit and administrative credits, in excess of FMG 5 million (raised to FMG 10 million in February 1983) are monitored by the Central Bank.

1/ See subsection c. below.

c. The interbank market

In June 1975 an interbank money market was instituted, whereby the excess resources of some banks (in practice, the BNI and the BFV) are channeled through the Central Bank to other national banks (usually the BTM). The assets and liabilities of the market were treated as those of the Central Bank, so that the "market," in practice, was another credit facility of the Central Bank. Since its inception, the money market was generally in a state of imbalance, with funds supplied exceeding demand. This was mainly a result of the fact that the interest rate paid by the BTM for use of funds from the money market was higher than the Central Bank's rediscount facilities, and the BTM only went to the money market as a last resort. The Central Bank absorbed the losses on money market operations. In September 1981 the money market was replaced by a "face-to-face" market directly among the banks without the intermediation of the Central Bank. It was stipulated that the interest rate in the "face-to-face" market could not exceed the rediscount rate, resulting in an increased use of the money market and a sharp reduction in the BTM's recourse to the rediscount facilities of the Central Bank. The present interest rate in the "face-to-face" market is 11 percent. The liquidity of the national banks was reduced since their reserves no longer included the outstanding balances on the "face-to-face" market, as was the case under the former interbank market.

d. Developments in monetary and credit aggregates

(1) Revisions to monetary statistics

One major problem in monitoring monetary developments has been a failure to revalue external assets and liabilities of the Central Bank on the basis of current exchange rates. Until July 1982 the Central Bank had accounted for all transactions prior to September 1981 using a historic exchange rate of FMG 201 = US$1.00 (the October 3, 1983 rate was FMG 481 = US$1.00). Since July 1982 foreign assets have been revalued monthly at the rate prevailing at the end of the previous month. However, external liabilities were not revalued accordingly; they were simply recorded in FMG terms at the rate on the day incurred. As the Malagasy franc depreciated and foreign debt mounted, the monetary accounts became increasingly difficult to interpret, with valuation adjustments implying profits on foreign exchange operations of the Central Bank. The Malagasy authorities have undertaken to rectify the situation, in part with technical assistance provided by the IMF's Central Banking Department between March and October 1983. Beginning end-June 1983 all external assets and liabilities have been revalued monthly at the average exchange rates of the preceding month. These accounts are maintained in the original currency denominations of the liabilities as well as in Malagasy francs. Estimates were also made for end-December 1982 under the old and revised statistical systems. Valuation losses for end 1982 are estimated at FMG 55.1 billion. The monetary survey data before end-1982 are not comparable with the subsequent figures, especially as the revisions for foreign exchange revaluations were used as an opportunity to reclassify certain other assets and liabilities.

(2) Developments, 1979-82

Overall monetary and credit developments are summarized in Table 10. Through 1980 total domestic credit increased rapidly, and broad money expanded at a faster pace than nominal GDP. Madagascar's net external position deteriorated markedly. Since 1981, monetary and credit policies have become more restrictive, in large part as a response to the continued worsening of the external accounts.

The growth of total domestic credit of the banking system has decelerated significantly since 1981 compared to the late 1970s. From an annual rate of expansion of 45 percent in 1980, total domestic credit has grown at an average annual rate of just under 27 percent from 1981 through 1982. In relation to broad money (M_2) at the beginning of each year, the increase in domestic credit steadily decelerated from 61 percent in 1980 to 35 percent in 1981 and 25 percent in 1982.

Through 1981 about three fourths of the expansion in total domestic credit was directed to financing the government sector, reflecting the large overall government deficits in that period and the large recourse to domestic bank financing. As a percentage of the outstanding amount of domestic credit, the Government's share reached a peak of 58 percent in 1981. In 1982, with the significant reductions in the Government's borrowing requirements and greater recourse to net external financing, the Government's share of total credit growth was only 48 percent. Credit to the private sector and state enterprises (the present bank reporting system does not permit a breakdown between the two subsectors) increased from 1979 through 1981 at an average annual rate of increase less than half that of total domestic credit. In 1982 this category of credit rose by 19 percent, compared to total domestic credit growth of about 15 percent.

Madagascar's net external position has deteriorated rapidly since 1979, although the revaluation difficulties noted above render the data of the early 1980s, until the recent revisions, largely irrelevant.

Reflecting credit developments as well as the deterioration in the external financial situation, the increase in the money supply, broadly defined, has decelerated significantly from an annual average of about 22 percent in 1979-81 to about 10 percent in 1982. This compares with an annual average increase in nominal GDP of about 21 percent over the same period, resulting in an increase in velocity of circulation. During this period currency in circulation represented, on average, about 40 percent of narrowly defined money supply (M_1). Meanwhile,

Table 10. Madagascar: Monetary Survey, 1979-83

(In billions of FMG)

	Old series				New series	
	1979	1980	1981	1982 Prel.	1982 Rev.	1983 June
Monetary movements (net)	-40.1	-93.4	-49.8	-70.6	-111.5	-110.2
Assets	4.6	10.8	19.8	26.0	26.0	22.2
Liabilities	-44.7	-104.2	-69.2	-96.6	-137.5	-132.4
Domestic credit (net)	234.8	340.1	413.0	476.6	484.0	494.0
Claims on Government (net)	104.1	181.1	240.6	271.1	268.5	275.2
Central Bank (net)	91.0	176.7	223.6	257.0	257.0	262.4
State banks (net)	-2.4	-11.5	-0.5	-0.7	-3.3	-4.1
Other (net)	15.5	15.9	17.5	14.8	14.8	16.7
Credit to private sector and state enterprises	130.7	159.0	172.4	205.5	215.5	218.8 1/
Of which: claims by Central Bank	9.8	8.6	8.6	8.3	18.3 1/	21.7
Broad money	173.0	206.0	249.8	278.3	275.6	254.3
Money	137.8	164.7	207.1	225.4	221.4	195.5
Currency	53.6	70.2	83.1	90.4	90.4	81.3
Demand deposits	84.2	94.5	124.0	135.0	131.0	114.2
Quasi-money	35.2	41.3	42.7	52.9	54.2	58.8
Long-term foreign borrowing	14.5	31.8	108.8	120.2	156.8	215.8
Of which: rescheduling agreements	--	--	49.9	63.1	87.5	141.5
Other items (net)	7.2	8.9	4.6	7.5	-59.9	-87.3
Of which: Valuation adjustment	...	...	...	...	-55.1	-68.6
Memorandum item:						
Velocity of broad money	3.7	3.6	3.5	3.8	3.8	...

Source: Central Bank of Madagascar.

1/ Includes reclassification of FMG 10.0 billion of advances to state enterprises previously recorded in other assets.

quasi-money, after stagnating in 1981, grew by 27 percent in 1982, a period in which narrowly defined money grew by only 9 percent. The increase in deposit interest rates of June 1982, which significantly lessened the negative real interest rates, contributed to this outcome.

(3) Developments in 1983 1/

Particularly striking in the first half of 1983 has been, first, the decline in money supply and the plunge in the inflation rate despite the price effects of further exchange rate depreciations since May 1982, and, second, the increasingly severe liquidity situation of the national banks. In these circumstances, and combined with the recent interest rate increases, the velocity of circulation has continued to rise and is expected to reach 4.4 in 1983, or close to the average of the mid-1970s. Broad money declined by 7.7 percent in the first six months of 1983 and by a further 1 percent in July. Currency in circulation declined by 10.1 percent in the first semester. The rapid decline in currency and deposits reflected the further accumulation of external payments arrears on debt service payments (which has a contractionary effect, as the Central Bank debits domestic deposits in Malagasy francs according to the original maturities of external loans and other foreign payments) and the strong improvement in the Government's finances. As total domestic credit expanded by 2 percent in the first half of 1983, the banking system became increasingly illiquid. By June 1983 the consolidated bank liquid reserves to deposits ratio had declined to 2.8 percent from 5.3 percent at end-1982 and 14.3 percent at end-1981. The two national banks that were usually in a surplus position in the "face-to-face" market were increasingly constrained in their ability to provide funds to that market. This was largely a result of their efforts to keep a margin within the global ceilings, as imports and crop financing needs were expected to rise rapidly from the middle of the year. Moreover, those banks, but particularly the BTM, had assets tied up in the financing of large stocks of cloves, and to a lesser extent coffee and vanilla. These factors, combined with the discontinuation of access to central bank rediscount facilities for all but the BTM, severely limited the ability of the banks to expand credit to the nongovernment economy. In these conditions the banks gave priority to the financing of agricultural marketion, to the detriment of "social credits" of less than FMG 10 million, mainly to households (Appendix Table XVII).

e. Operations of the Central Bank

Appendix Table XVIII summarizes the operations of the Central Bank during the period December 1979-June 1983. During that period the Central Bank accounted for about 71 per cent of the increase in

1/ Based on actual monetary and credit figures through July 1983.

total domestic credit provided by the banking system, net of government deposits. As of the end of June 1983 the increase in total domestic credit provided by the Central Bank only slightly exceeded the increase in net credit to the Government that it provided, as credit to the national banks had been declining, reflecting the curbing of access to the Central Bank's rediscount facilities.

The central bank credit to the national banks, which amounted to FMG 9.0 billion at the end of 1979, declined to zero at the end of 1982, before recovering to FMG 4.3 billion at the end of June 1983, which reflected the reopening of rediscount facilities for the banks on a temporary basis to meet their liquidity needs for financing the summer rice harvest and other crops. During the course of the revaluation adjustments to the Central Bank's external assets and liabilities, about FMG 10.0 billion of advances to state enterprises in respect of arrears on foreign loans, which had been placed in "other items" as they were thought to be temporary, were reclassified as claims on the economy. The revaluation exercise made explicit the cumulative foreign exchange losses of the Central Bank, which are estimated at FMG 55.1 billion at end-December 1982 and FMG 68.6 billion at end-June 1983. These losses are reported under "other items" as negative assets in the Central Bank's balance sheet.

On August 29, 1983 the Central Bank proceeded with a new issue of currency. A three-week period was stipulated, later extended by one week, in which all notes had to be exchanged on a one-for-one basis, after which the old notes would cease to be legal tender. The new issue was undertaken to discourage illicit transactions and fiscal evasion.

f. Operations of the national banks

Appendix Table XIX summarizes the operations of the national banks during the period December 1979-June 1983. During that period net domestic credit provided by the national banks increased at an average annual rate of 15.8 per cent, which was less than the average annual rate of increase in credit provided by the whole banking system (23.2 per cent). While credit to state enterprises and the private sector rose steadily, the Government maintained a net deposit balance with the national banks that declined to a low of FMG 0.5 billion at end-1981 from a high of FMG 11.5 billion at end-1980 before reaching FMG 4.1 billion at end-June 1983. The liquidity position of the banks has deteriorated markedly, as noted above. First, deposits with the Central Bank have progressively declined from FMG 18.8 billion at end-1981 to FMG 7.4 billion at end-December 1982 and to FMG 2.5 billion at end-June 1983. Second, borrowing from the Central Bank was also curtailed, although, in view of the liquidity squeeze, access to the rediscount facilities has been permitted on an ad hoc basis. The national banks have also had limited access to foreign borrowing.

Foreign assets consist exclusively of float and minimum working balances in foreign correspondent bank accounts. The net external position of the banks varies with developments in the underlying commercial transactions. After improving to a positive FMG 7.3 billion at end-December 1982, a decrease in foreign assets and an increase in foreign liabilities reduced the positive balance to FMG 2.0 billion by end-June 1983. At the same time, long-term foreign borrowing (which is not included in liabilities netted against foreign assets) rose from FMG 2.9 billion at end-1979 to FMG 16.0 billion at end-1982 and has remained at about that level. In order to improve the statistical monitoring of national bank operations, a new monthly reporting system is being devised to replace the one now in use, which was instituted in 1973. The new system is expected to be operational by the beginning of 1984.

g. Interest rate stucture

The stucture of interest rates was raised on June 1, 1982 and again on February 1, 1983 (Appendix Table XX). In June 1982 the Central Bank's rediscount rate on short-term paper, other than export bills and agricultural and small business credits, was raised to 12.5 percent, with loan and deposit rates increased correspondingly. The more favorable rediscount rate was raised to 11.0 percent. The February 1983 adjustments left the central bank rates unchanged but raised the lending rates by an average of 1 percentage point and the deposit rates by an average of 2.5 percentage points. Up until that time the lending and deposit rates determined by the Central Bank were maximum rates, and the actual rates were below those prescribed. The February changes stipulated that the deposit rates would be minimum and obligatory, and that the lending rates would be minimum. The Central Bank still maintains a maximum lending rate of 21 percent on all types of credit. The Professional Bankers' Association has an official status in supervising prudential and equitable operations by the three national banks. It also periodically establishes a "fourchette" for interest rates on each type of credit above the minimum and ranks borrowers within the "fourchette" as a function of estimated commercial risks and their reputations. In the first half of 1983 the actual rates charged by the banks on short-term credits were above the minimum; for the medium- and long-term credits as well as for most of the deposit rates, the actual rates recorded were lower than the minima due to statistical problems concerning the time period covered and rounding errors, as well as, for the longer maturities, the legal stipulation that the higher rates are applied only as credits or deposits are renewed or initiated.

IV. Balance of Payments

1. Overall developments, 1979-83

The most important developments in the balance of payments in recent years have been a stagnation or decline of exports, a sharp drop in imports, and a very large debt service burden (Table 11). In 1982 the trade deficit was reduced to less than half that in 1980 and is projected to decline further by one third to SDR 75 million in 1983. The decline in the trade deficit was due entirely to a drop of almost 50 percent in the volume of imports over the period; export volume declined, and the terms of trade deteriorated sharply by an estimated 24 percent between 1979 and 1982, before partially recovering in 1983. As a percentage of GDP, the current account deficit was reduced from 18.5 percent in 1980 to 13 percent in 1982; in 1983 the current account deficit is expected to decline by 10 percent to SDR 301 million, or 11 percent of projected GDP. Excluding interest payments, the improvement in the current account was even more significant, as the deficit declined from 17 percent of GDP in 1980 to 9.5 percent in 1982, with a further reduction to 7.4 percent of projected GDP estimated for 1983.

Due to the very rapid increase in indebtedness in 1979-81, and the high level of interest rates, the debt service burden has increased to a critical level, while gross receipts on capital account have declined. As a result, despite important debt reschedulings that Madagascar has obtained since 1981, the foreign exchange constraints have been exacerbated, and the overall balance of payments registered deficits of over SDR 40 million in 1981 and 1982, with an increase to SDR 79 million projected for 1983 in the absence of any further debt rescheduling. These deficits have been reflected in an increase in external payments arrears and the balance financed by drawings under Fund stand-by arrangements. Moreover, in 1983 the Central Bank's foreign liabilities rose by about SDR 10 million, reflecting the receipt of a short-term revolving credit.

