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Staff Country Reports

Madagascar: Selected Issues and Statistical Appendix

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MADAGASCAR

Selected Issues and Statistical Appendix

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Approved by the African Department

December 6, 2002

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Madagascar: Basic Data

Area, population, and GDP per capita

Area: 582,000 square kilometers

Population

Total: 16 million (2001)

Growth rate: 3.1 percent (1999)

GDP per capita (*World Bank Atlas* method): US\$260 (2001)

	1997	1998	1999	2000	2001
National accounts (In billions of Malagasy francs)					
GDP at current prices	18,051	20,343	23,379	26,242	30,334
GDP at constant 1984 prices	2,046	2,126	2,225	2,331	2,471
(Annual percentage change at 1984 prices)					
GDP at market prices	3.7	3.9	4.7	4.8	6.0
Primary sector (at factor cost)	1.9	2.1	3.4	0.8	4.0
Secondary sector (at factor cost)	4.7	5.3	4.2	5.6	7.6
Tertiary sector (at factor cost)	4.7	5.1	5.5	6.7	6.1
(In percent of GDP)					
Consumption	95.3	93.0	92.8	92.3	87.7
Gross domestic investment	12.8	14.8	14.9	15.0	15.5
Gross domestic savings	4.7	7.0	7.2	7.7	12.3
Current account balance ¹	-5.5	-7.4	-5.4	-5.7	-1.3
Price movements (Annual percentage change)					
GDP deflator	7.3	8.4	9.8	7.1	9.0
Consumer price index (traditional basket) ²	4.8	6.4	14.4	8.7	4.8
Government finance (In billions of Malagasy francs)					
Current revenue and grants	2,703.2	2,872.6	3,509.9	4,014.4	4,190.6
Current expenditure	1,960.2	2,146.1	2,175.0	2,402.5	3,081.7
Capital expenditure	1,176.9	1,673.1	1,615.9	1,766.1	2,180.9
Overall balance on a cash basis (deficit -)	-573.3	-1,285.2	-583.1	-872.8	-1,322.0
Net domestic financing	-119.0	901.5	246.4	121.9	580.9
Of which: domestic banks (net)	-146.0	741.2	167.1	3.1	468.4
(In percent of GDP)					
Overall deficit, commitment basis, excluding total grants	-7.7	-9.3	-6.4	-6.4	-8.1
Overall balance on a cash basis, including grants (deficit -)	-3.2	-6.3	-2.5	-3.3	-4.4
Money and credit (In billions of Malagasy francs)					
Foreign assets (act)	1,771.1	1,172.0	1,711.5	2,006.3	2,571.1
Domestic credit					
Claims on the government (net)	584.3	1,325.5	1,560.7	1,563.3	2,047.8
Claims on the economy	1,814.1	1,828.2	1,955.4	2,415.0	2,778.3
Broad money	3,846.2	4,169.1	4,981.1	5,916.8	7,357.7

Madagascar: Basic Data

	1997	1998	1999	2000	2001
	(Annual percent change)				
Domestic credit					
Claims on the government (net)	-20.0	126.9	17.7	0.2	31.0
Claims on the economy	13.4	0.8	7.0	23.5	15.0
Broad money	19.8	8.4	19.5	18.8	24.4
Balance of payments	(In millions of SDRs, unless otherwise indicated)				
Exports, f.o.b.	368.5	385.0	427.1	628.5	757.9
Imports, f.o.b.	-495.6	-495.5	-543.0	-707.1	-746.3
Trade balance	-127.1	-110.5	-115.9	-78.6	11.6
Services (net)	-81.1	-103.3	-94.8	-136.2	-125.9
Of which : interest payments due	75.8	67.2	39.8	40.1	44.4
Unrequited transfers (net)	132.1	63.0	94.6	102.6	114.6
Private transfers (net)	74.3	50.4	68.8	77.1	89.7
Public transfers (net) ³	57.8	12.6	25.8	25.5	24.9
Current account balance					
In percent of GDP ⁴	-5.5	-7.4	-5.4	-5.6	-1.3
Capital transfers	77.6	73.5	94.2	87.0	88.6
Of which : drawings	155.5	90.2	75.0	86.9	90.2
amortization	-77.4	-89.7	-77.1	-78.2	-68.7
direct investment	10.0	11.9	42.7	52.9	73.1
Overall balance	19.7	-126.6	-9.9	-82.3	21.1
Debt relief and cancellation	803.0	38.0	40.8	59.6	55.8
IMF (net)	0.7	-10.3	9.7	34.8	21.4
Arrears (reduction -)	-783.2	12.0	3.1	-5.7	0.0
Reserves (net) (increase -)	-39.5	76.6	-34.0	28.4	-76.9
Gross official reserves ⁵	14.1	7.8	9.8	10.2	14.4
Outstanding external debt ⁶	2,858.3	2,828.9	2,948.6	3,123.9	3,132.4
Exchange rates (period averages)					
Malagasy francs per SDR	7,016.1	7,381.7	8,585.8	8,934.0	8,385.8
Malagasy francs per U.S. dollar	5,090.9	5,441.4	6,283.8	6,773.3	6,587.2

¹ Including official transfers.

² End of period.

³ Including project grants.

⁴ Including official transfers.

⁵ In weeks of imports of goods and services.

⁶ After debt relief.

Madagascar: Social and Demographic Indicators ¹

Land area (square kilometers)	581,540
Population	
Total (in millions) (2001)	16.0
Urban population (percent of total)	30.0
Population density (people per sq. km.)	26.7
Population density, rural (people per sq. km. of arable land) (1998)	407.6
Population growth (annual percentage)	3.1
Life expectancy at birth (years) (2001)	
Overall	55.0
Women	55.8
Men	52.8
Crude birth rate (per 1,000)	40.7
Crude death rate (per 1,000)	12.1
Infant mortality rate (per 1,000) (2001)	92.0
Education	
Illiteracy rate, adult total (percentage of people over 15) (2001)	33.0
Primary education, pupils (in thousands) (1998)	1,889.9
Secondary education, general pupils (in thousands) (1997)	356.6
Secondary education, vocational pupils (in thousands) (1992)	8.1
Primary school enrollment (percentage of relevant age group) (2001)	102.0
Secondary school enrollment (percentage of relevant age group)	19.4
Tertiary school enrollment (percentage of relevant age group) (1995)	2.2
Health	
Hospital beds (per 1,000)	0.5
Physicians (per 1,000)	0.1
Safe water (percentage of population with access)	47.0
Sanitation (percentage of rural population with access)	25.0
Child immunization (under 12 months, percent)	
DPT	48.0
Measles	46.0

Sources: CD-ROM of World Bank, *World Development Indicators*, 2001; and Malagasy authorities.

¹ Data are for 1999, unless otherwise indicated.