2. Merchandise trade

a. Exports

(1) Overall developments

Export performance in recent years has been characterized by generally declining volumes and fluctuating average unit prices at levels above those of 1979, combined with a virtual absence of export diversification (Table 12 and Appendix Table XXI). Export volume declined in every year since 1979 except in 1982, when vanilla shipments rose sharply (84 percent), and 1983 export volume is expected to be 18 percent lower than in 1979. Export prices, after rising sharply in 1980, declined in the two subsequent years, mainly due to lower coffee prices, but are expected to recover in 1983, when they are estimated to be 18 percent

Table 11. Madagascar: Balance of Payments, 1979-83

(In millions of SDRs) 1/

	1979	1980	1981	1982	1983 Proj.
Exports, f.o.b.	304.9	335.3	274.3	298.1	295.7
Imports, f.o.b.	-512.7	-587.3	-433.2	-409.0	-371.1
Trade balance	-207.8	-252.0	-158.9	-110.9	-75.4
Service receipts	58.9	62.9	55.6	49.7	44.0
Service payments	-219.8	-274.2	-268.1	-272.0	-268.6
Freight	-99.3	-113.5	-66.2	-68.1	-58.8
Transport and travel	-45.1	-58.2	-59.3	-55.7	-54.3
Investment income 2/	-13.5	-35.6	-78.3	-90.7	-101.0
Of which: moratorium interest on reschedulings in current year	(--)	(--)	(-13.7)	(-0.7)	(-2.4)
Other services	-61.9	-66.9	-63.7	-57.5	-54.5
Services (net)	-160.9	-211.3	-212.5	-222.3	-224.6
Private unrequited transfers (net)	5.5	2.9	3.4	-1.3	-1.1
Current account	-363.2	-460.4	-368.0	-334.5	-301.1
(Excluding interest)	(353.3)	(-428.4)	(-292.9)	(-246.3)	(-202.3)
Public unrequited transfers	27.3	32.7	53.1	65.5	59.2
Nonmonetary capital (net)	234.3	288.0	274.8	171.1	175.8
Drawings	248.9	320.7	277.2	190.1	186.2
Amortization 2/	-14.6	-32.7	-66.8	-100.1	-170.7
Rescheduled debt service 3/	--	--	64.4	81.1	160.3
Principal on regular maturities (net of payments on reschedulings)	(--)	(--)	(44.4)	(57.1)	(134.2)
Interest	(--)	(--)	(20.0)	(24.0)	(26.1)
National banks (net)	4.7	5.1	-18.1	-23.8	--
Allocation of SDRs	3.5	3.5	3.5	--	--
Other 4/	-10.2	-45.1	9.6	79.9	-12.6 5/
Overall balance	-103.6	-176.2	-45.1	-41.8	-78.7
Financing	103.6	176.2	45.1	41.8	78.7
IMF	-3.7	37.7	31.6	47.0	6.5
Changes in arrears (decrease -)	--	174.5	-65.2	55.0	-88.7
due to: Consolidations	(--)	(-44.7)	(-124.2)	(-8.8)	(-119.1)
Accumulations	(--)	)	)	(221.0)	(79.5) 6/
Repayments	(--)	)(219.2)	) (59.0)	(-157.2)	(-49.1) 6/
Arrears consolidated into medium-term liabilities (decrease -)	--	44.7	87.1	-52.4	102.7
New consolidations	(--)	(44.7)	(124.2)	(8.8)	(119.1)
Repayments	(--)	(--)	(-35.0)	(-14.3)	(-16.4) 7/
Repayments due but not made	(--)	(--)	(-2.1)	(-46.9)	(...)
Other central bank reserves (net) (increase -)	107.3	-80.7	-8.4	-7.8	10.5
Assets (increase -)	(43.3)	(-13.8)	(-7.8)	(-7.3)	(0.2)
Liabilities (decrease -)	(64.0)	(-66.9)	(-0.6)	(-0.5)	(10.3)
Remaining gap	--	--	--	--	47.7

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

1/ Converted at the following rates per SDR 1: FMG 274.83 (1979), FMG 275.01 (1980), FMG 320.41 (1981), FMG 386.08 (1982), and FMG 445.8 (1983).
2/ Before debt rescheduling.
3/ Debt reschedulings obtained thus far under Paris Club I and II through June 1983, from certain other official creditors, and from the London Club group of banks under agreement reached in principle.
4/ Includes valuation adjustment, short-term capital, and errors and omissions.
5/ Represents delays in export proceeds assumed at 5 percent of export value except for exports of cloves.
6/ Estimates for January-June 1983.
7/ Scheduled total repayments in 1983; differs from previous years, where actual repayments are shown.

Table 12. Madagascar: Exports, 1979-83

(Value in millions of SDRs; volume in thousands of metric tons; and unit prices in SDR/kilo) 1/

	1979	1980	1981	Prel. 1982	Proj. 1983
Coffee, value	138.6	164.0	92.7	82.9	111.3
Volume	63.1	69.5	56.0	52.9	52.8
Unit price	2.2	2.4	1.7	1.6	2.1
Cloves, value	54.6	24.0	66.2	71.0	46.2
Volume	13.5	4.4	9.3	10.0	6.4
Unit price	4.0	5.5	7.1	7.1	7.2
Vanilla, value	11.3	14.2	24.7	51.3	51.6
Volume	0.4	0.4	0.6	1.1	1.0
Unit price	28.3	35.5	41.2	46.6	51.6
Pepper, value	3.6	4.0	1.6	1.8	1.6
Volume	2.3	3.1	1.4	1.7	2.0
Unit price	1.6	1.3	1.1	1.1	0.8
Butterbeans, value	2.9	2.2	0.3	1.3	...
Volume	7.6	3.7	0.3	2.0	...
Unit price	0.4	0.6	1.0	0.7	...
Shellfish and fish, value	13.5	14.2	14.4	18.1	18.4
Volume	3.6	3.4	3.2	3.7	3.5
Unit price	3.8	4.2	4.5	4.9	5.3
Sugar, value	5.1	9.1	7.2	3.1	9.0
Volume	19.6	24.0	11.2	10.5	25.0
Unit price	0.3	0.4	0.6	0.3	0.4
Meat, value	10.6	13.8	4.1	2.1	1.1
Volume	5.3	5.5	2.1	0.9	0.7
Unit price	2.0	2.5	2.0	2.3	1.6
Meat canned, value	1.5	1.5	0.6	0.8	...
Volume	0.7	0.6	0.3	0.3	...
Unit price	2.1	2.5	2.0	2.7	...
Cocoa, value	4.0	2.5	2.2	1.6	2.2
Volume	1.8	1.5	1.7	1.5	1.8
Unit price	2.2	1.7	1.3	1.1	1.2
Cotton fabric, value	6.9	6.5	5.9	7.5	11.7
Volume	3.4	3.4	3.1	3.3	4.2
Unit price	2.0	1.9	1.9	2.3	...
Sisal, value	6.5	6.2	5.6	5.7	3.6
Volume	15.4	13.5	14.1	15.4	11.9
Unit price	0.4	0.6	0.4	0.4	0.3
Petroleum products, value	8.0	5.1	9.4	14.5	8.1
Volume	94.9	40.5	59.9	96.2	54.3
Unit price	0.08	0.1	0.2	0.2	0.1
Chrome, value	4.7	7.3	5.9	2.8	2.2
Volume	109.1	134.5	88.2	59.0	50.7
Unit price	0.04	0.05	0.07	0.05	0.04
Graphite, value	4.7	5.1	7.5	7.3	7.2
Volume	14.5	11.5	16.3	14.6	14.3
Unit price	0.3	0.4	0.5	0.5	0.5
Mica, value	1.1	1.1	0.6	0.8	...
Volume	1.2	1.1	1.0	1.4	...
Unit price	0.9	1.0	0.6	0.6	...
Other, value	27.3	54.5	25.6	25.5	21.4
Of which:					
re-exports	(15.3)	(27.3)	(14.0)	(15.5)	(10.1)
Total	304.9	335.3	274.3	298.1	295.6

Source: Data provided by Malagasy authorities.

1/ Value and price series converted using period average FMG/SDR exchange rates. The assumed conversion rate for 1983 is FMG 445.8.

above their 1979 level. While the value of total exports in SDR terms increased by 8.6 percent to SDR 298 million in 1982, export earnings in that year were still less than in 1978. Moreover, in 1983 exports are projected to decline slightly to SDR 296 million. 1/

In general, export performance continued to be adversely affected by past policies of neglect of the agricultural sector, including inadequate pricing policies and basic infrastructure (particularly in transportation) and shortages of imported inputs. Moreover, three major export crops, coffee, cloves, and vanilla, face, in varying degrees, marketing constraints that are likely to impede the expansion of their export volumes or to reduce the level of shipments presently attained.

(2) Coffee, cloves, and vanilla

The above three exports account for over two thirds of Madagascar's export earnings. In recent years export performance among these crops has varied greatly. Export receipts from coffee, the most important export crop, declined in 1981 and 1982, to SDR 83 million, the lowest level since 1975. Both the volume, at 52,800 tons, and the average unit price at US85¢/1b, were the lowest since 1977 and 1976, respectively. Madagascar exported its full quota of 45,000 tons under the ICO and shipped the remaining 8,000 tons to nonquota markets. While exports of coffee have been constrained by the ICO quota, which is considerably lower than marketed production, and by uncertainties regarding outlets to nonquota markets, coffee exports have also been adversely affected by the decline in quality as a result of the insufficient replanting of trees and by transportaion difficulties. In 1983 receipts from coffee exports are projected to increase by one third to SDR 111 million, due entirely to higher unit prices, as shipments are expected to remain unchanged from their 1982 level. As a result, coffee, which had declined as a proportion of total export receipts to a low of 28 percent in 1982 (from a peak of nearly 50 percent in 1980), is expected to increase its share in the total to nearly 40 percent in 1983.

Exports of cloves have fluctuated with the two- to three-year peak cycle followed by a trough year, while average unit prices rose steadily and stabilized at about US$8/kg in 1982. Receipts from clove exports in that year increased by 7 percent to SDR 71 million, stimulated by higher shipments. More recently, however, the marketing of cloves has been severely constrained by increased production in Indonesia, where the major part of world demand for cloves originates. In 1983 receipts from clove exports are projected to decline by 35 percent to SDR 46 million, reflecting

1/ The 1983 projections assume that clove exports amounting to SDR 32 million will have been made during the last quarter of 1983. If these exports are not made, the total value of exports in 1983 will be SDR 264 million, or 12 percent less than in 1982. As explained below, there have been difficulties in selling cloves in Madagascar's major export market.

a sharp drop in volume to 6,400 tons. These projections assume that 4,500 tons of cloves will have been exported to Indonesia in the last quarter of 1983; however, as of mid-November these sales had not yet materialized. As a proportion of total exports, receipts from cloves would decline from one fourth in both 1981 and 1982 to 16 percent in 1983, on the assumption that present projections are realized.

Performance of the third most important export crop, vanilla, has been markedly different from that of the other major crops and from the results of less important exports. Earnings from vanilla shipments rose sharply in every year in the recent period and were the principal contributor to the growth in export receipts in 1982, when the total value of vanilla exports more than doubled to SDR 51.3 million. Between 1979 and 1982 shipments expanded by 175 percent to 1,060 tons as production rose, stimulated in large part by the sharp increases in producer prices in recent years, while average unit prices recorded a gain of 65 percent during this period. The share of vanilla in total exports quadrupled to 17 percent of the total in 1982. In 1983 receipts from vanilla exports are expected to stabilize at SDR 52 million, as a decline in volume by 9 percent to 967 tons is expected to be offset by higher unit prices. Madagascar, the Comoros, and La Réunion have almost a world monopoly for vanilla, and it is believed that the world market could not absorb significant increases in supply without adversely affecting the price. However, in 1983 vanilla is expected to replace cloves as Madagascar's second most important export.

(3) Other exports

Other agriculturally based exports include, in decreasing order of importance, shellfish and fish, cotton fabric, sugar, sisal, meat, and pepper; together they accounted for only 13 percent of total export receipts in 1982. Most of these exports have either stagnated or declined, in part because inadequate profitability was an impediment to increases in output. In the case of fish and shellfish, export value rose by one third between 1979 and 1982, and is expected to show a marginal increase in 1983 to SDR 18.4 million. However, these gains were due entirely to higher unit prices, while volume remained unchanged at about 3,500 tons per annum. The value of meat and pepper exports declined by 80 percent and 50 percent, respectively, during 1979-82, and further decreases are projected for 1983. The main cause for this poor performance, particularly in the case of meat, was the sharp reduction in volume. As described in Section I above, production of pepper fell following a severe deterioration in real producer prices, while, in the case of meat, lack of profitability in exporting for the world market has been one of the factors contributing to the unsatisfactory outcome. Receipts from exports of cotton cloth increased by 9 percent during 1979-82, as volume declined somewhat while unit prices increased. However, in 1983 earnings from cotton fabric are expected to increase by over 50 percent to SDR 11.7 million, as a result of an increase in production stimulated by a rise in producer prices of over 40 percent during the last three years.

The principal nonagriculturally based exports are petroleum products, graphite, and chrome. Export earnings from petroleum products rose by 80 percent during 1979-82 to SDR 14.5 million, but in 1983 they are expected to decline by over two fifths to SDR 8 million as a result of production difficulties at the refinery due to shortages of imported spare parts. In the case of graphite, export earnings declined by 3 percent to SDR 7.3 million in 1982 due to lower volume, following increases in each of the two preceding years, while export receipts of chrome declined sharply to SDR 2.8 million in 1982 from a high level of SDR 7.3 million in 1981, reflecting a steep fall in production due to shortages of imported spare parts as well as lack of profitability. Further declines are projected for both exports in 1983.

b. Imports 1/

(1) Overall developments

Import performance in Madagascar was characterized during 1979-80 by high levels of imports of raw materials, intermediate goods, and capital goods, in response to the expansionary investment policy pursued by the Government during that period. This was followed in 1981, and to a lesser extent in 1982, by a sharp decline of these imports, as well as imports of consumer goods other than foodstuffs, under the impact of the severe foreign exchange shortage. Nevertheless, imports of rice expanded very sharply during the entire period. In 1983 imports are expected to shift in favor of raw materials and intermediate goods and of basic consumer goods that would provide incentives for the agricultural sector. These priorities reflect the authorities' attempts to revitalize production, particularly in the agricultural sector, and to promote export expansion and import substitution.

(2) 1979-82

Following increases in SDR terms by 70 percent and 15 percent in 1979 and 1980, respectively, to a record high level of SDR 722 million, the value of imports fell in each of the two subsequent years by a total of 31 percent to SDR 500 million in 1982 (Table 13). In 1981 imports fell by SDR 206 million (28.5 percent), while in 1982 the reduction amounted to SDR 15.5 million (3 percent). For 1983 a further decline by 12 percent to SDR 441 million is projected. During 1981-83 the annual average compound rate of decline will amount to 15 percent. Apart from

1/ A detailed analysis of the composition of imports is not possible, as the authorities have discontinued, since mid-1981, the collection of the required statistics.

Table 13. Madagascar: Composition of Imports, c.i.f., 1979-83 1/

	1979	1980	1981	1982	1983 Proj.	1979	1980	1981	1982	1983 Proj.
	(In millions of SDRs and metric tons)					(In percent)				
Consumer goods other than foodstuffs	83.2	80.1	49.9	46.0	47.1	13.3	11.1	9.7	9.2	10.7
Foodstuffs	64.6	68.0	84.0	115.5	66.9	10.3	9.4	16.3	23.1	15.2
Of which: rice	(32.4)	(42.6)	(57.6)	(95.1)	(51.3)	(5.2)	(5.9)	(11.2)	(19.0)	(11.6)
volume	(156.000)	(177.000)	(192.000)	(356.208)	(183.687)	(...)	(...)	(...)	(...)	(...)
Energy	75.6	122.3	107.6	121.3	91.3	12.0	17.0	20.9	24.2	20.7
Of which: crude oil	(43.3)	(95.1)	(91.3)	(97.1)	(63.7)	(6.9)	(13.2)	(17.8)	(15.8)	(14.4)
volume	(375.445)	(492.090)	(427.368)	(396.712)	(271.731)	(...)	(...)	(...)	(...)	(...)
Raw materials and intermediate goods	130.9	158.5	94.3	97.8	111.8	20.9	22.0	18.3	19.6	25.3
Capital goods	260.1	255.6	161.6	114.6	111.9	41.5	35.4	31.3	22.9	25.4
For industry	(254.3)	(253.4)	(...)	(...)	(...)	(40.6)	(35.1)	(...)	(...)	(...)
For agriculture	(5.8)	(2.2)	(...)	(...)	(...)	(0.9)	(0.3)	(...)	(...)	(...)
Other	12.8	37.0	18.4	5.1	12.3	2.0	5.1	3.5	1.0	2.7
Total	627.2	721.5	515.8	500.3	441.3	100.0	100.0	100.0	100.0	100.0

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

1/ Data differ from those shown in the balance of payments, as the latter are net of freight by Malagasy ships.