I. RECENT ECONOMIC DEVELOPMENTS AND POLICIES¹

1. After several decades of decline in per capita GDP, Madagascar experienced, over the 1997–2001 period, high growth rates as a result of significant progress in macroeconomic stabilization and structural reforms, accompanied by substantial inflows of foreign direct investment and external assistance. Over this period, the growth rate of real GDP averaged 4.6 percent, while inflation generally remained below 10 percent (Figure 1). The incidence of poverty declined from 73 percent to 69 percent of the population, with most gains occurring through a reduction of urban income poverty, while the rural poverty head count remained stable. External sector developments were favorable, with export earnings doubling over the five years, spurred by the expansion of activity in the export processing zone (EPZ) exports and high international vanilla prices. International reserves also increased sharply, reflecting, in part, accelerated inflows of foreign direct investment since 1999.

A. Real Sector

2. **Real GDP growth** in 2001 was 6 percent, continuing the trend of sustained increase in per capita real GDP began during the period 1997–2000. The secondary and tertiary sectors were the main sources of growth. The value added of the secondary sector, which accounts for only 13.3 percent of output, increased by 7.6 percent in 2001, following an annual average increase of 5 percent over the 1997–2000 period. The value added of the tertiary sector, which accounts for 52.3 percent of output, grew by 6.1 percent in 2001, after an average growth rate of 5.5 percent over the last four years. The primary sector, with slower growth and, therefore, a gradually declining share of real value added, grew by 4 percent in 2001.

3. Agriculture accounts for about 55 percent of real value added in the **primary sector** and employs more than 80 percent of Madagascar's economically active population. Main agricultural products are rice and cassava (for domestic consumption), coffee, cloves, and vanilla (export products), and sugar cane and cotton (industrial products). Output fell in 2000 because of cyclone damages, but recovered by 5.5 percent in 2001.

4. While the **secondary sector** accounts for a relatively small share of the total value added, its share increased to 13.3 percent in 2001 from 12.4 percent in 1997. The sector is composed of five main branches of manufacturing activities: food processing, wood and by-products, textiles and clothing, the metal industry, and public utility services (including electricity and water). The sector has grown steadily in recent years due to the expansion of activity in the EPZ, established in 1989.² By end-2001, there were 149 firms in the EPZ,

¹ Prepared by Cemile Sancak.

² The EPZ benefits from several fiscal incentives, including a reduced rate on the corporate income tax (CIT); tax holidays from the CIT, ranging from 2 to 15 years depending on the
(continued)

employing more than 120,000 people (one-third of the secondary sector) and covering diverse activities, including the textile industry and information processing.³

5. The growth of the tertiary sector over the last several years stemmed from the accelerated growth of the secondary sector. For example, the transport sector, which represents 33 percent of the value added in the tertiary sector, experienced an annual average real growth rate of 5.8 percent over 1997-2001, spurred by increased activity in the secondary sector. Construction, which accounts for about 3 percent of the tertiary sector's real output, grew at an annual average growth rate of 11.6 percent over 1997-2001. The tourism sector, with growth rates of over 14 percent a year in recent years, has also been one of the more dynamic sectors of the economy.

6. **Domestic savings** increased to 12.3 percent of GDP in 2001 from 7.8 percent of GDP in 2000, as private savings increased to 12.5 percent from 5.3 percent—a gain that was partly offset by the decline of public savings. Over the same period, overall investment rose by 0.5 percentage point of GDP to 15.5 percent of GDP in 2001, on account of rising public investment (Figure 2).

7. The decline in the average rate of inflation from 11.9 percent in 2000 to 7.4 percent in 2001 is attributable to a number of factors, including favorable agricultural production, the appreciation of the exchange rate, the large imports of rice (the main staple food), and a decline in money velocity, reflecting increased confidence by the business community.

B. Public Finance

8. Fiscal performance in 2001 was satisfactory in the first half of the year, but revenue in the second half of the year fell substantially short of target, owing largely to weaknesses in customs administration. For the year, budgetary revenue reached 10 percent of GDP, compared with a revised program target of 11.9 percent (Figure 3). Contrary to the normal seasonal trend, customs revenue in the second half of the year was considerably lower than in the first half. There are indications that the deteriorating performance was attributable to the continuing disorganization of customs services at secondary ports, as well as some exceptional exemptions granted in the run-up to the December 2001 presidential elections. Despite the revenue shortfall, the overall deficit, on a commitment basis and excluding grants, was contained at 8.1 percent of GDP, as against the program target of 9.9 percent, as government expenditures were 2.8 percent of GDP lower than programmed. This reflected a substantial shortfall in capital expenditure relative to program by 2.8 percent of GDP and lower-than-anticipated costs of structural reforms, such as the severance pay in connection with the privatization of public enterprises. Current expenditures were only marginally higher

type of enterprise; a reduced dividend distribution tax; and exemptions from import duties and taxes, including excises.

³ Most firms are in the textile and apparel-manufacturing sector.

than programmed, as a shortfall in expenditures on goods and services, including those financed by debt relief under the Initiative for Heavily Indebted Countries (HIPC Initiative), was offset by significant election-related overruns of expenditures through the special fund of the presidency (estimated at 0.6 percent of GDP). In mid-July 2002, the new government commissioned the State Inspectorate General to conduct an audit of both the HIPC Initiative financed expenditures and the use of the presidential special fund in 2001.

9. External budgetary financing was about 1 percent of GDP lower than programmed, as (i) the disbursement of the second tranche of the World Bank's second structural adjustment credit (SAC II) (US\$30 million) was delayed until January 2002 due to the late selection of a winner of the tender for the telecommunication company, TELMA, and (ii) the disbursement of a tranche of the European Union's structural adjustment assistance was postponed because of delays in the negotiations of conditionalities. With privatization receipts also lower than programmed by FMG 90 billion (0.3 percent of GDP), as proceeds of the sale of certain assets of the petroleum company were delayed until 2002, bank financing of the government exceeded the revised program by 0.7 percent of GDP.

C. Financial Sector

10. Madagascar's banking system consists of the Central Bank of Madagascar (BCM), six privately owned commercial banks, a microfinance network, and two insurance companies. The BCM is responsible for the implementation of monetary policy. The Banking and Financial Supervision Commission (CSBF) supervises and regulates all financial services, with the exception of the insurance companies, which are regulated by the Ministry of Finance and Economy. The BCM's main monetary policy instruments are the required reserve ratio and the treasury-bill auction system, both of which influence the liquidity of the banking system. In addition, the BCM uses the discount rate to signal changes in its monetary policy stance. As average inflation declined to 7.4 percent in 2001 from 11.9 percent in 2000, interest rates on treasury bills began to fall (Figure 4). The central bank's base rate (TD) was cut in June 2001 from 12 percent to 10.5 percent and further in October 2001 to 9 percent, while the reserve requirement was maintained unchanged at 24 percent for demand deposits and 3 percent for time deposits. With a view to promoting credit expansion in favor of the private sector, which had suffered serious losses during the crisis, the central bank decided to lower the required reserve ratio on demand deposits to 18 percent and on time deposits to 2 percent on October 21, 2002.

11. Broad money grew on average by 16.6 percent during the period 1997–2000. It increased by 24.4 percent in 2001, reflecting a surge in both net foreign assets of the banking system and net domestic assets. While net foreign assets grew by 15.4 percent of initial money stock (up from 12.2 percent in 2000), owing to higher foreign direct investment and export earnings, net domestic assets rose by 16.6 percent of initial money stock, on account of a sharp increase in the domestic financing requirement of the government; this was partly offset by the decline in credit to the economy, as strong profits reduced the borrowing needs of exporting firms, which are traditional users of bank credit.

12. The monetary authorities continued to pursue a flexible exchange rate policy; the central bank intervened on the exchange market to achieve external reserve objectives and to minimize temporary exchange rate fluctuations.

13. The authorities have adopted measures to enhance the soundness of the banking and financial sector,⁴ based on the recommendations of the 1999 MAE technical assistance mission. Accordingly, the CSBF issued several instructions in 2000 and 2001; these limit insider lending to 10 percent of capital, require all banks to implement a permanent internal audit system subject to systematic review by the CSBF, set prudential limits for bank participation in nonbanking activities, and reduce the regulatory ceiling on lending concentration from 40 percent to 30 percent of capital. The CSBF also adopted regulations and supervisory standards for credit unions and microfinance institutions not previously covered, including a new licensing requirement, effective July 2001.

D. External Sector

14. The external sector benefited from favorable conditions in key commodity export markets and a robust expansion of activity in the EPZ in 2001. The current account deficit, including grants, narrowed to a record low of 1.3 percent of GDP, while the trade balance moved to a small surplus for the first time since 1987 (Figure 5). Exports were the key factor in this development as they expanded by more than 20 percent. Led by favorable international market prices, vanilla exports tripled, while clove exports doubled. Manufactured exports from the EPZ enterprises also contributed to export growth, as they rose by 8 percent in value in the year. EPZ firms profited from the favorable impact of the U.S. African Growth and Opportunity Act (AGOA), as textile exports to the United States doubled in 2001. Imports, on the other hand, increased only by 6 percent in value, as equipment goods and food imports grew modestly and petroleum imports fell, while oil prices declined.

15. The favorable external conditions led to an increase of net foreign assets of the central bank by SDR 77 million to SDR 214 million in 2001. At the end of the year, the gross foreign reserves were equivalent to 14.4 weeks of imports of goods and nonfactor services, up from 10 weeks at end-2000. The increase in gross international reserves reflects the improvement in the current account and strong foreign direct investment and inflows of external assistance, both for budgetary and balance of payments support and project financing. Foreign direct investment, while still modest, reached 2 percent of GDP in 2001, increasing by more than one-third. The foreign-financed component of the public investment program amounted to 4 percent of GDP, with grants accounting for about 60 percent of the total. External budgetary and balance of payments support amounted to 1.3 percent of GDP, including an SDR 22 million purchased from the Fund.

⁴ The ratio of nonperforming loans to total loans increased from 8.4 percent in 2000 to 10.3 percent in 2001.

16. Reflecting the positive overall balance of payments, the Malagasy franc appreciated by about 8 percent in nominal effective terms and by 10 percent in real effective terms during 2001. Despite the appreciation of the currency, unit labor costs remained highly competitive.⁵

17. After having reached the decision point of the enhanced HIPC Initiative in December 2000, multilateral creditors, including the African Development Bank, IDA and the IMF, delivered interim debt relief in 2001 amounting to SDR 18.8 million. Paris Club creditors provided Cologne terms flow-of-debt relief beginning March 2001, in an amount equivalent to SDR 55.8 million for the year. They are expected to deliver Cologne stock-of-debt relief once Madagascar attains the completion point. The authorities are in bilateral negotiations with some Paris Club creditors in order to obtain debt relief beyond Cologne terms. Madagascar is also negotiating with non-Paris Club creditors to reschedule current arrangements on terms at least comparable to those of the Paris Club. In 2001, rescheduling agreements were concluded with the Saudi Fund for Development and a commercial bank from Hong Kong SAR. The authorities also reached an agreement with Russia on the restructuring of post-cutoff-date debt in December 2001 and signed a protocol of partial cancellation of the debt owed to China in November 2001. Provided the enhanced HIPC assistance agreed at the decision point is delivered, the net present value of debt-to-exports ratio would fall from 259 percent at end-2000 to 183 percent at end-2001.

18. In recent years, Madagascar has liberalized and simplified its external trade regime. Since October 2000, the country has been a member of the Common Market for Eastern and Southern Africa (COMESA). Also, since early 2000, it has had a preferential tariff agreement with Comoros and Mauritius;⁶ both agreements provide for a 100 percent tariff reduction. In 2000, Madagascar adopted a five-rate, non zero external tariff structure with a maximum tariff of 30 percent, consistent with the commitment under the Regional Integration Facilitation Forum (RIFF). The number of products subject to the 30 percent rate was reduced further in 2001, in line with commitments under the RIFF. As of 2001, Madagascar has an open trade regime. According to the Fund's overall trade restrictiveness index, Madagascar is rated 3 on the 10-point scale of restrictiveness (10 indicating the most restrictive). In 2001, Madagascar's average tariff rate (including the statistical tax on imports and stamp duties) was 20 percent, with very few nontariff barriers.

⁵ See discussion in Section III of this issues paper.

⁶ At present, nine countries are members of the COMESA free trade area: Djibouti, Egypt, Kenya, Madagascar, Malawi, Mauritius, Sudan, Zambia, and Zimbabwe. Madagascar's trade with Mauritius is significant, with exports and imports from Mauritius accounting for 4 percent and 10 percent of the total, respectively. However, trade with COMESA countries, other than Mauritius, is negligible.

E. Structural Reforms

19. In 2001, the authorities implemented a number of structural reforms in the area of budgetary management, tax administration, and privatization. Fund technical assistance was instrumental in improving public expenditure management, with a view to preparing monthly “flash” reports on a timely basis. New computerized systems were installed in all 22 main treasury offices, and became operational in November 2001. The computerized customs information system (ASYCUDA 2.7) was installed in the secondary ports, but the upgrade to version 3++ was delayed. A UN Conference on Trade and Development (UNCTAD) technical assistance mission to secure its installation is expected shortly.

20. The authorities continued to implement their comprehensive public enterprise privatization program, concluding the sale of assets (storage facilities) of the state petroleum company, SOLIMA, and launching the tender for the telecommunications company, TELMA; the winner of the tender was selected in December 2001. In mid-2002, the authorities decided to place Air Madagascar under a management contract with an internationally recognized foreign firm, in order to improve its efficiency and pave the way for a future privatization. They also decided to open up the capital of the state cotton company, HASYMA.