1980, when it remained virtually unchanged, volume is estimated to have declined by 33 percent and 12 percent in 1981 and 1982, respectively, and a further reduction by 8 percent is projected for 1983 (Appendix Table XXI), which implies that the import volume in 1983 will be 46 percent below the 1979 level. By contrast, between 1979 and 1982 import prices rose in each year, and in 1982 they are estimated to have been over one-third higher than in 1979. Import prices are forecast to increase by about one percent in 1983.

Virtually all categories of imports participated in the decline over the period 1980-82. The notable exception was the category foodstuffs, which increased by SDR 47.5 million to SDR 115.5 million in 1982. This expansion was more than accounted for by rice imports, the value of which rose by 123 percent in the two years to SDR 95 million in 1982. The volume of rice imports doubled to a record high level of 365,208 tons. Of this total, 267,550 tons were bought with Madagascar's own foreign exchange for SDR 61.1 million, i.e., at an approximate average unit price of SDR 229/ton for low quality rice; 62,494 tons were financed by long-term foreign loans for the equivalent of SDR 26.5 million, i.e., at an average unit price of SDR 424/ton, and the remainder was financed by grants. Imports of foodstuffs other than rice rose by only 4 percent to SDR 20 million in 1982.

Capital goods imports accounted for two thirds of the decline in total imports during 1981-82, falling by SDR 94 million and SDR 47 million during each of the two years, respectively, to SDR 115 million in 1982, or 55 percent below their 1980 level. This decline reflected the sharp drop in investment activity from the high level attained in mid-1978-80. Imports of raw materials and intermediate goods fell by SDR 64 million in 1981, representing almost one third of the total reduction of imports in that year, but then increased marginally to SDR 98 million in 1982; at that level they were 38 percent lower than in 1980. The next most important reduction occurred in the categories of consumer goods (other than foodstuffs) and "other" imports, which fell by over SDR 30 million, each, in the two-year period. The bulk of the reduction in consumer goods occurred in 1981, while the decline in "other" imports was shared more evenly over the two years. The latter category comprises temporary imports required for the execution of investment projects, and the decline was associated with the sharp drop in investment.

In 1982 the overall value of energy imports at SDR 121 million was virtually unchanged from that in 1980. About 80 percent of energy imports consists of crude oil, whose volume declined by 20 percent between 1980 and 1982. In 1981 the decline in volume of crude oil and of other petroleum products more than offset the increase in average unit prices (11 percent in the case of crude oil), so that the total value of energy imports fell by 12 percent. However, in 1982 a further reduction in the volume of crude oil by 7 percent was more than offset by higher average unit prices, resulting in a 13 percent rise in the total import bill for energy. A large percentage of Madagascar's crude petroleum imports is supplied under contracts at a price linked to the posted price of Saudi Arabian light, which delays the effects of changes in world market prices.

Reflecting the above developments, the relative position of the various import categories in total imports changed between 1979 and 1982. The share of capital goods, which accounted for two fifths of the total in 1979, declined to 23 percent in 1982. During the same period consumer goods other than foodstuffs fell as a proportion of the total from 13 percent to 9 percent, while "other" imports, which had increased their share to a peak level of 5 percent in the total in 1980, reduced it to only 1 percent in 1982. By contrast, during the same period the share of rice imports rose by more than three and one half times to 19 percent, while that of energy doubled to 24 percent of the total in 1982. The relative position of raw materials and intermediate goods declined only marginally, accounting for about one fifth of the total, as their decline during this period was somewhat in excess of that of total imports.

(3) 1983

The major part of the projected reduction in imports in 1983 (by SDR 59 million to SDR 441 million) is to come from lower imports of foodstuffs, which are to fall by SDR 49 million, or over 80 percent of the decline in the total import bill. The value of imports of rice alone is to drop by SDR 44 million (46 percent), reflecting a 48 percent cut in volume to 183,687 tons, with average unit prices 4.7 percent higher than in 1982. The volume of rice imports purchased with Madagascar's own foreign exchange is to be reduced by 63 percent to 98,629 tons and its value by 69 percent to SDR 19 million; the volume of imported rice financed by long-term loans is to increase by 17 percent to 73,322 tons, and the remainder is to be financed by grants. Imports of energy are to decline by SDR 30 million to SDR 91 million. This will be more than accounted for by lower imports of crude oil, which are expected to be reduced by 32 percent to 271,731 tons, associated with the production difficulties at the refinery noted above, while average unit prices are likely to be about 5 percent lower than in 1982. Due to contracts entered into previously, it was not possible for Madagascar to benefit to the full extent of the reduction in the world market price for crude oil in 1983. Imports of capital goods are projected to decline marginally to SDR 112 million, following the sharp reduction in the two preceding years. By contrast, raw materials and intermediate goods imports are projected to increase by SDR 14 million to SDR 112 million, and a small increase is also provided for consumer goods other than foodstuffs, both implying higher volumes. The category of "other" imports is expected to increase by SDR 7 million to SDR 12 million; this is associated with the rehabilitation of the cotton cloth sector, involving the importation of cotton cloth for reprocessing and export. As noted earlier, the above developments reflect the authorities' policy aimed at providing essential inputs and incentive goods for the agricultural sector to permit increased production of import substitutes and exports. As a result of the above trends, the proportion of both raw materials and intermediate goods and capital goods in total imports is to increase to one fifth each, while the relative position of energy and foodstuffs is to decline to one fourth and 15 percent of the total, respectively.

3. Services

The deficit on the services account rose by almost one third in 1980, stabilized in 1981, and increased by only 4.6 percent in 1982 to SDR 222 million. In 1983 the net outflow on services is expected to rise marginally to SDR 225 million. The outcome in 1980 reflected mainly a sharp increase in interest payments on foreign debt and in merchandise freight, while developments in subsequent years resulted from a continued increase in interest payments and lower service receipts, offset in large part by reduced expenditures on freight (except for 1982, when less was transported by Malagasy ships) and on other services. The reduction in freight expenditures by SDR 55 million between 1980 and 1983 followed the decline in imports discussed above while the steep rise in interest payments by SDR 88 million between 1979-83 to a projected SDR 98.8 million 1/ reflected the dramatic increase in foreign indebtedness. Payments on "other services" declined in every year in line with lower project-related expenditures associated with declining investments.

Excluding interest payments, the deficit on the services account narrowed in each year, and in 1983 it is expected to amount to SDR 126 million, SDR 25 million below its 1979 level. Interest payments included under expenditures for investment income are shown before any rescheduling but include moratorium interest on rescheduled debt. Such interest payments increased almost tenfold from 1979 to 1983 to SDR 98.8 million. Rescheduled interest is capitalized and shown in the balance of payments table under debt relief in the capital account. The total of gross interest payments rescheduled during 1981-83 amounted to SDR 70 million (27 percent of exports of goods and services), the largest amount (about SDR 54 million) relating to Paris Club countries (Tables 11 and 14). However, if account is taken of moratorium interest, which is levied on the rescheduled amounts of principal and interest and on the consolidation of arrears, there was only a small net relief in terms of interest payments during 1981-83 of SDR 3.7 million. The outcome would have been worse except for the absence of interest charges in 1983 on the rescheduling of the total debt outstanding at the end of 1982 (including arrears) to certain COMECON and Arab countries.

1/ Scheduled payments in respect of total investment income, including dividend transfers, are projected to amount to SDR 101 million in 1983.

Table 14. Madagascar: Interest Payments Before and After Rescheduling, 1981-83

(In millions of SDRs) 1/

	1981	1982	1983
A. Interest payments before rescheduling during any given year	61.4	87.5	96.4
Payments on medium- and long-term debt	43.6	53.4	59.5
Paris Club	(20.7)	(26.9)	(24.8)
Other countries	(2.2)	(7.9)	(8.1)
Exceptional balance of payments financing	(5.2)	(7.1)	(6.0)
International organizations	(3.8)	(4.7)	(14.8)
Banks	(10.9)	(6.2)	(5.3)
Other private	(0.8)	(0.6)	(0.5)
Short-term	17.8	15.0	6.4
Moratorium interest on debt rescheduled in previous years	--	19.1	30.5
Paris Club I (1981 and Jan.-June 1982)	(--)	(6.0)	(6.5)
Paris Club II (July-Dec. 1982)	(--)	(--)	
Paris Club II (Jan.-June 1983)	(--)	(--)	(3.7)
Private	(--)	(0.2)	(0.2)
Consolidation of arrears	(--)	(12.9) 2/	(20.1) 3/
B. Interest payments rescheduled	-20.0	-24.0	-26.1
Paris Club I (1981)	-19.1	--	--
Paris Club I (Jan.-June 1982)	--	-11.7	--
Paris Club II (July-Dec. 1982)	--	-11.5	--
Paris Club II (Jan.-June 1983)	--	--	-12.0
Other countries 4/	-0.7	-0.7	-13.5
Private	-0.2	-0.1	--
C. Moratorium interest for rescheduling during any given year	13.7	0.7	2.4
Paris Club I (1981)	(0.7)	--	--
Paris Club I (Jan.-June 1982)	--	--	--
Paris Club II (July-Dec. 1982)	--	(0.1)	--
Paris Club II (Jan.-June 1983)	--	--	--
Private	(0.1)	--	--
Consolidated arrears	(12.9)	(0.6)	(2.4)
D. Interest payments after rescheduling (A - B + C)	55.1	64.2	72.6
E. Exports of goods and services	329.9	347.9	339.7
A/E ratio	18.6	25.1	28.4
D/E ratio	16.7	18.4	21.4

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

1/ Converted at the following rates for SDR 1: FMG 320.41 (1981), FMG 386.08 (1982), and FMG 445.8 (1983).
2/ Estimated interest payments to banks related to previously consolidated overdrafts and unconsolidated arrears.
3/ Estimated interest payments to banks on previously consolidated overdrafts and arrears, which, together with other debt outstanding, have been rescheduled in principle.
4/ Certain Arab and COMECON countries.

4. Capital movements

Following an increase in net nonmonetary capital inflow by SDR 54 million in 1980, there were reductions of SDR 13 million and SDR 104 million in 1981 and 1982, respectively, to SDR 171 million in 1982, or 40 percent below the level attained in 1980. In 1983 this trend is expected to be reversed only slightly, when a net inflow on nonmonetary capital of SDR 176 million is expected. The above developments were dominated by a steep decline in drawings on loans, while changes in amortization payments, after taking account of rescheduling, declined by SDR 4 million during the period. In 1981 a decline in drawings of SDR 44 million to SDR 277 million was attenuated by a net reduction in amortization payments as a result of debt relief obtained in the form of reschedulings, which reduced repayments by SDR 30 million compared with 1980. By contrast, in 1982 the sharp reduction in drawings by SDR 87 million was compounded by an increase in amortization, after rescheduling, of SDR 17 million, resulting in the record reduction in net capital inflows. In 1983 drawings on loans are to fall only marginally to SDR 171 million, but amortization after rescheduling thus far obtained is expected to reduce repayments by SDR 9 million compared with 1982, leaving the net inflow on nonmonetary capital virtually unchanged. The decline in drawings in 1981-82 resulted in part from the sharp reduction (in 1981) and elimination (in 1982) of exceptional balance of payments financing, which in 1980 amounted to SDR 57.2 million, as well as from the steep reduction in investment. Amounts drawn from Donors' Club commitments (SDR 27 million in 1982 and SDR 41 million in 1983) only partially made up for the above shortfall.

The trend in inflows from public transfers during 1981-82 differed from that of drawings on loans, with receipts from such transfers increasing by SDR 20 million and SDR 12 million in each of the two years, respectively, to a high level of SDR 60 million in 1982, thus mitigating the decline in total foreign drawings in that period. In 1983 the upward trend in public transfers is expected to be reversed, and the projected decline by SDR 6 million, together with the SDR 4 million reduction in drawings on foreign loans, will reduce total drawings to SDR 245 million, or SDR 108 million less than the record level of SDR 353 million attained in 1980.

Amortization payments originally due increased almost sixfold between 1979 and 1982 to SDR 100 million in 1982; in 1983 amortization before rescheduling is projected to increase to SDR 171 million. As noted above, these repayments were reduced through reschedulings. The total amount of reschedulings of principal (net of down payments in respect of non-rescheduled principal) and of interest that was capitalized amounted to SDR 306 million during 1981-83 (Table 15), excluding the consolidation of arrears, which are part of the foreign liabilities of the Central Bank and are shown below the line of the balance of payments. The largest amount of debt relief, viz. SDR 160 million, was obtained in 1983, reflecting

Table 15. Madagascar: Impact of Rescheduling on External Debt Service, 1/ 1981-83

(In millions of SDRs) 2/

	1981	1982	1983
A. Debt service before rescheduling 3/	135.6	210.2	280.6
Interest (incl. moratorium interest on debt rescheduled in previous years)	61.4	87.5	96.4
Principal on regular maturities 4/	66.8	100.1	170.7 5/
Payments on previously rescheduled regular maturities	--	2.9	3.9
Payments on arrears consolidated in previous years	--	14.3	6.0
IMF repurchases	7.4	5.4	3.6
B. Amounts rescheduled 6/	-68.3	-84.6	-167.4
Interest	-20.0	-24.0	-26.1
Principal (gross)	-48.3	-60.6	-141.3
Paris Club I (1981)	(-31.4)	(--)	(--)
Paris Club I (Jan.-June 1982)	(--)	(-19.3)	(--)
Paris Club II (July-Dec. 1982)	(--)	(-24.2)	(--)
Paris Club II (Jan.-June 1983)	(--)	(--)	(-25.2)
Other countries 7/	(-13.7)	(-15.2)	(-50.8)
Private	(-3.2)	(-1.9)	(-65.3)
C. Payments on reschedulings during any given year	52.6	1.3	15.9
Moratorium interest	13.7	0.7	2.4
Payments on rescheduled regular maturities	3.9	0.6	3.1
Payments on consolidated arrears	35.0	--	10.4
D. Debt service after rescheduling of any given year (A - B + C)	119.9	126.9	129.1
E. Exports of goods and services	329.9	147.9	339.7
A/E ratio	41.1	60.4	82.6
D/E ratio	36.3	36.5	38.0

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

1/ Includes reschedulings obtained thus far from the Paris Club through June 30, 1983, from certain other official creditors in respect of the total debt outstanding at end-1982, and from the London Club group of banks based on an agreement in principle expected to be signed before end-1983.

2/ Converted at the following rates for SDR 1: FMG 320.41 (1981), FMG 386.08 (1982), and FMG 445.8 (1983).

3/ The debt service before debt rescheduling does not exactly match the balance of payments presentation, since it includes payments on debt (including arrears) rescheduled in previous years and IMF repurchases and excludes moratorium interest for rescheduling during any given year; in the balance of payments table, debt relief is presented net of payments on previously rescheduled debt, and moratorium interest is shown in the services account.

4/ Excluding unconsolidated arrears.

5/ Includes FMG 29.11 billion (SDR 65.3 million) of regular principal due to banks in 1983 on debt not in arrears. The counterpart is added to amounts rescheduled (under category "private") in accordance with the agreement reached in principle and expected to be signed before the end of 1983.

6/ Excluding arrears.

7/ Certain Arab and COMECON countries.

mainly the rescheduling of the total debt outstanding at the end of 1982 to certain Arab and COMECON countries, and the rescheduling, in principle, of the total stock of debt owed to commercial banks; in both the latter cases, only the debt relief applicable to the maturities falling due in 1983 has been shown. The above amount of debt relief in 1983 also includes the rescheduling by the Paris Club of debt service originally falling due during the first semester of 1983. Debt rescheduling is discussed in greater detail in the section on the external debt below.

5. External debt

a. Background and overall developments

The legal provisions for controlling the contracting of foreign debt are stipulated in the Exchange Control Regulations of November 25, 1972 (Decree 72-446), which specify that borrowing abroad is subject to the approval of the Minister of Finance (since June 1983 this position has been changed to that of Minister of Finance and Economy). As described in SM/82/127 (8/2/82), during 1979-81 there was a dramatic increase in foreign borrowing, and the control and monitoring system regulating foreign borrowing de facto ceased to function. The subsequent need to cope with foreign indebtedness, including the monitoring of the limits imposed on new foreign borrowing under the Fund stand-by arrangements and the preparation for the reschedulings under the Paris Club, led to the gradual re-establishment of controls over foreign indebtedness. The 1972 Exchange Control Regulations were reinforced. In addition, to ensure adherence with the annual investment programs, the Directorate of Planning attached to the Presidency has been made responsible for the prior approval of the terms and conditions of external borrowing. External debt is monitored by the Central Bank.

With the exception of arrears on external payments, where a complete breakdown by creditors is still being put into final form, considerable progress has been made in completing external debt data, both in terms of coverage and identification by creditors and in the timely monitoring of the debt. External payments arrears were until recently recorded in local currency converted at the exchange rate of the day on which they had been incurred. The stock of arrears had not been revalued during 198081 and was only partially revalued during 1982. Beginning end-June 1983 external payments arrears are revalued each month at the average exchange rate of the preceding month (see Section III.2 above).

Between end-1978 and end-1981 the outstanding external debt, excluding unconsolidated arrears, increased five and one half times to SDR 1.24 billion, or from 12.8 percent to 53 percent of GDP (Table 16). In 1982 the stock of external debt rose further to SDR 1.45 billion (excluding an estimated SDR 214 million of external payments arrears). Including the above arrears, the outstanding stock of debt amounted to SDR 1.66 billion at the end of 1982, equivalent to 64 percent of GDP.

Table 16. Madagascar: Outstanding Stock of External Debt, 1978-82 1/

(In millions of SDRs; end of period)

	1978	1979	1980	1981	1982
OECD	77.6	193.3	343.4	462.0	561.7
COMECON and People's Rep. of China	22.0	31.3	64.2	108.2	121.9
Arab countries	0.2	6.8	16.4	66.7	73.0
Banks	4.2	47.7	56.2	62.6	54.9 2/
International organizations	122.8	130.6	218.6	310.9	418.9
Of which: IMF	(13.4)	(9.9)	(42.9)	(74.8)	(126.5)
Exceptional balance of payments financing 3/	--	53.1	109.3	139.3	124.2
Private nonguaranteed	2.7	10.6	9.0	7.5	6.6
Consolidated arrears	--	--	45.5	148.6	87.4
Of which: banks	(--)	(--)	(45.5)	(99.9)	(59.0) 2/
Paris Club	(--)	(--)	(--)	(38.0)	(20.2)
Arrears	--	--	...	...	213.5
Of which: banks	(--)	(--)	(--)	(...)	(63.1) 2/
Total	229.5	473.7	862.6	1,243.2	1,662.1

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

1/ After debt rescheduling from the Paris Club and from certain other official creditors.
2/ Agreement between private banks and Madagascar reached in principle to reschedule arrears, including other debt outstanding to banks; the agreement is expected to be signed before the end of 1983.
3/ Certain Arab and COMECON countries.

This outcome takes account of debt reschedulings obtained from the Paris Club and from other official creditors and the consolidation of arrears with a few banks prior to an agreement reached in principle in 1983 to reschedule the total debt outstanding to banks. In 1983 total outstanding debt, on the basis of reschedulings thus far obtained, is expected to increase to about SDR 2.0 billion, equivalent to 74 percent of projected GDP. Of the total amount of external debt outstanding at the end of 1982, onethird was government and government guaranteed debt owed to OECD countries, one fifth was accounted for by other official creditors (certain Arab and COMECON countries), 13 percent represented arrears, 11 percent was owed to commercial banks, and 5 percent comprised arrears consolidated into medium-term obligations; a very small amount consisted of private nonguaranteed debt, other than to banks.

Reflecting the sharp rise in external indebtedness, the ratio of amortization and interest payments to receipts from exports of goods and services rose from 7.6 percent in 1979 to 60.4 percent in 1982 before debt rescheduling (Table 15). In 1983 this ratio is expected to increase to 82.6 percent. Interest payments alone as a proportion of receipts from exports of goods and services, before debt rescheduling, jumped from 2.6 percent in 1979 to 25.1 in 1982 and are expected to reach 28.4 percent in 1983, before any further debt rescheduling (Table 14).

b. Debt rescheduling

The dramatic increase in Madagascar's external debt necessitated the renegotiation of substantial debt service payments to official and private creditors. There were two reschedulings under the Paris Club; the first, on April 30, 1981, covered 85 percent of principal and interest falling due between 1981 and June 30, 1982, in respect of contracts concluded before January 1, 1981; the second, on July 13, 1982, covered 85 percent of principal and interest falling due between July 1, 1982 and June 30, 1983 in respect of contracts concluded before January 1, 1982. Both reschedulings stipulated that, of the remaining outstanding 15 percent, 5 percent had to be paid as originally scheduled; in the case of the first rescheduling, a further 5 percent had to be paid on June 30, 1983 and the remaining 5 percent on June 30, 1984, while the second rescheduling specified that such repayments be made on June 30, 1984 and June 30, 1985, respectively. These reschedulings provided for a repayment period of about 9.5 years, of which about 5.1 years grace (including the consolidation period). The total net debt relief during the consolidation period January 1, 1981-June 30, 1983 (i.e., net of moratorium interest on these reschedulings and the payments of the nonrescheduled amounts) is estimated at SDR 126 million. In addition, both Paris Club renegotiations rescheduled arrears (including on short-term debt) outstanding on January 1, 1981 and on July 1, 1982, respectively. Under the first Paris Club, 25 percent of rescheduled arrears had to be paid before end-1981 and the remainder in eight equal semi-annual installments by September 30, 1985, i.e., a total repayment period of 4.8 years. Under the second Paris Club, 30 percent of rescheduled arrears had to be paid before end-

1982 and the remainder in six equal semi-annual installments by September 30, 1985, i.e., a total repayment period of 3.3 years. The total amount of arrears consolidated under the two reschedulings was about SDR 44 million.

In addition, Madagascar received some debt relief during 1981-82 from other offiicial creditors (Arab and COMECON) amounting to SDR 30 million. The total debt outstanding at the end of 1982 to certain Arab and COMECON countries, amounting to SDR 352 million, including SDR 32 million of arrears, was rescheduled in 1983. A grace period for all payments falling due in 1983 was provided, including no moratorium interest on the rescheduling during that year. For arrears, a total repayment period of 4 years (including a grace period for 1983) was applied, with equal annual installments ending in 1986. For maturities on debt not in arrears, the repayment period was 11 years, of which 4 years grace. Interest payments on this rescheduling are to begin in 1984 and are fixed at a rate of 10.5 percent. In 1983 the debt relief provided under this rescheduling amounted to about SDR 64 million.

Madagascar also rescheduled debt service owed to banks. In 1980 and 1981 ad hoc reschedulings with a number of banks were agreed upon tentatively. The major part of these reschedulings (US$147 million) related to short-term arrears that were consolidated over a period of about three years, with a moratorium interest of LIBOR plus 1.5 percent. A small amount, viz. US$8.3 million, of medium-term debt obligations not in arrears was also rescheduled, with a moratorium interest of LIBOR plus a margin ranging from 1.75-2.60 percent. In June 1982 negotiations began regarding a rescheduling of Madagascar's total outstanding obligations to commercial banks, and agreement was subsequently reached in principle, within the framework of the London Club, to reschedule the total debt outstanding at the end of 1982, amounting to US$195.3 million, of which US$69.6 million were arrears on principal. During a meeting on March 11, 1983 among the Steering Committee of the London Club group of banks, representatives of a number of the creditor banks, and the Malagasy authorities, it was agreed to propose the following rescheduling terms to the creditor banks: (i) all outstanding debt, including arrears, should be rescheduled over a period of eight years, (ii) the interest rate on rescheduled debt to be the equivalent of 1.75 and 2.00 percentage points above LIBOR, respectively, for short- and medium-term debt, with a resulting average margin of 1.85 percent, (iii) a rescheduling fee of 0.75 percent, and (iv) the extension of a new revolving line of credit of US$12.5 million to finance essential imports which would exactly offset proposed principal payments in 1983. In addition, penalty interest rates that a number of banks levied on outstanding arrears were to be discontinued after March 31, 1983, subject to Madagascar becoming current on overdue interest on its outstanding debt to banks. A separate agreement on similar terms was to cover the rescheduling of an outstanding loan of US$17.7 million (which was included in the above-mentioned total of US$195.3 million) to certain banks and Citibank, as agent, for the financing of a Boeing 747 aircraft. Madagascar became current on its interest payments to banks as of March 30, 1983, and banks discontinued levying penalty rates.

As it had not been possible to complete the agreement, and in view of the worsening balance of payments situation, another meeting was convened on September 21, 1983, during which the Steering Committee agreed to propose to the creditor banks an extension of the grace period for principal during 1983-84, with repayments to be spread over 1985-88, with the original length of the repayment period (i.e., 8 years ending 1990) remaining unchanged. This relief on principal payments (estimated at about SDR 28 million net of interest payments on the nonrepaid amount) was to be in lieu of the originally envisaged new revolving line of credit. The rescheduling fee and interest rate were to remain unchanged from the March proposals. It is expected that a final agreement incorporating the present proposals will be signed before end-1983.

As a result of the above rescheduling the total net debt relief--rescheduled principal (gross) and interest, less payments in respect of the nonrescheduled portion of principal and moratorium interest on the reschedulings and on arrears consolidations--amounted to SDR 240 million, equivalent to 24 percent of exports of goods and services during 1981-83. However, if payments under the terms of the agreements consolidating arrears into medium-term liabilities are also deducted to arrive at the net debt relief, such relief amounted to SDR 174 million during the three-year period, equivalent to 17 percent of exports of goods and services.

The debt service payments after the above reschedulings and consolidations, and before any possible additional debt relief in 1983, were reduced to SDR 129 million, and the debt service ratio was reduced from 83 percent to 38 percent in that year; this compares with debt service ratios before and after rescheduling of 60 percent and 37 percent in 1982 and 41 percent and 36 percent in 1981, respectively (Table 15). The ratio of interest payments alone to exports of goods and services, which, as noted earlier, was equivalent to 28 percent in 1983 before rescheduling, was still a very high level of 21.4 percent after the reschedulings and in the absence of additional debt relief during the remainder of the year. These ratios compare with 25 percent and 18.4 percent in 1982 and 18.6 percent and 16.7 percent in 1981, respectively (Table 13). Interest payments to banks comprise a significant portion, i.e., 35 percent, of total interest payments in 1983, compared with 30 percent in 1982, although debt to banks was only 10 percent of total debt outstanding at the end of 1982.

In the absence of any further reschedulings, debt service payments in respect of contracts signed through April 1983 are projected to increase in virtually every year during 1984-87 to SDR 291 million in 1987 under the impact of payments becoming due in respect of rescheduled debt, and higher repayments on other nonreschedulable debt, such as to international organizations, including the IMF (Table 17).

Table 17. Madagascar: Projected External Debt Service Payments, 1983-87 1/

(In millions of SDRs) 2/

	1983		1984		1985		1986		1987	
	Amt.	Int.	Amt.	Int.	Amt.	Int.	Amt.	Int.	Amt.	Int.
OECD countries	30.2	22.9	67.7	39.3	64.6	35.9	65.9	33.2	80.9	26.8
Other countries (including loans for the exceptional financing of the balance of payments) 3/4/	--	--	--	30.5	--	30.5	--	30.5	41.5	30.5
Banks 4/	--	25.4	--	21.8	34.9	19.8	34.9	15.2	34.9	11.5
International organizations	7.9	14.8	31.5	15.4	44.9	14.4	51.9	12.1	44.8	9.2
Of which: IMF 5/	(3.6)	(9.9)	(23.5)	(10.2)	(32.4)	(8.3)	(35.4)	(5.8)	(27.6)	(3.3)
Private nonguaranteed	2.0	0.7	1.8	0.5	1.0	0.4	0.5	0.3	0.8	--
Consolidated arrears	16.4	2.4	22.2	6.2	22.7	3.6	12.9	1.8	3.5	0.4
Short-term	--	6.4	--	6.4	--	6.4	--	6.4	--	6.4
Total	56.5	72.6	123.2	120.1	168.1	111.0	166.1	99.5	206.4	84.8
Total debt service	129.1		243.3		279.1		265.6		291.2	

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

1/ Data cover loans contracted through April 1983, after debt reschedulings from the Paris Club through June 1983, from other official creditors in respect of the total debt outstanding at the end of 1982, and from the London Club group of banks based on an agreement reached in principle and expected to be signed by end-1983.

2/ SDR 1 = FMG 445.8.

3/ Certain Arab and COMECON countries.

4/ Repayments on the basis of rescheduling of total debt (including arrears) outstanding at the end of 1982 referred to in footnote 1.

5/ On the basis of purchases outstanding as of November 1983.

V. Exchange and Trade System

Madagascar avails itself of the transitional arrangements of Article XIV, and maintains restrictions under Article VIII, Sections 2 and 3, of the Articles of Agreement. Since the previous Article IV consultation in 1982, Madagascar's restrictions on trade and payments remained comprehensive, reflecting the acute shortage of foreign exchange. The principal developments related to exchange rate actions, the persistence of external payments arrears, and the continued severe restrictions on imports and invisibles.

1. Exchange rate system

The Malagasy franc continued to be pegged to a basket of several currencies, a system adopted on April 2, 1982, when the fixed link of the Malagasy franc to the French franc was discontinued. The weight assigned to each currency in the basket is based on the distribution of Madagascar's trade during 1973-80. There is no single intervention currency, although the majority of transactions take place in French francs and U.S. dollars. In accordance with the movement in the basket, the Central Bank of Madagascar adjusts the Malagasy franc exchange rates on a daily basis against ten currencies that it quotes, viz., the Austrian schilling, the Belgian franc, the deutsche mark, the French franc, the Italian lira, the Japanese yen, the Netherlands guilder, the pound sterling, the Swiss franc, and the U.S. dollar. The spread between the official buying and selling rates for the ten currencies quoted by the Central Bank vis-a-vis the Malagasy franc is 1.0 percent.

The Malagasy franc was devalued on several occasions since the adoption of the peg to a currency basket. A devaluation on May 17, 1982, by 13.0 percent, in foreign currency terms, against the currency basket, was followed by further devaluations by 5.7 percent, 2 percent, and 9.5 percent on January 31, July 8, and October 1, 1983, respectively, viz., a cumulative devaluation since May 17, 1982 by 27.2 percent.

With December 1979 as a base, the nominal trade-weighted effective exchange rate depreciated almost without interruption during 1980 and 1981 and was 18.0 percent below the base level at the end of the first quarter of 1982 (Appendix Table XXII). Following the above exchange rate actions, the nominal trade-weighted rate declined by the end of August 1983 to 34.1 percent below its end-1979 level. The total depreciation between end-April 1982 and end-August 1983 amounted to 19.6 percent.

In real terms (after adjustment for relative price changes), the trade weighted effective exchange rate appreciated by 15.5 percent by the end of the first quarter of 1982. It depreciated subsequently following each devaluation, but resumed its appreciation thereafter. At the end of June 1983 it was 14.2 percent above its December 1979 base and 12.4 percent above the end May 1982 level. With the two subsequent devaluations in July and October, this appreciation is likely to have been reversed. The bilateral exchange rates for the French franc, the U.S. dollar, and the SDR for the period 1975-October 4, 1983 are shown in Appendix Table XXIII.