II. ECONOMIC AND SOCIAL IMPACT OF THE POLITICAL CRISIS⁷

A. The Political Crisis, January-July 2002

21. The political crisis started following the first round of presidential elections on December 16, 2001. Mr. Ravalomanana, then Mayor of Antananarivo and the leading challenger against the incumbent President, Mr. Ratsiraka, contested the results announced by the High Constitutional Court (HCC), according to which Mr. Ravalomanana received 46.21 percent of the vote and Mr. Ratsiraka received 40.85 percent. The support committee for Mr. Ravalomanana, observing the polling and having separately counted the votes, argued that Mr. Ravalomanana in fact won the election by an absolute majority, rendering a second round of elections unnecessary. Mr. Ratsiraka's insistence on a second round of elections triggered daily mass demonstrations and a general strike, starting in late January in Antananarivo, by the supporters of Mr. Ravalomanana. Mr. Ravalomanana proclaimed himself President on February 22, appointed a new government, and took over all ministries in the capital, while Mr. Ratsiraka set up his seat of government in Toamasina (Tamatave). At the same time, Mr. Ratsiraka's supporters blockaded all roads from the coastal areas to the central plateau and began blowing up bridges. In early March, Mr. Ratsiraka's government appointed a new governor of the central bank based in the Toamasina branch. With the central bank management split, foreign depositories froze the external reserves of the central bank, preventing the payment of external obligations, as well as the functioning of the interbank foreign exchange market.

22. Mediation attempts under the auspices of the Organization of African Unity (OAU) and the United Nations led to an agreement on April 18, 2002 in Dakar, Senegal. After a recount of the first-round votes, as stipulated by the agreement, the HCC on April 29 declared Mr. Ravalomanana winner of the elections with 51.46 percent of the vote, compared with the 35.90 percent obtained by Mr. Ratsiraka; Mr. Ravalomanana was officially inaugurated as President on May 6. Following the recount of the first-round votes, Mr. Ravalomanana's government received growing domestic support. With the bulk of the military shifting support to Mr. Ravalomanana, his government was able to take control of the coastal cities of Tuléar and Majunga in mid-June and of the port of Diego Suarez at the beginning of July. By early July, most countries had officially recognized Mr. Ravalomanana's government. The political crisis ended when Mr. Ratsiraka left Toamasina for France in July, with Mr. Ravalomanana in control of the whole country; road blockades were dismantled and the free flow of people and goods through the country was reestablished. The foreign exchange market reopened in late July. This chronology of events is summarized in Box 1.

⁷ Prepared by Cemile Sancak.

Box 1. Chronology of Events

Presidential elections

December 16, 2001. First round of presidential elections.

December 23, 2001. The High Constitutional Court (HCC) rejects the petition by Ravalomanana supporters to compare the vote count by the Ministry of the Interior and that of the KMMR (support committee of Mr. Ravalomanana); the petitioners claim that Mr. Ravalomanana attained more than 50 percent of the popular vote in the first round of elections.

January 25, 2002. The HCC announces that Mr. Ravalomanana received 46.21 percent of the vote and Mr. Ratsiraka received 40.85 percent.

Protests and dual governments

Late-January-February 2002. Massive protests in the capital organized by Mr. Ravalomanana's supporters

January 30, 2002. Mr. Ravalomanana calls for a general strike in Antananarivo; daily central bank operations cease; interbank foreign exchange and treasury bill markets close.

February 2002. Diplomatic initiatives by the Association of Francophone Parliamentarians, the Organization of African Unity (OAU), the Indian Ocean Commission and Mauritius fail to end the crisis.

February 22, 2002. Mr. Ravalomanana declares himself the President of the Republic and takes over all ministries in the capital.

February 26, 2002. Mr. Ravalomanana appoints Mr. Sylla as the Prime Minister and nominates a government, while Mr. Ratsiraka continues to act as the President from his stronghold of the coastal city of Toamasina. Strikes in the capital end.

February 28, 2002. Mr. Ratsiraka declares martial law in the capital, which is not respected.

February-March 2002. Ratsiraka supporters begin setting up roadblocks throughout the country and destroy bridges to isolate Antananarivo.

March 4, 2002. Central bank headquarters reopen.

March 7-8, 2002. Mr. Ratsiraka's government fires the governor of central bank and appoints a new interim governor, who controls the Toamasina branch. Foreign depositories freeze external reserves of the central bank.

April 18, 2002. Mr. Ravalomanana and Mr. Ratsiraka sign an agreement in Dakar, Senegal, under the auspices of the OAU and the United Nations, stipulating also a recount of the first-round vote.

April 29, 2002. After a recount of the vote, the HCC declares Mr. Ravalomanana the winner of the elections with 51.46 percent of the vote against the 35.90 percent obtained by Mr. Ratsiraka.

May 6, 2002. Mr. Ravalomanana is officially inaugurated as the President of the Republic and confirms Mr. Sylla as Prime Minister.

May 7, 2002. Four governors (of Tuléar, Diego Suarez, Toamasina, and Majunga) loyal to Mr. Ratsiraka declare their provinces sovereign and independent.

May 31, 2002. The government of Prime Minister Sylla launches a military offensive to take control of the provinces loyal to Mr. Ratsiraka.

Recognition of Mr. Ravalomanana

May 2002. Switzerland and Norway recognize Mr. Ravalomanana as the President of Madagascar.

June 19, 2002. Mr. Ravalomanana gains control of Tuléar and Majunga.

June 26, 2002. The United States recognizes Mr. Ravalomanana as President.

July 2, 2002. Military units loyal to Mr. Ravalomanana enter Diego Suarez.

July 3, 2002. The French Minister of Foreign Affairs visits Antananarivo and meets with Mr. Ravalomanana, implicitly signaling recognition by France.

July 5, 2002. Mr. Ratsiraka leaves Toamasina for France.

July 8, 2002. Toamasina falls without resistance; Mr. Ravalomanana controls the whole country.

July 11, 2002. European Union countries recognize Mr. Ravalomanana's government.

B. Economic Impact of the Political Crisis

23. The political crisis engendered a sharp downturn in economic activity. The economic embargo on a large part of the central plateau, beginning in early February, and the resulting disruption of transportation led to a significant reduction in domestic and external trade. Output losses due to the crisis were concentrated in the transport, export processing zone (EPZ), and tourism sectors. Real GDP is projected by the government statistical agency, INSTAT, to decline by 12 percent in 2002. The consumer price index increased by 21 percent in the first five months of 2002, mainly as a result of shortages of fuel and other necessities, such as food products and soap. Income poverty is estimated to have risen by as much as 6 percent, up from 69 percent of the population in 2001 to 75 percent.

Box 2. Economic Impact of the Political Crisis
(annual percentage change)

	2001 Actual	2002 Projection
Real GDP	6.0	-11.9
Primary sector	4.0	-1.4
Secondary sector	7.6	-25.1
Tertiary sector	6.1	-12.5
Consumer Price Index (average)	6.9	15.3

Source: Malagasy authorities.

24. The political crisis had a relatively mild adverse impact on primary sector production, compared with the impact on the secondary and tertiary sectors of the economy (see Box 2). The expected decline in primary sector output in 2002 results from a decline in forestry output, partially offset by agriculture output growth of 0.8 percent. The decline in primary sector activities is partly explained by disruptions to harvesting due to the unavailability of transportation and lack of credit to pay field laborers. In addition, several agro-business enterprises, such as the cotton company, HASYMA, ceased operations owing to cash constraints. While the volume of **agricultural production** remained relatively stable in real terms during the crisis, producer prices for some food crops, such as rice, declined by up to 50 percent in isolated communities as a result of the sharp increase in transport costs and difficulties in delivering products to markets. At the same time, the prices of imported staple goods, such as salt, sugar, vegetable oil and lamp oil, increased sharply until May. Consumer prices declined from June to September, after the free movement of people and goods had been reestablished.