2. External payments arrears

Madagascar has incurred external payments arrears (other than those related to dividend transfers, which are discussed below) since the beginning of 1980. By the end of 1980 external payments arrears are estimated to have amounted to SDR 175 million, equivalent to 44 percent of exports of goods and services in that year. As noted earlier, until 1982 external payments arrears were recorded in local currency only, converted at the exchange rate of the day on which they were incurred. The stock of arrears had not been revalued, and revaluation of flows had begun only in 1982. On the basis of such partial data, the stock of external arrears declined at the end of 1981, but this was more than accounted for by the consolidation of arrears into medium-term obligations. On a net cash basis, i.e., the difference between repayments and new accumulations, arrears continued to increase. A partial revaluation of the stock of arrears for end 1982 indicates that they had increased to about SDR 213 million on that date. Based on a more comprehensive revaluation, the stock of arrears on June 30, 1982 amounted to SDR 107 million; on a net cash basis, however, arrears are estimated to have increased by SDR 30.4 million during January-June 1983. Since then the monitoring of arrears has been improved considerably, and, along with other foreign liabilities of the Central Bank, they are being revalued at the end of each month at the average exchange rate of the preceding month. On September 30, 1983 external payments arrears amounted to SDR 128.6 million. Thus far during 1983 SDR 119 million of arrears were consolidated into medium-term obligations, including SDR 32 million owed to official creditors other than those of the Paris Club and SDR 61 million owed to commercial banks under a tentative agreement that remains to be completed.

In addition, arrears in respect of dividend transfers have existed since about 1973. Since the previous Article IV consultation, considerable progress has been made at the Central Bank to reduce the backlog of applications that had developed beginning in 1981. In both 1982 and 1983 transfers in respect of dividends amounted to FMG 1 billion. On June 30, 1983 arrears on dividend transfers, i.e., applications approved by the Central Bank as representing bona fide dividends less amounts transferred, amounted to FMG 3.35 billion, equivalent to SDR 7.5 million.

3. Imports and import payments

Importers require the approval of the Ministry of Commerce before being permitted to engage in import activities. The following categories of importers may be distinguished: (i) state enterprises and enterprises in which the state holds a majority participation, (ii) enterprises importing raw materials, spare parts, and equipment goods for their own production, (iii) enterprises established under Malagasy law specializing in the distribution of specified products and having a minimum of five branches in at least three provinces, with an annual import volume equivalent to at least FMG 300 million, and (iv) groupings of traders.

All imports are subject to the annual import program, whose overall value is determined among the Ministry of Finance and Economy, the Ministries of Commerce and of Industry, and the Central Bank. The Ministry of Commerce then allocates quotas to importers within the overall limit of the import program, and licenses are issued freely up to the limits of these quotas. Since about mid-1981 a committee (Comité technique des paiements extérieurs), consisting of representatives of the Ministry of Finance and Economy, the Ministries of Commerce and of Industry, the Central Bank, and the commercial banks, has been meeting on a weekly basis to administer the limited foreign exchange and to ensure that the allocated quotas do not exceed foreign exchange availabilities. As a result of these arrangements to control imports, there is no longer a formal list of prohibited imports.

On March 23, 1983 a facility (Compte EPI - Exportations/pièces détachées-intrants) was established whereby, subject to prior approval, exporters retain specified percentages of export proceeds in convertible accounts denominated in Malagasy francs, which may be used freely by these exporters to import spare parts and other essential inputs for their own production activities. Thus far, the facility has been extended to exporters of cotton cloth, hides, fish and shellfish, graphite, sisal, and processed sisal.

4. Exports

No changes have taken place in the regulations governing exports since the previous Article IV consultation. Enterprises require the prior authorization ("carte d'exportation") by the Ministry of Commerce to engage in export activity. In addition, all exports are subject to an export authorization. The government-owned trading firms (ROSO, COROI, SICE, SOMACODIS, SINPA, SOLIMA, etc.) have a monopoly over most of the important exports (except vanilla), i.e., coffee, cloves, pepper, sugar, butter beans, meat, petroleum products, and chrome. Foreign exchange proceeds from exports must be surrendered not later than one month from the due date specified in the export contract.

5. Invisibles and capital

All payments for invisibles abroad require prior approval of the Minister of Finance, who has delegated approval authority either to the Directory of the Treasury (Exchange Control Service) or to the national banks. Specified limits apply on the sale of foreign exchange for a number

Directory of the Treasury (Exchange Control Service) or to the national banks. Specified limits apply on the sale of foreign exchange for a number of current invisibles. The annual limit on tourist travel by residents is equivalent to FMG 100,000 per traveler (FMG 50,000 for a child under ten years of age). For business travel, foreign exchange may be purchased up to a daily limit of FMG 10,000 per person, subject to a maximum of FMG 300,000 per annum. Authorized banks may not sell foreign banknotes in excess of the equivalent of FMG 20,000 per person per trip for tourist or business travel. There are also basic limits for educational expenses and certain other current invisibles. Applications for the sale of foreign exchange for other categories of invisibles are considered by the Ministry of Finance and Economy at its discretion.

Foreigners working in Madagascar are allowed to transfer the savings from wages and salaries earned upon presentation of the work contract and employment permit, provided the transfer takes place within three months of the pay period. The transferable amounts are limited to up to 25 percent of the net salary for bachelors and persons who have their families with them and up to 45 percent for those whose families live outside Madagascar. The transferable amounts are equivalent to 100 percent of the salaries for both of the above two categories of transferees for vacation periods spent outside of Madagascar, subject, in all cases, to a maximum limit of FMG 300,000 per person per month.

Nonresident foreigners may transfer dividends in full when distributed by industrial enterprises and up to 75 percent when distributed by other firms. Applications for such transfers must be presented through commercial banks to the Central Bank. Applications that have been approved by the Central Bank are forwarded to the Ministry of Finance and Economy for approval of the remittance of the corresponding foreign exchange. The application is then returned to the Central Bank for remittance of foreign exchange. Applications are verified to determine whether the amounts constitute bona fide dividends; this requires the presentation of proof that amounts to be transferred are compatible with the cash flow requirements of the company and that tax obligations have been met. As noted above, there are substantial arrears on transfers of bona fide dividends.

All foreign direct investments in Madagascar and direct investments by Malagasys abroad require the prior approval of the Minister of Finance and Economy. Exempt from this approval requirement are investments in the form of an increase in capital by way of reinvestment of undistributed profits. As noted earlier, all foreign borrowing is subject to the approval of the Minister of Finance and Economy.

Madagascar: Summary of the Tax System, June 1983

Tax	Nature of tax	Exemptions and deductions	Rates
1. Taxes on incomes and profits			
1.1 Taxes on companies			
1.11 Company profits tax (Impôt sur les bénéfices des Sociétés - IBS)	Annual tax on profits from any source earned by an enterprise domiciled in Madagascar as well as revenue produced by assets or a business activity in Madagascar.	- Revenue earned by proprietorships - Interest paid by the Caisse d'Epargne de Madagascar - Interest on Treasury bills and development bonds - Interest paid by the Treasury on the national loan	45 percent
1.12 Financial transaction tax (Impôt sur le revenu des capitaux mobilier - IRCM)	Annual tax on the proceeds of financial participation in the capital of enterprises, applied to distributed profits.		25 percent in general; 45 percent in bearer bonds.
1.13 Incorporation tax (Taxe d'incorporation)	Annual tax on profits or reserves incorporated into the equity capital of enterprises.		8 percent
1.14 Professional tax (Taxe professionelle)	Annual tax on the income generated by any business activity in Madagascar.	Salaries; university restaurants and canteens; farmers (owners); fishing and hunting; agricultural enterprises; artists, directors of technical and general schools; paper salesmen; local authorities wholesale activities; sanitary operations of enterprises; intermediaries in public markets for goods financed by foreign aid; procurement services of enterprises.	Determined by specific list in tax code. For real property, determined by examination of losses, comparison with normal rents, and direct inspection.
1.2 Taxes on individuals			
1.21 Tax on nonwage income (Impôts sur les revenus nonsalariaux - IRNS)	A tax on the nonwage income of persons resident in Madagascar or from a source located in Madagascar.	Net income from real constructed property that serves as a principal residence; interest paid by the Caisse d'Epargne de Madagascar; interest on Treasury bills and development bonds; interest paid by the Treasury on the national loan.	Rate calculated by formula: $\frac{\text{taxable income}}{\text{taxable income + FMG 7 million}}$, up to a maximum rate of 60 percent.
1.22 Tax on wage income (Impôts sur les revenus nonsalariaux et assimilés - IRSA)	Income tax on wages and pensions, collected at source. Imported income is charged for ownership of vehicles and houses, e.g., FMG 20,000 per month per vehicle and 10 percent of gross salary for owner-occupied house.	Permanent or temporary payments for insurance claims; family-related transfers; work-related indemnities for costs; payments related to honorary awards; military wages; remuneration of majority partner-managers of limited liability enterprises; interest paid by the Treasury on the national loan.	Rate calculated by formula: $\frac{\text{taxable income}}{\text{taxable income + FMG 1.1 million}}$, with a maximum marginal rate of 60 percent.
2. Taxes on property			
2.11 Tax on land	Tax on estimated productive value of land, based on type of crop use. Receipts transferred to local governments.	State and local government land; land newly planted within last 5 years (10 years for replanting of coffee trees).	Rate varies according to usage of land. Ranges from FMG 25 per ha. for pasture, FMG 125 per ha. for rice land, FMG 450 for coffee and sugar land, to FMG 1,500 per ha. for nonagricultural use.

Madagascar: Summary of the Tax System, June 1983 (continued)

Tax	Nature of tax	Exemptions and deductions	Rates
2.12 Tax on permanent constructions	Tax on construction property based on its estimated rental value. Receipts transferred to local governments.	State and local government constructions. New construction for 1st 10 years of life.	Owner-occupied* Residential 3% Nonresidential 5% Nonowner-occupied* Residential 6% Nonresidential 7% *Certain local governments have the right to set their own rates, within minimum and maximum limits.
2.13 Tax on real estate profits and value-added	Tax on profits on value-added of real estate transfers.		10, 20, and 30 percent by tranches.
3. Taxes on goods and services			
3.11 Value-added tax (Taxe unitaire sur les transactions)	A single point value-added tax on all receipts from commercial, industrial, and craft activities as well as liberal professions, deliveries, and advantages in kind granted to personnel.	Wages from all activities; farmers; ranchers; fishermen; the Central Bank; postal check centers; the Caisse d'Epargne de Madagascar; animal merchants; other products on a restrictive list.	15 percent
3.12 Consumption tax	Excise tax on consumption of domestically produced and imported products.	Intermediate goods and most basic commodities.	Specific rates very widely, from 5 to 15 percent for most goods, but ranging to 50 percent or higher for alcoholic spirits, cigarettes, and other luxury goods.
3.13 Registration duties	Duty on registration of all acts involving the transfer of goods, as a percentage of the value of the goods.		Buildings and businesses: 12 percent + 2 percent tax. Large objects: 8 percent. Financial assets: 8 percent. Succession: 2 to 15 percent in tranches for direct descendants; 15 to 25 percent for others. Company acts: 2 to 6 percent.
3.14 Real estate sales publicity tax	Tax on all announcements in connection with real estate sales.		2 percent of value of sale for registration. 1 percent of value of sale for publicity.
3.15 Tax on insurance contracts	Tax covering all agreements providing against risks or the provision of income.		4 percent in general. 20 percent for risks against fire.
3.16 Tax on buses	Tax on all buses registered in the name of an enterprise.		FMG 75,000 per year up to buses of 9 fiscal horsepower. FMG 8,000 per year per fiscal horsepower in excess of nine.
3.17 Tax on motor vehicles	Tax on all vehicles in circulation.	Vehicles registered in the name of the state; vehicles exonerated by international agreements; special vehicles and farm tractors.	Fiscal horsepower: 1CV FMG 12,500; 2 to 4CV FMG 1,000/CV; 5 to 9CV FMG 2,000/CV; 10 to 15CV FMG 8,000/CV. Rate reduced by half for vehicles over 10 years old. Commercial vehicles: FMG 1,000/CV

Madagascar: Summary of the Tax System, June 1983 (concluded)

Tax	Nature of tax	Exemptions and deductions	Rates
3.18 Stamp duties	Specific duty on paper sheets that can serve an official function.		FMG 200 per sheet. For passports, driving permits, and other official documents, duty ranges up to FMG 1,000 per document depending on document fee.
4. Taxes on international trade			
4.11 Export duty (Droit de sortie)	Generally a specific duty on volume of exports. In some cases, an ad valorem duty levied on the f.o.b. export price less certain embarkation costs ("valeur imposable")	Meat; green pepper; sugar; diesel oil; cotton cloth.	Coffee: FMG 19/kg. Cloves: FMG 110/kg. Ad valorem: 2% - processed meat, chrome 3% - leather 5% - seafood black pepper cacao graphite mica sisal 7% - pois du cap raffia 10% - medicinal plants 15% - vanilla
4.12 Export taxes (Taxe conjuncturelle)	Ad valorem tax levied on the f.o.b. export price of a limited number of traditional exports.	Seafood.	Coffee: 10 percent Vanilla: 11 percent Cloves: 15 percent Clove essence: 10 percent
4.2 Import duties			
4.21 Import tax (Taxe d'importation)	Ad valorem import tax on the c.i.f. value of most imported goods.	Fertilizer; some chemical products; newspapers; stamps; invalid chairs; art works imported by artists.	Rates very from 2 percent on rice, 3 percent on transportation equipment, and about 10 percent on capital goods to well above 100 percent on luxury consumer goods.
4.22 Customs duty (Droits de douane)	Ad valorem customs duty on the c.i.f. value of a more limited range of imported goods.	Rice; fish; milk; palm oil and copra; energy imports; animal feed; tobacco; lumber, rubber; textiles; minerals; chemicals; printed material; art works.	Generally ranging from 5 to 10 percent, but as high as 25-40 percent range for clothing and woven fabrics.
4.23 Tax on petroleum products (Taxe unique sur les produits pétroliers)	Ad valorem tax on the c.i.f. value of petroleum imports imposed on imported refined products upon debarkation and exrefinery on imported crude oil.		Gasoline: 68 percent Kerosene: 14 percent White spirit: 24 per cent Aviation fuel: 37 percent Diesel oil: 24 percent Lubrication oil: 31 percent Natural gas: 45 percent
5. Other taxes			
5.11 Tax on transfers abroad (Taxe forfaitaire sur les transferts)	Tax applied to the value of all transfers abroad of funds to nonresidents.	Scholarships; original price of real estate or business acquisition in Madagascar; dividends already taxed by the IRCM; reimbursement of loan to a credit institution.	15 percent

Source: Ministry of Finance and Economy.

Madagascar: Structure of the Public Enterprise Sector

A listing of the principal nonfinancial public enterprises, and their activities, is shown in Table I (Appendix II).

A distinction can be made among three groups of public enterprises, which entered the public sector at different times and for different reasons. A first group was the trading concerns (including SOMACODIS, ROSO, SICE, AND COROI) that were nationalized in the mid-1970s. In each of these cases the companies were foreignowned, enjoyed dominant market positions, and were repatriating profits abroad. A second group of companies was the "new enterprises," which the Government established, beginning in the late 1970s, in an effort to complete the industrial apparatus then deemed necessary to support the country's agricultural and infrastructural development; AAA(Entaer), ZEMA, TOLY, MAMISOA, CIMA, and the not yet operating fertilizer company ZEREN are examples of this second group. A third category are companies in which the Government had recently taken majority ownership: the major ones are the textile companies SOTEMA and COTONA.

A somewhat special category of public enterprises was established in the energy sector, within the National Military Office of Strategic Industries (OMNIS), primarily for hydrocarbons exploration. OMNIS is also responsible for KRAOMA (chrome) and SECREN (naval construction and repair). SOLIMA (the state petroleum company) is not under the auspices of OMNIS and is a refining and distributing company managed as are other public enterprises.

Another useful distinction among public enterprises can be made between state marketing agencies, on the one hand, and public enterprises directly engaged in production, on the other (Tables II and III, Appendix II). As befits their function, marketing agencies normally have a lower value-added than do producing units. The degree of processing by Madagascar's state marketing agencies, however, has been unusually low, and decreased from 10.5 percent of the value of production in 1978 to 5.7 percent in 1982. Profitability has been extremely low, and, net of subsidies, the slight 1.3 percent before-tax operating profit of 1978 turned into a 5 percent loss rate in 1982.