25. The political crisis had its largest impact on the secondary sector, where output is expected to plummet by 25.1 percent in 2002. Road blockades prevented the supply of essential inputs, including fuel and raw materials, for most manufacturing industries located in the central plateau. In addition, companies producing for the domestic market faced weaker demand, prompting them to curtail production and lay off workers. It is estimated that, for EPZ companies, which are mainly involved in apparel production for export markets, output will fall by about 70 percent in 2002, following a 40 percent increase in 2001. EPZ firms, unable to meet foreign orders, shut down operations, with the exception of a few in high-value-added production, which were able to ship products by air, and of a few located in coastal areas. Most companies shut down their plants, temporarily laying off an estimated 100,000 EPZ employees. Since a number of foreign orders have been lost, by mid-October 2002, only 49 about 150 EPZ companies had partially resumed operations, accounting for some 20,000 workers. The EPZ companies are, as a group, expected to operate at significantly reduced (35 percent or less) capacity until spring 2003, when foreign orders and production are expected to pick up.⁸

26. The tertiary sector was also hard hit by the political crisis, with an expected decline in output of 12.5 percent for the year as a whole, compared with an increase of 6.1 percent in 2001. **Transportation** was one of the most affected sectors, as 90 percent of the trucking fleet was virtually immobilized by the roadblocks, damaged bridges, and fuel shortages.⁹ The severe shortage of fuel led to a sharp increase in petroleum prices on the black market of as much as 500 percent across the country.¹⁰ Air Madagascar stopped most internal and external flights, as did most foreign carriers for security reasons. **Commercial activity** also declined substantially following the decline in secondary and tertiary sector output. Since about 55 percent of Madagascar's electricity output is utilized by industries and businesses, electricity output fell during the crisis as economic activity slowed. In the **electricity** sector, two acts of sabotage cut power to Antananarivo on two occasions. The public electricity company, JIRAMA, also had collection difficulties as local governments and universities could not pay their electricity and water bills. **Tourism** was brought to a halt during the crisis; international travel to Madagascar for tourism is estimated to have declined by 95 percent.

27. The **banking sector** continued operations throughout the crisis and ensured the continuity of the payments system. The quality of the commercial bank's loan portfolio

⁸ As new foreign orders are received, there is usually a six-month lag between customer orders and production phases for EPZ companies.

⁹ In addition to the economic embargo, Cyclone Kesiny in February caused hundreds of landslides that blocked key roads and damaged several bridges in the eastern part of the country.

¹⁰ The official posted prices did not change during the crisis, but there was no petroleum to sell at these prices.

deteriorated, as the share of nonperforming loans rose from 10.3 percent at end-2001 to 14.0 percent at end-August 2002. Until October 23, 2002, when the treasury bill market reopened, all treasury bond holdings, including those of the commercial banks, were automatically rolled over. As the interbank foreign exchange market was closed from February to July, foreign exchange operations were severely curtailed; they did however perform some transactions on a “netting” basis. Microfinance institutions have reported lower savings and credit repayment rates following the crisis. The **telecommunications sector** experienced a small decline in output during the crisis but is expected to fully recover in the last months of 2002, compensating for most of that decline.

C. Social Impact of the Political Crisis

28. The crisis had a particularly strong impact on poor families and vulnerable groups. Three groups in particular experienced a sharp decline in their standard of living: farmers in the rural areas, the newly unemployed in the formal sector, and the extremely poor in the informal sector in the urban areas. In the rural areas, farmers, especially those isolated from the markets, experienced a decline of up to 50 percent in household income, as a result of a significant drop in producer prices and a dramatic increase in fuel and transport costs.¹¹ In urban areas, reduced production and the temporary shutdown of companies resulted in loss of jobs for about 150,000 mostly low-skilled workers in the formal sector. The loss of income in urban formal sector income also led a drop in demand for informal sector operators. Consequently, the extremely poor, who are primarily involved in informal sector activities, such as petty trade and day work in the construction industry, were particularly affected by the crisis.

29. In addition to the loss of income, the sharp increase in the prices of a number of essential goods further reduced the purchasing power of these groups. On the basis of simulations made using the household survey data collected during the crisis, the United Nations Development Program (UNDP) has estimated that income poverty increased by as much as 6 percent since 2001 and now affects 75 percent of the population. In addition, the World Bank reports that, in the February-August period, school dropout rates increased significantly, reaching 14 percent, while visits to health care centers declined by 36 percent in rural areas and 14 percent in urban areas. Both rural and urban families have reported decreased food consumption, which is likely to further increase malnutrition rates for children under 5 years of age.

¹¹ Source: INSTAT.

III. EXTERNAL COMPETITIVENESS¹²

A. Introduction

30. Since the establishment of an export processing zone (EPZ) regime in 1989, exports have assumed an increasingly important role in Madagascar's economic development. And, as Madagascar's exports have become more diversified, the maintenance and enhancement of international competitiveness have assumed an increased importance. Over the period mid-1999 to 2001, concern over a possible deterioration in competitiveness developed as the nominal and real effective exchange rates of the Malagasy franc were appreciating (by about 18 and 33 percent respectively between June 1999 and December 2001, Figure 6). Motivated by the question of whether the appreciation reflected an equilibrium movement or an incipient misalignment, and recognizing that the measurement of external competitiveness cannot rely on a single approach, the staff has been monitoring Madagascar's export performance and various measures of competitiveness.

31. This section provides a short survey of the findings derived from three different approaches to the measurement and assessment of competitiveness.¹³ These include econometric modeling of the fundamental determinants of the equilibrium real effective exchange rate, comparative labor cost analysis, and an analysis based on a constant-market-share (CMS) decomposition analysis. In short, the results from all three approaches suggest that Madagascar remains broadly competitive, despite the recent current appreciation, and that there is no evidence of a detrimental exchange rate misalignment.

32. These general conclusions tend to be supported by Madagascar's recent export performance. Receipts for exports of goods and nonfactor services have increased steadily since 1996, rising from about 20 percent of GDP in 1996 to over 30 percent in 2001, and the volume of exports increased in every year from 1996 to 2001. The current account deficit (excluding official transfer) in relation to GDP narrowed from about 8 percent of GDP in 1997-98 to 5.7 percent in 2000, and further to 1.7 percent in 2001. Prior to 2002, Madagascar was reasonably successful in attracting numerous foreign investors, partially through an ambitious program of privatization of state enterprises, but in particular through its EPZ regime, especially in the textile and apparel manufacturing sector. Private capital inflows increased from 0.2 percent of GDP (SDR 4 million) in 1994 to over 2 percent of GDP (SDR 50 million) in 2000 (Figure 7).

33. This section is organized as follows. The next subsection highlights the results of an econometric analysis of the fundamental determinants of the real exchange rate and an assessment of misalignment. A comparative analysis of trends in Madagascar's labor costs

¹² Prepared by Messrs. John Cady and Jie Liu (both AFR).