The contrast offered by the producing units is apparent. A high value-added proportion (61.7 percent in 1982, down from 71.2 percent in 1978) was accompanied by substantial profits. The extremely high operating profit rate in 1978 of 40.6 percent before tax fell, largely as a result of the economic downturn, to a still very comfortable 19.6 perceent in 1982. At the same time, the fiscal contribution of the major public enterprises engaged in direct production increased considerably, from 3.9 percent of the value of production in 1978 to 8.5 percent in 1982.

What the two groups of public enterprises had in common was a decline in the level of their activity and a virtual disappearance of direct government subsidies. Between 1978 and 1982 the proportion of value added in the corresponding economic sectors (nonpublic services, for marketing agencies; manufacturing and mining, for production units) accounted for by the public enterprises analyzed here shrank between 1978 and 1982 from 5 percent to less than 2 percent for the group of marketing agencies and from 39 to 25 percent for the group of producing units. And subsidies, equivalent to almost 11 percent of operating profit for the two groups combined in 1978, had dropped to just over 3 percent of operating profit in 1982. 1/

The financing of public sector enterprises reflected the development of the sector and the distinction among the nationalized trading concerns, the companies of recent majority acquisition by the Government, and the "new enterprises." The first two groups had existing financing arrangements, which continued basically unchanged. The new enterprises obtained their financing from a variety of sources. These included equity participations (from the Government, banks and insurance companies, marketing agencies, and occasionally the social security fund - CNAPS), 2/ foreign financing (from donors and/or commercial banks) for technical assistance and imports, and local credit from the banking system to cover operating costs and working capital. The policy regarding credit applications since 1982 has been that banks should evaluate credit applications from private and public sector companies on the same basis, and give no preference to the latter.

1/ In that year none of the public enterprises analyzed here, other than SECREN, received any direct government subsidy.

2/ Equity participation by the banks and insurance companies rarely exceeding 15 percent of subscribed capital.

Table I. Madagascar: Principal Nonfinancial Public Enterprises, 1982 1/

A. Transport and Public Utilities 2/

1. Road

FIBATA (urban transport company in Antananarivo)

FIMA (urban and interurban road transport company in and between the major cities)

"Regiment du Train" (army trucking organization)

2. Rail

RNCFM (Reseau National de Chemins de Fer Malgaches; national railway)

3. Shipping

SEPT (Société d'Exploitation du Port de Tamatave; Tamatave Port Company)

SMTM (Société Malgache de Transports Maritimes; shipping line)

CMN (Compagnie Malgache de Navigation, coastal shipping line)

4. Air

Air Madagascar (national airline)

5. Public utilities

JIRAMA (electricity and water company)

1/ Unexplained acronyms refer to the Malagasy name of the organization. An asterisk denotes enterprises included in the group analyzed in Appendix II, Table II.

2/ State marketing agencies also undertake the movement by road of a variety of commodities in their sphere of activity. In addition, the Government has created trucking enterprises at the Faritany (provincial) level. SOLIMA, the state petroleum enterprise, accounts for a portion of coastal shipping.

Table I (continued). Madagascar: Principal Nonfinancial Public Enterprises, 1982

B. Regional Development Agencies 1/

FIFABE (in the Maravoay Plain area)

HASYMA (cotton development agency)

SAMANGOKY (in the lower Mangoky valley)

SODEMO (in the Morondava region)

SOMALAC (in the Lac Alaotra area)

C. State Agricultural Marketing Companies 2/

(*) DARRIEUX (Société Anonyme Maxime Darrieux et Compagnie)

(*) ROSO

(*) SICE (Société Industrielle et Commerciale de L'Emyrne)

(*) SINPA (Société d'Intérêt National Pour la Production Agricole)

(*) SOMACODIS (Société Nationale Pour la Collecte et Distribution)

SONACO (Société Nationale du Commerce) 3/

D. Production Units 4/

(*) AAA (Entaer) (Entreprise Nationale des Travaux Agricoles et d'Equipment Ruraux; agricultural works and equipment service company)

CIMA (cement)

(*) COTONA (Cotonnière d'Antsirabe; the largest cotton mill)

(*) FANAMALANGA (tree planting and harvesting)

1/ Three other regional development organizations are FIFATO, FAFIFAMA, and SOAMA. FAFIFAMA also carries out meat processing operations, primarily for export.

2/ Except for SINPA, which until 1977 held the official monopoly of rice and paddy marketing, these companies have been involved in marketing and distribution of a variety of commodities and services. Other marketing parastatals are COROI, LACHAIZE, MALAIZE, SECA, SECPAB, SOGEDIS, and SPM.

3/ Dissolved by decree of July 5, 1983.

4/ Two large fertilizer factories, ZEMA and ZEREN, are nearing completion but have not begun operating.

Table I (concluded). Madagascar: Principal Nonfinancial Public Enterprises, 1982

D. Production Units (continued)

KOBAMA (wheat mill)

KRAOMA (chrome mining) 1/

MAMISOA SOJA (soya mill) 2/

OMIPRA (Office Militaire de Production Agricole; rice production scheme)

(*) SECREN (Société d'Etudes de Construction et de Reparation Navales; naval construction and repair) 1/

SEIMAD (Société Immobilière du Madagascar)

SINTP (Société d'Intérêt National pour les Travaux Publiques; public construction)

SIRAMA (largest sugar refining company)

SNBCE (Sucreries de Nossy Be et de la Côte Est; second largest sugar refining company)

SOLIMA (Société Petrolière Malgache; state petroleum refining and distribution company)

(*) SOTEMA (Société Textile de Mahajunga; second largest cotton mill)

(*) STAR (Société Tananarivienne de Refrigeration et des boissons gazeuses; soft drinks bottling company)

SUMATEX (Sud Madagascar Textiles; the newest cotton mill) 3/

(*) TOLY (manufacture of agricultural tools and equipment)

Source: Data provided by the Malagasy authorities.

1/ Under the National Military Office for Strategic Industries (OMNIS).
2/ While the enterprise has legal existence as a "socialist enterprise," its soya milling complex is still under construction.
3/ Managed by a private firm under a management contract.

Table II. Madagascar: Aggregated Profit-and-Loss Statement of Certain Major Nonfinancial Public Enterprises, 1978 and 1982 1/

(In millions of FMG)

	Marketing agencies 2/ 1978	Marketing agencies 2/ 1982	Producing units 3/ 1978	Producing units 3/ 1982
1. Value of production				
a. Turnover	58,466	81,691	50,775	58,048
b. Less: Indirect taxes	107	401	3,811	4,877
c. Plus: Subsidies	119	--	2,804	522 4/
d. Equals: Operating income	58,478	81,290	49,768	53,693
e. Plus: Change in stocks	929	1,280	1,621	6,877
f. Equals: Value of production	59,407	82,570	51,389	60,570
2. Expenditure				
a. Purchases of goods and services	53,164	77,831	14,796	23,207
b. Salaries and wages	2,428	3,659	8,897	13,876
c. Depreciation	1,423	2,560	2,722	6,866
d. Subtotal	57,015	84,050	26,415	43,949
3. Operating profit	2,392	-1,480	24,974	16,621
4. Interest	1,480	2,669	2,458	4,304
5. Operating profit less interest	912	-4,149	22,516	12,317
6. Direct taxes	1,252	419	890	734
7. Operating profit less interest after tax	-340	-4,568	21,626	11,582
8. Nonoperating income (net)	4,682	3,463	-123	-981
9. Net after tax profits	4,342	-1,105	21,503	10,601
Memorandum items:				
Operating profit before tax/value of production (5/1.f.)	.015	-.050	.438	.203
Operating profit before tax less subsidies/value of production less subsidies	.013	-.050	.406	.196
Value added (1.f. less 2.a.)	6,243	4,739	36,593	37,363
Value added/value of production	.105	.057	.712	.617
Net before-tax profits/value of production	.052	-.018	.401	.163
Proportion of sectoral value added 5/	.051	.016	.389	.249
Indirect taxes/turnover (1.b./1.a.)	.002	.005	.075	.084
Total taxes less subsidies (1.b. plus 6 less 1.c.)	1,240	820	1,897	5,089
Total taxes less subsidies/value of production less subsidies	.021	.010	.039	.085
Interest/value of production (4/1.f.)	.025	.032	.048	.071
Depreciation/salaries and wages (2.c./2.b.) 6/	.586	.700	.306	.495
As proportion of operating expenditure:				
a. Purchases of goods and services	.932	.926	.560	.528
b. Salaries and wages	.043	.044	.337	.316
c. Depreciation	.025	.030	.103	.156

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

1/ Does not include regional development agencies, transport enterprises, public utilities, or the state petroleum refinery. Includes most of the remaining nonfinancial public enterprises with direct or indirect state equity participation greater than FMG 300 million. See Appendix II, Table I for an identification of the enterprises listed and the nature of their principal activities.

2/ DARRIEUX, ROSO, SICE, SINPA, SOMACODIS.

3/ AAA (Entaer), COTONA, FANAMALANGA, SECREN, SIRAMA, SNBCE, SOTEMA, STAR, TOLY.

4/ SECREN only.

5/ Nonpublic service sector for marketing agencies; manufacturing and mining for production units.

6/ As proxy for capital intensity.

Table III. Madagascar: Sources of Funds, Certain Major Nonfinancial Public Enterprises, 1982

(In millions of FMG)

	Marketing agencies 1/		Producing units 2/	
	Amount	Percent of total	Amount	Percent of total
Depreciation and other provisions	2,560	38.3	6,819	27.5
Net profit after tax	-1,105	-16.5	10,557	42.5
New government and non-government equity contributions 3/	410	6.1	1,153	4.6
Net borrowing 4/	4,819	72.1	6,296	25.4
Long- and medium-term	(2,088)	(31.2)	(2,270)	(9.1)
Short-term	(2,731)	(40.9)	(4,026)	(16.3)
Total funds	6,684	100.0	24,825	100.0

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

1/ Same group as in Table II, Appendix II.
2/ Same group as in Table II, Appendix II less AAA (Entaer) for which the requisite information is not available.
3/ As data are available only for 1978 and 1982, and not for the intervening years, new equity contributions in 1982 are assumed to be one fourth of the difference between paid-up equity in 1978 and paid-up equity in 1982. In all cases, direct and indirect government participation accounts for a majority of total equity, and the Government is the sole owner of at least 7 of the 13 enterprises examined here.
4/ Data on loan repayments are not available or, in some cases, data on new gross borrowing in 1982. Net borrowing in 1982 was therefore estimated as one fourth of the difference between 1978 debt and 1982 debt. When data on long- and short-term borrowing from banks were not shown separately, such borrowing was attributed to long- and short-term borrowing in the same proportion as nonbank debits.

Table I. Madagascar: Percentage Distribution of GDP by Uses, 1972-83 1/

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983 Proj.
Private consumption	70.3	72.1	74.5	74.6	72.6	71.3	73.9	74.8	76.1	76.7	80.3	80.9
Public consumption	19.4	17.1	15.8	15.1	16.0	15.8	16.8	17.3	17.1	16.3	15.5	14.4
Gross investment	13.9	14.4	14.5	13.1	13.3	15.4	14.4	25.4	23.4	18.1	13.7	11.8
Net imports of goods and nonfactor services	-3.3	-4.0	-4.8	-2.8	-1.9	-2.4	-5.1	-17.3	-16.6	-11.0	-9.4	-7.1
GDP	100	100	100	100	100	100	100	100	100	100	100	100

Source: General Planning Directorate.

1/ Components may not add up to totals because of rounding.

Table II. Madagascar: Gross Domestic Product and Use of Resources, 1978-83 1/

(In billions of FMG at current prices)

	1978	1979	1980	1981	1982	1983 Proj.
Agriculture	187	212	249	314	410	519
Industry	94	115	124	125	150	187
Services	182	243	281	320	406	485
Of which: public sector	60	80	84	90	108	131
Import taxes	24	32	35	30	30	26
Gross domestic product	487	595	691	789	996	1,217
Increase (in percent)	--	22.1	16.1	14.2	26.2	22.2
Net imports of goods and nonfactor services 2/	25	103	115	87	94	86
Total resources	512	699	806	876	1,090	1,303
Increase (in percent)	--	36.4	15.4	8.7	24.4	19.9
Private consumption	360	445	526	605	800	984
Public consumption	82	103	118	129	154	175
Gross investment	70	151	162	143	136	144
Gross savings	45	47	47	55	42	58

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

1/ Components may not add up to totals because of rounding.
2/ Adjusted in light of available data from the balance of payments.

Table III. Madagascar: Agricultural Production of Major Commodities, 1978-83 1/

(In thousands of tons, except where otherwise specified)

		1978	1979	1980	1981	1982 2/	1983 3/
Staple food items							
Paddy		1,922.0	2,045.0	2,109.0	2,011.0	1,967.0	2,147.0
Cattle 4/		10,120.0	10,140.0	10,160.0	10,180.0	10,200.0	10,200.0
Export crops							
Coffee 5/	Total	78.2	81.6	79.9	83.5	79.7	81.1
	Marketed	58.5	69.5	64.6	58.5	50.6	55.0
Vanilla	Total 6/	4.8	2.3	3.0	4.3	4.0	4.1
	Marketed 7/	0.4	0.5	1.3	1.0	1.3	0.9
Cloves	Total	12.8	4.2	12.3	10.8	15.8	6.0
	Marketed	10.8	3.7	4.4	9.3	10.4	7.5
Pepper	Total	2.5	2.5	2.8	2.9	2.5	2.5
	Marketed	2.4	2.3	2.5	1.9	2.2	2.2
Cocoa	Total	1.5	1.7	1.7	1.8	1.6	1.7
	Marketed	1.4	1.6	1.6	1.7	1.5	1.6
Pois du cap	Total	8.1	9.7	5.9	5.0	6.2	8.9
	Marketed	6.0	5.1	0.8	3.0	9.0	5.0
Sisal	Total) Marketed)	15.9	14.8	16.0	15.4	15.1	12.5
Industrial crops							
Cotton 8/	Total) Marketed)	33.1	30.5	23.2	28.0	25.6	28.2
Sugar 9/	Total	1,375.0	1,444.0	1,395.0	1,420.0	1,460.0	1,465.0
	Marketed	1,074.0	1,045.0	1,048.0	1,055.0	848.0	995.0
Groundnuts	Total	34.0	40.0	39.0	33.0	34.0	34.0
	Marketed	24.0	16.0	14.0	20.0	23.0	23.0

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

1/ Production estimates are subject to great unreliability; marketed production (for export) is much more reliable, and has therefore been given for comparative purposes.
2/ Provisional.
3/ Projection.
4/ IBRD staff estimates; figures in thousands of head.
5/ Cafe marchand.
6/ Green vanilla.
7/ Prepared vanilla (4.6 kg. green = 1 kg. prepared).
8/ Seed cotton.
9/ Sugarcane.

Table IV. Madagascar: Producter Prices for Major Crops, 1979-83

(In Malagasy francs per kilogram)

		1979	1980	1981	1982	1983 Proj.
Food crops						
Paddy	- Nominal	39	43	47	60 1/	65 2/
	Real 1/	21	19	16	19	19
Export crops						
Coffee	- Nominal	185	215	259	260	280
	Real 4/	99	97	87	81	82
Cloves	- Nominal	385	395	430	435	435
	Real 4/	206	179	149	136	127
Vanilla	- Nominal	500	600	700	700	1000
	Real 4/	267	271	243	219	292
Sisal	- Nominal	84	86	140	150	150
	Real 4/	45	39	49	47	44
Pois du cap	- Nominal	55	65	75	80	80 5/
	Real 4/	29	29	26	25	23
Industrial crops						
Cotton 5/	- Nominal	86	94	104	129	152
	Real 4/	46	43	36	40	44
Sugarcane	- Nominal	5.3	6.4	7.7	9.4	9.5
	Real 4/	2.8	2.9	2.7	2.9	2.8
Groundnuts	- Nominal	45	55	65	80	80
	Real 4/	24	25	23	25	23
Memorandum item:						
Index of real producer prices 6/ (1979 = 100)		100	93	80	91	91

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

1/ Announced mid-year (May) after the beginning of the harvest season.
2/ Minimum price.
3/ Deflated by the low-income consumer price index (Antananarivo), adjusted to exclude rice.
4/ Deflated by the low-income consumer price index (Antananarivo).
5/ Average price Acala.
6/ Using 1979 official producer prices and production volumes to calculate value weights.

Table V. Madagascar: Paddy Purchases by State Companies, 1979-83

(In thousands of tons and in percent)

	1979 1/		1980 2/		1981 3/		1982 4/		1983 5/	
	Tons	Percent	Tons	Percent	Tons	Percent	Tons	Percent	Tons	Percent
SINPA	102.6	44	97.9	41	51.9	43	11.1	11	--	--
SOMALAC	91.3	39	105.4	45	51.7	43	70.5	68	100.0	66
FIFABE	28.4	12	22.9	10	10.9	9	16.9	16	28.5	19
SOMACODIS	1.1)		3.8)		4.8)		2.2)		10.0	7
COROI	2.4)	5	3.3)	4	.5)	5	1.7)	5	4.0	3
ROSO	3.4)		.6)		.6)		.7)		6.7	4
SICE	4.4)		1.2)		.9)		.9)		1.5	1
Total	233.6	100	235.1	100	121.3	100	104.0	100	150.7	100
(Percent of total production)	(11)		(11)		(6)		(5)		(7)	

Source: Data provided by the Malagasy authorities.

1/ April 1979-December 1979.
2/ January 1980-February 1981.
3/ March 1981-March 1982.
4/ April 1982-March 1983.
5/ Projection April 1983-March 1984.

Table VI. Madagascar: Livestock and Fisheries Production: Marketed Output, 1979-83

(In metric tons, except as otherwise specified)

	1979	1980	1981	1982	1983 Proj.
Cattle 1/ (1,000 head)	61	95	41	28	6
(ton equiv.) 2/	5,840	9,050	3,880	2,680	580
Shrimp	4,375	4,270	3,150	5,895	5,940
Crabs	300	435	480	520	520
Saltwater fish	9,080	7,830	6,600	8,000	9,500
Freshwater fish 3/	9,100	10,400	10,660	12,000	12,800

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

1/ Cattle slaughtered in modern facilities, primarily for export.
2/ Using standard coefficient: 145 kg average carcass weight, 67 percent exportable yield for beef, 61 percent yield for tinned meat.
3/ Fish marketed by modern sector.

Table VII. Madagascar: Production and Export of Minerals, 1979-83

	1979	1980	1981	1982	1983 Proj.
Production (thousand tons)					
Chromite	128.3	146.5	99.7	51.9	70.0
Graphite	14.2	12.2	16.9	15.4	15.0
Mica	1.2	1.6	0.6	0.7	1.0
Exports (thousand tons)					
Chromite	109.1	134.5	88.3	59.1	50.7
Graphite	14.6	11.5	16.3	14.7	13.5
Mica	1.2	1.1	1.0	1.4	1.0
Export value (millions of SDRs)					
Chromite	6.67	7.21	3.80	2.89	2.26
Graphite	4.67	5.20	7.47	6.98	6.06
Mica	0.94	1.24	0.78	0.80	0.63
Unit value (SDRs per ton)					
Chromite	61	54	43	49	45
Graphite	320	452	458	475	449
Mica	779	1,124	780	572	628

Source: Data provided by the Malagasy authorities (National Institute of Statistics and Economic Research; and Customs Office).

Table VIII. Madagascar: Capacity and Production of Public Transport Enterprises, 1978-82 1/

	1978	1979	1980	1981	1982
Value of production (millions of FMG)					
Air	6.6	10.8	15.9	17.0	19.8 2/
Railroads	3.4	3.8	4.0	4.4	5.8
Shipping	2.7	3.2	4.8	7.0	7.5
Production index (1978 = 100)					
Air	100	120.0	132.8	137.5	140.8
Railroads	100	98.7	93.1	79.5	83.1
Shipping	100	118.1	177.5	257.3	276.2
Implicit unit price index (1978 = 100)					
Air	100	137	181	188	213
Railroads	100	113	127	162	206
Shipping	100	101	100	101	101
Production as percent of installed capacity					
Air					
Passenger	51	52	57	54	57 2/
Freight	57	41	40	41	42 2/
Railroads					
Passenger	74	79	83	85	...
Freight	42	44	46	46	...
Shipping	...	...	...	...	...

Sources: Data provided by the Malagasy authorities (Ministry of Transport, Supplies, and Tourism); and staff estimates.

1/ Data for road traffic are not available on a reliable time series basis owing to the year-to-year variation in the number of enterprises involved. Capacity utilization is estimated at about 75 percent in 1982.
2/ Estimated.

Table IX. Madagascar: Energy Consumption, 1978-83

	1978	1979	1980	1981	1982	1983 Proj.
Petroleum and products (thousands of tons)						
Crude						
Production	--	--	--	--	--	--
Imports 1/	378.5	375.4	456.8	419.4	395.4	360.0
Changes in stocks	-3.9	16.6	-82.7	40.0	-11.2	-7.0
Use in refinery	382.4	358.9	539.5	379.4	406.5	367.0
Refined products						
Production	352.9	331.8	496.2	353.3	346.4	312.0
Imports	78.8	124.7	56.0	47.6	58.9	67.0
Exports	105.9	80.2	128.3	80.2	88.4	83.0
Changes in stocks	-52.9	-47.2	24.3	-14.2	19.9	--
Consumption	378.7	423.6	399.5	334.9	297.0	296.0
Other energy consumption						
Hydroelectricity (millions of Kwh) 2/	115.8	117.8	147.8	154.0	228.3	228.3
Coal (thousands of tons)	13.4	29.0	27.2	...	18.9	54.0
Firewood (thousands of tons)	3,163	3,236	3,259	4,935	5,095	5,190

Source: Data provided by the Malagasy authorities (Ministry of Commerce).

1/ On a transactions basis.
2/ Production level.

Table X. Madagascar: Production and Consumption of Electricity, 1978-83

(In millions of Kwh)

	1978	1979	1980	1981	1982	1983 Proj.
Production 1/	283	313	336	337	342 2/	342
Hydroelectric	116	118	148	154	228	228
Thermal	167	195	188	183	114	114
Consumption	245	279	296	307	295	298
Public lighting	10	10	10	9	6)	
Households	62	68	74	81	84)	104
Other	173	201	212	217	205	194

Source: Data provided by the Malagasy authorities (Ministry of Industry and Commerce).

1/ Electric power generated by JIRAMA (the electricity and water company), i.e., excluding electricity generated for self-consumption.

2/ The Andekaleka generating plant (2 x 29 MW) began operating in July 1982. Consequently, the thermal plants linked with Andekaleka have been serving only for maintenance services. Added to favorable climatic factors, this explains the large increase of hydroelectric production relative to 1981 and the associated decline in thermal production.

Table XI. Madagascar: Composition of Gross Investment, 1979-82

(In billions of FMG at current prices)

	1979	1980	1981	1982
Soil improvements	6.6	6.3	4.1	4.0
Construction	61.0	76.8	71.2	61.5
Residential	(11.5)	(18.0)	(17.0)	(17.0)
Nonresidential	(29.8)	(33.5)	(26.8)	(18.0)
Other construction	(19.7)	(25.3)	(27.4)	(26.5)
Transport	33.2	22.1	13.0	9.6
Equipment and tools	39.9	46.4	55.2	51.3
Machinery and equipment	(36.2)	(36.1)	(52.4)	(48.9)
Tools, instruments and appliances	(3.7)	(10.3)	(2.8)	(2.4)
Studies	4.0	6.0	4.8	3.0
Change in stocks	6.0	4.8	-5.8	7.0
Total	150.7	162.4	142.5	136.4

Source: Data provided by the Malagasy authorities.

Table XII. Madagascar: Population and Labor Force, 1979-82

(In thousands)

	1979	1980	1981	1982	1983 Proj.
Population	8,480	8,714	8,953	9,200	9,400
Labor force	4,269	4,357	4,431	4,536	4,606
Agriculture	3,792	3,839	3,882	3,977	...
Industry	60	66	69	67	...
Construction	31	37	40	37	...
Commerce, banking, insurance	94	100	103	100	...
Transport and telecommunications	29	32	33	30	...
Administration	131	144	153	158	...
Other 1/	132	139	151	167	...
Participation rate (in percent)	50.3	50.0	49.5	49.3	49.0

Source: Data are estimates provided by the Malagasy authorities (General Planning Directorate).

1/ Includes, among other occupations, craftsmen and household servants.

Table XIII. Madagascar: Minimum Monthly Wage for Unskilled Laborers, 1978-83

(In Malagasy francs)

	Agricultural 1/	Nonagricultural 2/
Prior to May 1978 - Zone I	8,600	8,839
- Zone II	7,200	8,059
May 1978-May 1980	10,200	10,018
June 1980-March 1981	11,700	11,491
April 1981-June 1982	13,800	13,554
Since June 1982	16,200	15,991

Source: Data provided by the Malagasy authorities.

1/ On the basis of 200 working hours per month.
2/ On the basis of 173.33 working hours per month.

Table XIV. Madagascar: Structure and Adjustment of Public Sector Salaries, 1978-83

(In thousands of Malagasy francs per month)

	Jan. 1978-July 1979	Aug. 1979-March 1981	April 1981-May 1982	From June 1982
Category I				
Minimum	23.6	23.8	24.6	25.5
Maximum	43.2	44.6	46.1	47.8
(Midpoint)	(33.4)	(34.2)	(35.4)	(36.7)
Category II				
Minimum	32.2	32.9	34.0	35.3
Maximum	56.5	58.5	60.5	62.7
(Midpoint)	(44.4)	(45.7)	(47.3)	(49.0)
Category III				
Minimum	41.8	43.3	44.8	46.4
Maximum	86.4	88.4	91.4	94.7
(Midpoint)	(64.1)	(65.9)	(68.1)	(70.1)
Categories IV and V				
Minimum	52.2	54.2	56.0	58.0
Maximum	132.7	138.7	143.3	148.6
(Midpoint)	(92.5)	(96.5)	(99.7)	(103.3)
Categories VI and VII				
Minimum	50.8	65.0	67.2	69.7
Maximum	157.9	160.3	165.7	171.9
(Midpoint)	(104.4)	(112.7)	(116.5)	(120.8)
Categories VIII and IX				
Minimum	65.2	82.3	85.1	88.2
Maximum	181.0	201.5	208.3	216.0
(Midpoint)	(123.1)	(141.9)	(146.7)	(152.1)

Source: Data provided by the Malagasy authorities.

Table XV. Madagascar: Budgetary Revenue, 1979-83

(In billions of Malagasy francs)

	1979	1980	1981	1982	1983 Est.
Tax revenue	90.7	102.7	102.8	115.0	134.9
Direct taxes	15.4	19.9	23.5	22.1	25.8
Indirect taxes	75.3	82.8	79.3	92.9	109.1
Export-related taxes	8.9	8.3	10.0	12.0	11.4
Export duties	(3.8)	(3.0)	(3.8)	(5.1)	(4.1)
Conjunctural export tax	(5.1)	(5.3)	(6.2)	(6.9)	(7.3)
Import-related taxes	39.7	43.2	34.1	35.9	43.2
Import sales tax	(9.5)	(10.8)	(9.6)	(9.2)	(10.6)
Customs duty	(4.9)	(5.5)	(3.2)	(2.9)	(3.5)
Import tax	(23.4)	(25.0)	(18.3)	(16.8)	(18.0)
Import consumption tax	(1.3)	(1.2)	(1.1)	(1.2)	(1.0)
Petroleum sales tax	(...)	(...)	(1.2)	(5.0)	(9.3)
Other	(0.6)	(0.7)	(0.7)	(0.8)	(0.8)
Other indirect taxes	26.7	31.3	35.2	45.0	54.5
Domestic sales tax	(8.1)	(8.8)	(7.5)	(17.1)	(20.1)
Excise duties	(9.7)	(11.0)	(10.9)	(12.6)	(14.0)
Company registration tax	(1.0)	(1.1)	(1.2)	(1.8)	(2.0)
Stamp tax	(2.2)	(2.4)	(2.9)	(3.7)	(3.9)
Special turnover tax	(...)	(...)	(2.0)	(2.2)	(0.6)
R.M.M.F. profits	(5.6)	(7.9)	(10.7)	(7.4)	(13.6)
Other	(0.1)	(0.1)	(0.1)	(0.2)	(0.3)
Nontax revenue	4.8	3.2	4.1	3.1	3.5
Adjustment to cash basis	-4.8	-5.5	-2.5	1.1	--
Total budgetary revenue	90.7	100.4	104.4	121.9	138.4

Source: Ministry of Finance and Economy.

Table XVI. Madagascar: Current Budgetary Expenditure, 1979-83 1/

	1979	1980	1981	1982	1983 Est.
	(In billions of Malagasy francs)				
Economic classification					
Salaries and wages	50.4	59.5	68.0	80.7	84.0
Material and supplies	14.7	16.7	7.2	4.6	11.2
Interest payments	1.9	4.0	6.7	10.9	14.7
Other	34.8	31.5	29.6	30.2	38.8
Total	101.8	111.7	111.5	126.4	148.7
Functional classification					
Public administration	40.6	47.3	45.8	47.2	...
Economic services	15.0	12.4	11.2	12.5	...
Of which:					
agriculture	(8.4)	(6.0)	(4.4)	(5.5)	(...)
public works	(3.3)	(2.6)	(1.9)	(2.4)	(...)
Social services	34.1	43.3	38.7	46.1	...
Of which:					
national education	(25.8)	(31.4)	(30.6)	(35.5)	(...)
health services	(7.1)	(10.3)	(6.8)	(9.0)	(...)
Interest payments	2.2	2.1	2.5	5.7	...
Other	9.9	6.6	13.3	14.9	...
Total	101.8	111.7	111.5	126.4	...
	(In percent of total current expenditure)				
Addendum:					
Salaries and wages	49.5	53.3	61.0	63.8	56.5
Economic services	14.7	11.1	10.0	9.9	...
Social services	33.5	38.8	34.7	36.5	...
Administrative services	39.9	42.3	41.1	37.3	...

Source: Ministry of Finance and Economy.

1/ Expenditures are shown on the basis of commitments and differ from cash payments recorded by the Treasury.

Table XVIII. Madagascar: Summary Accounts of the Central Bank, 1979-83

(In billions of Malagasy francs)

	Old series				New series	
	1979	1980	1981	1982 Prel.	1982 Rev.	1983 June
Net monetary movements	-33.8	-85.7	-47.9	-77.9	-118.8	-113.2
Foreign assets	0.3	4.5	6.6	9.4	9.4	9.3
Foreign liabilities	34.1	90.2	54.5	87.3	128.2	122.5
IMF	(2.6)	(12.6)	(21.8)	(39.2)	(39.2)	(42.7)
Arrears	(--)	(--)	(34.0)	(50.1)	(46.9)	(51.3)
Other liabilities	(31.5)	(77.6)	(-1.3)	(-2.0)	(42.1)	(28.5)
Claims on Government (net)	91.0	176.7	223.6	257.0	257.0	262.4
Credit to Government	134.1	208.0	266.9	339.8	339.8	368.4
Ordinary advances	(96.5)	(165.4)	(220.9)	(290.9)	(290.9)	(327.7)
Rice marketing financing	(30.9)	(34.9)	(40.0)	(42.4)	(42.4)	(35.6)
On-lending	(2.4)	(2.6)	(2.5)	(2.7)	(2.7)	(2.9)
Other	(4.3)	(5.1)	(3.7)	(3.8)	(3.8)	(2.2)
Government deposits	43.1	31.3	43.3	82.8	82.8	106.0
Claims on state enterprises	9.8	8.6	8.6	8.3	18.3 1/	21.8
Claims on banks	9.0	2.3	1.5	—	—	4.3
Reserve money	57.4	77.4	103.6	102.5	99.9	85.5
Currency outside banks	53.6	70.2	83.1	90.4	90.4	81.3
Currency in banks	1.4	1.5	1.7	2.1	2.1	1.7
Bank deposits	2.4	5.7	18.8	10.0	7.4	2.5
Long-term foreign liabilities	11.6	20.7	94.1	104.2	140.8	200.0
Of which:						
Rescheduling agreements	(--)	(--)	(49.9)	(63.1)	(87.5)	(141.5)
Other items (net)	7.0	3.7	-11.9	-19.3	-84.2	-110.2
Of which:						
Valuation adjustments	--	--	--	--	-55.1	-68.6
Counterpart funds	0.8	1.0	0.6	1.3	1.3	0.8

Source: Central Bank of Madagascar.