¹³ This section will summarize key findings rather than provide details. Another avenue for disseminating the detailed analyses will be found, perhaps through the publication of Working Papers.

vis-à-vis specific competitor countries is reported in Subsection C. Subsection D outlines the application of CMS analysis to Madagascar's export growth during the period 1991-2001. Subsection E concludes.

B. Equilibrium Real Exchange Rate Assessment

34. Using econometric methods, the fundamental long-run determinants of the real exchange rate of the Malagasy franc (including the net foreign assets position, terms of trade, taxes on international trade, and investment spending) have been modeled.¹⁴ Using an estimated long-run equation for the real effective exchange rate, evaluated at trend, or smoothed, values of all independent variables, estimates of the equilibrium real exchange rate have been derived. From these equilibrium estimates and actual values of the real exchange rate, measures of real exchange rate misalignment can be derived. The exercise indicates that the real exchange rate of the Malagasy franc has been significantly overvalued and undervalued for long periods in the past, but that, since 1996, the estimated equilibrium and actual real effective exchange rates have been quite close to each other, exhibiting differences of less than 5 percent. Thus, after taking into account changes in the fundamental determinants, the appreciation of the real effective exchange rate between 1999 and 2001 would appear to be consistent with an equilibrium change and indicative of neither misalignment nor a loss of competitiveness.

C. Relative Labor Cost Analysis

35. This subsection reports the key findings of a comparison of Madagascar's labor costs in the manufacturing sector since 1967 with a those of a small group of selected competitor countries.¹⁵ The rationale for examining relative labor costs is that labor usually represents the main domestic value-added component of total production costs and thus captures a key underlying determinant of competitiveness. To the extent that capital and intermediate goods are traded in international markets, whereas labor remains largely immobile internationally, labor costs are likely to diverge much more across countries than other costs of production, and, therefore, play an important role in determining the country's overall external competitiveness and in attracting foreign direct investment.

36. The comparison, conducted using U.S. dollars as a common currency, indicates that since 1987, Malagasy labor costs have been significantly below those in the comparator countries. In 2000, average monthly wages in Madagascar were about \$58, compared with

¹⁴ The paper "The Sustainable Real Exchange Rate for Madagascar: Estimation and Assessment," by John Cady, will shortly be issued as an IMF Working Paper.

¹⁵ The comparator countries comprise India, Kenya, and Mauritius. These countries were chosen, first on the basis of having significant textile and apparel industries, and, second, on the availability of labor cost data. The data have been drawn from the United Nations Industrial Development Organization (UNIDO) database, supplemented with labor cost data reported by Malagasy sources over the period 1994-2000.

countries. In 2000, average monthly wages in Madagascar were about \$58, compared with about \$100 in India and Kenya, and \$271 in Mauritius (Figure 8). This comparison ignores the effects of labor productivity differentials, an aspect that the staff intends to address in future work using unit labor costs, however, it nonetheless indicates that the level of wages in Madagascar's manufacturing sector tends to be much lower than in some key competitor countries.

D. Constant Market Share Analysis

37. This subsection summarizes the results of a constant-market-share analysis of Madagascar's export growth over the period 1991-2001. The CMS decomposition of export growth suggests that Madagascar has become more somewhat competitive between the base year of 1991 and 2001.

38. CMS analysis is a popular, easily applied method for examining a country's export growth. It entails the decomposition of the change in a country's exports between any two time periods into four components: a general growth effect; a commodity composition effect; a market distribution effect; and a residual effect, accounting for all other factors which is usually attributed to change in competitiveness.

39. More formally, the change in exports can be expressed by the following equation:

$$\Delta X = \bar{r}X_i + \sum (r_i - \bar{r})X_i + \sum \sum (r_{ij} - r_i)X_{ij} + (\Delta X - \sum \sum r_{ij}X_{ij}),$$

where

$\bar{r}$ is the proportional change in the overall exports of competitor countries;

r_i is the proportional change in the overall exports of competitors' exports of good i ;

r_{ij} is the proportional change in the overall exports of competitors' exports of good i in market j ;

X_i is Madagascar's exports of good i ; and

X_{ij} is Madagascar's exports of good i in market j .

40. The first term on the right-hand side of the equation is generally interpreted as the "general growth effect," measuring the export growth associated with the general increase in world exports; the second term is the commodity composition effect, which is meant to capture the extent to which a country's exports are concentrated in commodity classes with growth rates more favorable than the world average; and the third term is the market distribution effect, which indicates whether the country's exports have been concentrated in markets experiencing relatively rapid growth. These first three effects measure the change in exports that would occur if the country were able to keep constant its shares in the corresponding markets. The final, or competitiveness effect, then accounts for all growth that arises from changing export shares.¹⁶

¹⁶ The competitiveness effect may embody several influences on the sales of a particular country's exports in foreign markets. On the demand side, these factors could include the following: differential rates of export price inflation, differential rates of quality

(continued)

41. CMS analysis has the advantage of being able to account for the extent to which a country's exports are concentrated in commodities and markets that can be considered to be expanding slowly or rapidly, and the nature of the actual expansion of exports in the particular context. This type of analysis may point to a preferred composition and distribution of exports because, presumably, a country will prefer to concentrate its exports in commodities and markets that are rapidly expanding. However, the CMS method does have certain limitations: in particular, the results can be sensitive to the choice of base year and competitor groups.

42. The CMS analysis was conducted over the period 1991–2001 using country trade data available in the UN Comtrade database,¹⁷ with the key findings summarized below:

	Millions of U.S. Dollars	Ratio to Total Export Growth
Total export growth	527.0	1.00
Growth effect	-14.3	-0.03
Commodity effect	-124.3	-0.24
Market effect	141.7	0.27
Competitiveness effect	523.9	0.99

43. Since the introduction of the EPZ regime in 1989, there has been significant economic transformation in Madagascar. The structure of exports has shifted from traditional commodity exports, such as vanilla, cloves, and coffee, to shrimp and other fishery products and textiles and apparel. Reflecting these changes, the CMS decomposition suggests that competitiveness increased significantly during the period 1991–2001, starting in 1992, and accounting for almost all (99 percent) of the net increase in exports over the complete reference period. The growth and commodity effects are estimated to have diminished export

improvement and the development of new exports, differential rates of improvement in the efficiency of marketing or in the terms of financing the sale of export goods, and differential changes in the ability to promptly fill export orders. On the supply side, the factors could include the following: differential rates of monetary inflation, differential growth rates of available productive factors and the responsiveness of export supply to the domestic supply of these factors, and differential rates of productivity increases.

¹⁷ Available through the World Bank's World Integrated Trade Solution (WITS) system. The database contains detailed annual data, starting in 1962, on the value of imports and exports across the ten broad, one-digit SITC categories and across various country markets.

growth by 3 and 24 percent, respectively, while the market effect remained positive, contributing some 27 percent to the total export growth (Figure 9).