1/ Includes reclassification of FMG 10.0 billion of advances to state enterprises previously recorded in other items (net).

Table XVII. Madagascar: Distribution of Credit by Economic Activity, 1979-83 1/

	1979	1980	1981	1982	1983 June
	(In millions of Malagasy francs; end of period)				
Agriculture 2/	14,768	20,363	21,275	31,912	27,505
Mining	2,057	2,242	3,498	3,248	3,619
Petroleum refining	4,152	9,900	10,894	9,213	8,605
Food processing	16,541	19,799	21,945	24,823	29,277
Textile industry	11,079	11,738	11,628	13,735	16,213
Mechanical/electrical	10,827	7,593	5,151	5,845	6,322
Chemical	3,547	4,429	3,395	4,380	5,551
Other manufacturing	3,431	5,621	5,630	8,349	8,617
Public works/construction	7,807	8,214	12,051	14,337	15,747
Retail/wholesale trade	21,012	25,153	29,364	37,316	37,458
Transportation	4,505	6,138	6,671	7,202	7,889
Unclassified	3,058	4,166	4,746	6,617	7,218
Other 3/	13,416	19,544	23,652	25,623	20,679
Total	116,200	144,900	159,900	192,600	194,700
	(In percent of total credit)				
Agriculture	12.7	14.1	13.3	16.6	14.1
Mining	1.8	1.5	2.2	1.7	1.9
Petroleum refining	3.6	6.8	6.8	4.8	4.4
Food processing	14.2	13.7	13.7	12.9	15.0
Textile industry	9.5	8.1	7.3	7.1	8.3
Mechanical/electrical	9.3	5.2	3.2	3.0	3.2
Chemical	3.1	3.0	2.1	2.3	2.9
Other manufacturing	3.0	3.9	3.5	4.3	4.4
Public works/construction	6.7	5.7	7.5	7.4	8.1
Retail/wholesale trade	18.1	17.4	18.4	19.4	19.2
Transportation	3.9	4.2	4.2	3.7	4.1
Unclassified	2.6	2.9	3.0	3.4	3.7
Other	11.5	13.5	14.8	13.4	10.7
Total	100.0	100.0	100.0	100.0	100.0

Source: Central Bank of Madagascar.

1/ Includes short-, medium-, and long-term credits granted by the three national banks to the private sector and state enterprises.

2/ Includes livestock and fishing.

3/ Comprises individual credits of less than FMG 5 million through 1982 and FMG 10 million in 1983, which are excluded from the sectoral classification.

Table XVIII. Madagascar: Summary Accounts of the Central Bank, 1979-83

(In billions of Malagasy francs)

	Old series				New series	
	1979	1980	1981	1982 Prel.	1982 Rev.	1983 June
Net monetary movements	-33.8	-85.7	-47.9	-77.9	-118.8	-113.2
Foreign assets	0.3	4.5	6.6	9.4	9.4	9.3
Foreign liabilities	34.1	90.2	54.5	87.3	128.2	122.5
IMF	(2.6)	(12.6)	(21.8)	(39.2)	(39.2)	(42.7)
Arrears	(--)	(--)	(34.0)	(50.1)	(46.9)	(51.3)
Other liabilities	(31.5)	(77.6)	(-1.3)	(-2.0)	(42.1)	(28.5)
Claims on Government (net)	91.0	176.7	223.6	257.0	257.0	262.4
Credit to Government	134.1	208.0	266.9	339.8	339.8	368.4
Ordinary advances	(96.5)	(165.4)	(220.9)	(290.9)	(290.9)	(327.7)
Rice marketing financing	(30.9)	(34.9)	(40.0)	(42.4)	(42.4)	(35.6)
On-lending	(2.4)	(2.6)	(2.5)	(2.7)	(2.7)	(2.9)
Other	(4.3)	(5.1)	(3.7)	(3.8)	(3.8)	(2.2)
Government deposits	43.1	31.3	43.3	82.8	82.8	106.0
Claims on state enterprises	9.8	8.6	8.6	8.3	18.3 1/	21.8
Claims on banks	9.0	2.3	1.5	—	—	4.3
Reserve money	57.4	77.4	103.6	102.5	99.9	85.5
Currency outside banks	53.6	70.2	83.1	90.4	90.4	81.3
Currency in banks	1.4	1.5	1.7	2.1	2.1	1.7
Bank deposits	2.4	5.7	18.8	10.0	7.4	2.5
Long-term foreign liabilities	11.6	20.7	94.1	104.2	140.8	200.0
Of which:						
Rescheduling agreements	(--)	(--)	(49.9)	(63.1)	(87.5)	(141.5)
Other items (net)	7.0	3.7	-11.9	-19.3	-84.2	-110.2
Of which:						
Valuation adjustments	--	--	--	--	-55.1	-68.6
Counterpart funds	0.8	1.0	0.6	1.3	1.3	0.8

Source: Central Bank of Madagascar.

1/ Includes reclassification of FMG 10.0 billion of advances to state enterprises previously recorded in other items (net).

Table XIX. Madagascar: Summary Accounts of the National Banks, 1979-83

(In billions of Malagasy francs)

	Old series 1979	1980	1981	1982 Prel.	New series 1982 Rev.	1983 June
Reserves	3.8	7.3	20.5	12.0	9.5	4.2
Cash	1.4	1.5	1.7	2.1	2.1	1.7
Deposits with Central Bank	2.4	5.8	18.8	9.9	7.4	2.5
Net foreign assets	-6.3	-7.7	-1.9	7.3	7.3	2.0
Foreign assets	4.3	6.3	13.2	16.6	16.6	12.9
Foreign liabilities	10.6	14.0	15.1	9.3	9.3	10.9
Claims on Government (net)	-2.4	-11.5	-0.5	-0.7	-3.3	-4.1
Credit to Government	13.2	12.4	17.0	16.8	16.8	14.6
Government deposits	15.6	23.9	17.5	17.5	20.1	18.7
Claims on private sector and state enterprises	116.2	144.9	159.9	192.6	192.6	194.7
Demand deposits	70.7	81.1	110.4	121.3	117.3	100.5
Time deposits	28.0	31.5	32.5	42.9	44.2	48.9
Borrowing from Central Bank	9.0	2.3	1.5	—	—	4.3
Other items (net)	3.5	18.1	33.6	47.0	44.6	43.1
Of which:						
Long-term domestic borrowing	2.9	4.4	4.9	4.5	4.5	4.3
Long-term foreign borrowing	2.9	11.1	14.7	16.0	16.0	15.8
Related data						
Customs duty bills 1/	4.7	5.5	3.9	4.5	4.5	2.3
Post office checking deposits	3.9	3.8	3.9	4.0	4.0	3.9
Private sector demand deposits with the Treasury	9.6	9.6	9.7	9.7	9.7	9.7
Private sector savings deposited with the National Savings Fund	4.3	5.4	5.3	5.5	5.5	5.6

Source: Central Bank of Madagascar.

1/ Credit to the private sector from the Treasury in the form of customs receipts to be collected.

Table XX. Madagascar: Interest Rate Structure, 1974-83

(In percent per annum)

	Effective from: Oct. 1, 1974	Feb. 1, 1981	June 1, 1982 1/	Feb. 1, 1983 Minimum	Feb. 1, 1983 Actual 2/
Central bank rates					
Rediscount of:					
Short-term paper					
Other	...	8.00	12.50	12.50	12.50
Export bills, agricultural and small business credits	...	7.00	11.00	11.00	11.00
Medium-term paper	5.00	8.00	9.50-12.50	9.50-12.50	9.50-12.50
Long-term paper 3/	6.00	9.00	14.00	14.00	14.00
National bank rates on credit operations					
Short-term credit secured by:					
Commercial paper	...	10.5-11.00	15.00	15.00	17.40
Government contract	...	10.5-11.00	13.50	14.00	16.20
Agricultural stocks and export bills	...	9.0-10.00	12.50	12.50	15.90
Overdrafts	...	...	17.00	18.00	19.00
Medium-term credits 4/	...	...	15.75	15.75	15.40
Long-term credits	...	...	15.50	15.50	15.80
National bank rates on:					
Sight deposits					
Private sector	...	1.00	2.00	3.00	2.80
Public sector	...	3.50	4.00	4.50	2.90
Time deposits					
At least 2 months	...	5.75	9.00	...	...
At least 3 months	...	5.50	8.50	10.00	9.80
From 6 to 12 months	4.75	6.00	9.50	11.00	11.60
From 1 to 2 years	5.65	6.75	10.50	12.50	11.10
From 2 to 2-1/2 years	6.80	8.00	12.00	14.00	9.60
More than 2-1/2 years	...	...	13.00	15.00	11.70
Certificate of deposit					
From 6 months to 1 year	3.70	4.75	7.50	9.00	8.30
From 1 to 2 years	4.25	5.25	8.00	9.75	8.80
From 2 to 3 years	5.30	6.25	9.75	11.50	9.70
From 3 to 4 years	5.80	6.75	10.50	12.50	10.60
From 4 to 5 years	6.80	7.75	11.00	13.00	11.00
From 5 to 6 years	7.50	8.50	12.25	13.50	11.10

Source: Central Bank of Madagascar.

1/ Deposit rates are maxima and lending rates are minima.
2/ Average rates applied by the national banks in the first semester 1983. In some cases, the actual rates are lower than the minima fixed on February 1, 1983, as rates on longer-term credits and deposits could only be raised upon maturity.
3/ Rediscounting of long-term paper was introduced in August 1974.
4/ Refers to credit that is not rediscountable with the Central Bank; rediscountable credit bears, on the average, a lower rate by about two percentage points.

Table XXI. Madagascar: Estimates of Foreign Trade Indices, 1980-83

(1979 = 100)

	1980	1981	1982	1983
Export volume	89.8	84.9	93.7	82.1
Export prices 1/	122.5	106.0	104.4	118.2
Import volume	99.4	66.1	58.3	53.8
Import prices 1/	115.7	124.4	136.7	138.5
Terms of trade	105.9	85.2	76.4	85.3

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

1/ In terms of SDRs.

Table XXII. Madagascar: Indices of Trade-Weighted Effective Exchange Rates, 1980-August 1983

(December 1979 = 100)

(In foreign currency terms, i.e., units of foreign currency per FMG) 1/

		Nominal	Real 2/
1980	Q1	96.0	96.4
	Q2	98.1	98.7
	Q3	96.8	102.3
	Q4	93.5	105.4
1981	Q1	90.0	106.5
	Q2	85.4	106.3
	Q3	86.8	107.0
	Q4	84.1	109.4
1982	Q1	82.0	115.5
	May	71.1	101.6
	June	71.2	107.3
	July	71.2	110.3
	Aug.	71.3	110.9
	Sept.	71.3	113.4
	Oct.	71.3	113.9
	Nov.	71.3	115.7
	Dec.	71.4	115.5
1983	Jan.	67.3	112.2
	Feb.	67.1	112.7
	Mar.	67.3	114.3
	Apr.	67.2	114.4
	May	67.3	115.2
	June	67.3	114.2
	July	65.9	...
	Aug.	65.9	...

Source: Calculations made by the staff.

1/ Decline indicates depreciation and increase indicates appreciation.
2/ Nominal effective exchange rate adjusted for the inflation differential with trading partners, using official CPI index for Antananarivo.

Table XXIII. Madagascar: Bilateral Exchange Rates, 1975-Oct. 1983

	F		SDR		U.S. dollar	
	Period average	End of period	Period average	End of period	Period average	End of period
1975	50.00	50.00	260.22	262.56	214.32	224.28
1976	50.00	50.00	275.91	288.70	238.98	248.49
1977	50.00	50.00	286.83	285.76	245.67	235.25
1978	50.00	50.00	282.50	272.28	225.64	209.00
1979	50.00	50.00	274.83	264.78	212.72	201.00
1980	50.00	50.00	275.01	287.99	211.30	225.80
1981	50.00	50.00	320.41	334.52	271.73	287.40
1982	53.09	54.82	386.08	405.62	349.71	367.71
1982						
Jan.	53.09	54.82	335.90	337.18	291.25	293.75
Feb.	50.00	50.00	340.85	342.55	300.87	303.97
Mar.	50.00	50.00	344.68	347.40	306.80	312.10
Apr.	50.26	50.68	349.93	350.59	313.82	310.35
May	54.81	58.02	373.66	398.54	329.30	354.54
June	55.99	55.00	406.68	410.21	369.01	375.57
Subtotal	51.84	55.00	358.62	410.21	318.51	375.57
July	54.89	54.98	410.47	410.17	376.06	375.59
Aug.	54.71	54.31	411.21	412.84	378.45	381.17
Sept.	54.19	54.04	413.34	413.66	382.80	385.75
Oct.	54.05	53.85	413.86	414.82	386.31	390.47
Nov.	53.70	54.19	413.88	410.73	387.87	380.47
Dec.	54.49	54.82	409.16	405.62	373.98	367.71
Subtotal	54.34	54.82	411.99	405.62	380.91	367.71
1983						
Jan.	54.96	57.46	409.31	432.79	372.09	398.35
Feb.	57.6¿	57.70	432.15	432.23	396.45	396.56
Mar.	57.07	55.86	433.87	437.99	398.99	406.05
Apr.	55.61	55.36	440.15	441.76	406.70	408.43
May	55.13	54.73	442.62	445.80	408.92	413.80
June	54.48	54.59	446.58	445.41	417.52	416.82
Subtotal	55.81	54.59	434.11	445.41	400.11	416.82
July	55.02	54.77	453.24	460.11	428.00	435.86
Aug.	53.63	54.35	461.16	461.81	439.15	442.91
Sept.	54.71	54.39	463.52	461.66	441.00	436.83
Oct. 3	...	60.01	...	507.08	...	480.62
Oct. 4	...	60.06	...	507.85	...	478.62

Source: Data provided by the Malagasy authorities.

Bibliography

Fund documents

EBS/82/103, June 11, 1982 (Democratic Republic of Madagascar - Staff Report for the 1982 Article IV Consultation and Request for Stand-By Arrangement)

SM/82/127, July 1, 1982 (Madagascar - Recent Economic Developments)

EBS/82/55, March 8, 1983 (Madagascar - Mid-Term Review of the Stand-By Arrangement)

Annual Report on Exchange Arrangements and Exchange Restrictions, 1982

International Financial Statistics, various issues

World Bank documents

Madagascar: Current Economic Situation and Prospects, Report No. 4431-Mag, March 28, 1983

Madagascar: Transport Sector Memorandum, Report No. 4057-Mag, February 4, 1983

Madagascar: Agriculture and Rural Development, Report No. 4209-Mag, June 30, 1983

Madagascar sources

Democratic Republic of Madagascar: Development Prospects, Policies and Programs, 1983-85, March 1983

Journal officiel de la République Démocratique de Madagascar, various issues