E. Conclusions

44. The research findings summarized in this section, all tend to support the notion that Madagascar remains competitive, despite the currency appreciation from 1999 to 2001. This view is supported by Madagascar's recent export performance and also tends to be shared by the managers of textile and apparel manufacturing enterprises operating in Madagascar's EPZ. In general, they appreciate the quality and productivity of Malagasy labor, indicating that shortfalls in the hourly productivity of Malagasy workers vis-à-vis the best garment workers in the world are more than compensated for by the lower wages prevailing in Madagascar. Most EPZ operators, and especially those in the apparel industry, consider Madagascar an attractive place to invest, despite factors that they cite as hurting competitiveness, including poor public infrastructure, high telecommunications costs, operational inefficiencies at ports and airports, and an overly bureaucratic regulatory and tax system, compounded by corruption.

45. In the year to July 2002, following resolution of the 2002 political crisis (see Section II), the Malagasy franc depreciated by over 11 percent in nominal terms, reversing some of the appreciation experienced over the period 1999-2001, boosting competitiveness. Nevertheless, the crisis has not enhanced Madagascar's reputation for political stability and could represent a significant negative factor influencing Madagascar's overall competitiveness. EPZ production and exports have been slow to recover since July 2002, with only one-third of EPZ operators having at least partially resumed their operations by October. Thus, it still remains to be seen whether the 2002 crisis has permanently driven away existing and potential foreign investors.

Figure 1. Madagascar: Selected Economic and Financial Indicators, 1997-2001

Source: IMF, African Department.

Figure 2. Madagascar: Real Sector Developments, 1997-2001

Source: IMF, African Department.

Figure 3. Madagascar: Fiscal Sector Developments, 1997-2001

Source: IMF, African Department.

Figure 4. Madagascar: Money, Consumer Prices, and Treasury Bill Yields, 1997-2001¹
(In percent)

Source: Madagascar authorities.

¹ Data for broad money and the consumer price index are year-over-year growth rates.

Figure 5. Madagascar: External Sector Developments, 1997-2001

Source: IMF, African Department.

Figure 6. Madagascar: Real and Nominal Exchange Rates, January 1990 - August 2002
(Average 1990=100)

Source: IMF, Information Notice System.

Figure 7. Madagascar: Foreign Direct Investment, 1970-2000
(In percent of GDP)

Source: World Development Indicators, World Bank.

Figure 8. Madagascar and Selected Comparator Countries:
Monthly Wage in Manufacturing, 1963-2000
(In U.S. dollars)

Sources: UNIDO; IMF staff, and the author's calculations.

Figure 9. Madagascar: Constant-Market-Share Export Growth Decomposition, 1992-2001
(Base Year = 1991)

Sources: UN Comtrade database, and the author's calculations.

Madagascar: Summary of the Malagasy Tax System, June 2002
(All amounts in Malagasy francs)

Tax	Type of Tax	Deductions and Exemptions	Tax Rate	Tax Reporting
1. Taxes on net income and profits				
1.1 Taxes on corporations				
1.1.1 Tax on company profit [<i>Impôt sur les bénéfices des Sociétés</i> —IBS] Corporate profit tax (IBS) (General Budget)	<p><u>Article 01.01.02</u> Annual tax on the full range of profits earned by companies headquartered in Madagascar, as well as income generated by the possession of property (assets) or the practice of a gainful activity in Madagascar.</p>	<p><u>Article 01.01.03</u></p> <ul style="list-style-type: none"> Income earned by partnerships, religious missions and churches, or cultural associations is exempt from tax. However, the tax is payable in respect of their establishments engaged in sales or provision of services. Interest paid by the <i>Caisse d'Épargne de Madagascar</i>. Capital gains on sales of real estate. Income and capital gains deriving from the sales of stocks and shares held by SCRs. <p>50 percent of investment expenditures expensed, up to 50 percent of IBS before investment deduction; unlimited carryforward of unused deductions</p> <p>Income earned by nonprofit organizations or associations exclusively engaged in the promotion of small- and medium-scale enterprises.</p> <p>Companies registered under the export processing zone (EPZ) regime (hereafter, EPZ companies): IBS tax holiday of 2 to 15 years</p>	<p><u>Article 01.01.16</u> IBS at 35 percent.</p> <p>Taxable minimum:</p> <p>200,000 + 5 per mill of turnover: agriculture, crafts, industry, mining, hotel trade, tourism, or transportation.</p> <p>800,000 + 5 per mill of turnover for the rest.</p> <p><u>Article 01.01.06 6ème</u> Deficit may be carried forward for a period of three years.</p>	<p><u>Article 01.01.17</u></p> <ul style="list-style-type: none"> Prior to May 1 (calendar year) Prior to October 1 (June 30); and Within the two months following the end of the fiscal period (plus 50 percent). <p>On collection:</p> <p><u>Article 20.01.41</u> Estimated payments (A) Payable on a semiannual basis Article 20.01.42. (B) Payable at customs ("<i>acompte IBS</i>"):</p> <ul style="list-style-type: none"> 3 percent c.i.f. value if registered; and 5 percent of c.i.f. value in other cases on value of raw materials and consumer goods.

Madagascar: Summary of the Malagasy Tax System, June 2002
(All amounts in Malagasy francs)

Tax	Type of Tax	Deductions and Exemptions	Tax Rate	Tax Reporting
1.1.2 Global tax [<i>impôt synthétique</i>] (General Budget)	<p><u>Article 01.06.02</u> FMG 600,000/year<turnover exclusive of tax<=FMG 12,000,000/year:</p> <ul style="list-style-type: none"> • Representative (and affording full discharge in respect of) the TP, the IRNS, and TCA; • Tax earmarked for the financing of the regionalized investment program; and • Individuals engaging in an independent activity, whether or not liable for the TP tax. 	<p><u>Article 01.06.03</u></p> <ul style="list-style-type: none"> • Corporations; and • Wholesale and semi-wholesale merchants [<i>commerçants de gros et demi-gros</i>]. 	<p><u>Article 01.06.06</u> 6 percent, although may not be less than FMG 25,000.</p>	<p><u>Article 01.06.07</u> Tax return filed prior to March 31=>liable for the TP tax. <u>Article 01.06.08</u> In the three months following the issuance of the certificate of payment of tax [<i>titre de liquidation</i>] => other.</p>
1.2 Taxes on individuals				
1.2.1 Tax on capital income [<i>Impôts sur les revenus de capitaux mobiliers</i> —IRCM] (General Budget)	<p><u>Article 01.04.01</u> Occasional tax collected upon the distribution of profits.</p>	<p><u>Article 01.04.25 et seq.</u></p> <ul style="list-style-type: none"> • Amortization and repayment of principal realized upon liquidation of real estate assets; and • Loans or obligations of cooperatives, central mutual credit fund organizations. <p><u>Article 01.04.32</u> Interest on national loans [<i>emprunts</i>]:</p> <ul style="list-style-type: none"> • Contracted for purposes of investment with external financial institutions. 	<p><u>Article 01.04.07</u></p> <ul style="list-style-type: none"> • 25 percent. • 30 percent for individuals – the IRCM is in discharge of the IRNS. • 15 percent on interest paid on cash or cash security deposits of individuals or non-profit entities. • 10 percent – dividends of EPZ companies. 	<p><u>Article 01.04.15 (Art. 01.04.10 abrogated)</u> Distribution of dividends: Before April 30, (fiscal period ending the second semiannual period) or within the first 20 days of October.</p>
1.2.2 Capitalization tax [<i>Taxe d'incorporation</i>] (General Budget)	<p><u>Article 04.01.33</u> Occasional tax collected upon the capitalization of profits or reserves.</p>	<p><u>Article 01.04.34</u> Not collected to the extent that the capitalization of reserves or profits has as its counterpart the prior acquisition of capital goods or acquisition of equity holdings in the new capital of other firms, or expenditures on the occupational training of local personnel, or creation of additional jobs.</p>	<p><u>Article 01.04.33</u> 8 percent.</p>	

Madagascar: Summary of the Malagasy Tax System, June 2002
(All amounts in Malagasy francs)

Tax	Type of Tax	Deductions and Exemptions	Tax Rate	Tax Reporting
1.2.3 Tax on transfers abroad [<i>Taxe forfaitaire sur les transferts</i>] (General Budget)	<u>Article 01.05.01 and 01.05.02</u> Tax payable on payments or transfers for the benefit of individuals located abroad and not taxed in Madagascar for purposes either of the income tax [<i>impôts sur le revenu</i>] or the professional tax [<i>Taxe professionnelle</i>].	<u>Article 01.05.03</u> <ul style="list-style-type: none"> Amounts received in connection with scholarships; Sale price of immovable or movable assets; Products already liable for the IRCM; Repayment of principal on loans; Standard price for purchases of imported merchandise; Interest paid by the Public Treasury or the Central Bank; and Interest on national loans [<i>emprunts</i>] (01.04.32) 	<u>Article 01.05.05</u> 15 percent.	Withheld at source.
1.2.4 Real estate capital gains tax [<i>Impôt sur la plus-value immobilière—IPVI</i>] (General Budget)	<u>Article 02.12.02</u> Taxed assessed on transfers (for valuable consideration) of real estate assets or claims.	<u>Article 02.12.03</u> Capital gains on sales of real estate included in current inventories [<i>stock en cours</i>] by <i>Société immobilière</i> .	<u>Article 02.12.07</u> Graduated by branches: <ul style="list-style-type: none"> 5 percent < FMG 10,000,000; 10 percent between FMG 10,000,001 and FMG 20,000,000; 15 percent between FMG 20,000,001 and FMG 30,000,000; 20 percent between FMG 30,000,001 and FMG 40,000,000; and 25 percent for amounts in excess of FMG 40,000,000. 	
1.2.5 Personal wage income tax - IRSA (General Budget)	<u>Article 03.01.07</u> <ul style="list-style-type: none"> Wage earners—Tax on wages, remunerations, and fringe benefits, withheld at source. <u>Article 01.03.08</u> Taxation of cashless benefits <ul style="list-style-type: none"> FMG 50,000/month/vehicle rated ≤10 HP; FMG 80,000/month/vehicle rated > 10 HP; and 50 percent of the rent or rental value. Maximum: 25 percent of remuneration established in cash: <ul style="list-style-type: none"> 2 percent of remuneration established in cash /domestic; and 3 percent for other benefits. 	<u>Article 01.03.03</u> <ul style="list-style-type: none"> Permanent or temporary allowances for damage repair; Allowances for dependents; Remuneration associated with honorary awards; Pay for citizens called to serve in the armed forces in a military or civilian capacity; Civilian or military retirement pensions where the amount of the pension is determined by length of service record; and Remuneration earned by majority managers—partners in limited liability companies (SARLs). 	<u>Article 03.01.16</u> Scale A <ul style="list-style-type: none"> Up to FMG 150,000 per month – FMG 1,500; FMG 151,000-250,000 – 2 percent; FMG 251,000-500,000 – 10 percent; FMG 501,000-750,000 – 15 percent; FMG 751,000 – 1,000,000 – 20 percent; FMG 1,001,000-1,500,000 – 25 percent; 1,501,000-2,500,000 – 30 percent; and Over FMG 2,500,000 – 35 percent. Minimum <ul style="list-style-type: none"> FMG 1,500 if ≤ FMG 150,000; FMG 2,000 between FMG 150,000 and FMG 250,000; and FMG 2,500 if > FMG 250,000. Dependent credit [<i>Réduction pour charge de famille</i>]	<u>Article 01.03.12</u> Withheld and paid prior to the 15 th of the following month. If amount withheld is less than FMG 25,000 or if wages are paid on a quarterly basis wage bill, tax payments may be cumulated on a quarterly basis, and withheld and paid within the first 15 days following the end of the quarter.
			<u>Article 01.03.19</u> <ul style="list-style-type: none"> FMG 500/month without exceeding FMG 6,000/year. 	

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1.2.6 Nonwage personal income tax - IRNS (General Budget)	<p><u>Article 01.02.02</u></p> <ul style="list-style-type: none"> Sole proprietorship; Income earned from engaging in an independent profession; Corporate income, not liable for IBS tax; Remuneration of SARL majority managers/partners; Profits of firms engaged in industrial or commercial, crafts-related, tourism-related, or service-providing activities, or farms; Income from land; and Income earned in connection with the functions and responsibilities of persons not having the status of merchants (<i>non-commerçants</i>). 	<p><u>Article 01.02.03</u></p> <ul style="list-style-type: none"> Net income from developed real estate occupied by the owner as a principal residence; Capital gains earned on selling the property; Interest on bearer cash vouchers (<i>bons de caisse anonymes</i>); Interest on the recorded balances of savings accounts, when such accounts are blocked for six consecutive months; and Interest paid by the Treasury on a national loan (<i>emprunt national</i>). 	<p><u>Article 01.02.12</u></p> <p>Taxable base.</p> <p>Noneductibility of deficits incurred in connection with commercial, hotel related, tourism related, mining or transport deficits, or in respect of land income or investment income.</p> <p>Deficit may be carried forward for a period of three years. The amount of the deficit to be carried forward is deducted prior to the deduction for deferred amortization.</p> <p><u>Article 01.02.36:</u></p> <p>Tax scale</p> <p>Accounts-based (itemized) system [<i>régime réel</i>] and small- and medium-scale enterprises</p> <ul style="list-style-type: none"> Up to FMG 250,000 per year (fixed) FMG 10000; FMG 251,000-FMG 600,000 – 5 percent; FMG 601,000-1,000,000 – 10 percent; FMG 1,001,000-1,500,000 – 15 percent; FMG 1,501,000-2,500,000 – 20 percent; FMG 2,501,000-5,000,000 – 25 percent; FMG 5,001,000-10,000,000 – 30 percent; and Amounts exceeding FMG 10,000,000 – 35 percent. <p><u>Article 01.02.37</u></p> <p>Minimum amounts for all activities liable for tax TP>5th class = 5 TP.</p> <p><u>Article 01.02.38:</u> Party subject to IRNS registration tax (minimum).</p> <p>For agricultural activities:</p> <ul style="list-style-type: none"> 1/2 IFT (land tax) for arable land having a surface area of less than 5 hectares; IFT for land between 5-10 hectares; 2 IFT for land exceeding 10 hectares; 3 TP: activities classed under the 6th, 7th, and 8th classes of the TP; 4 TP: activities classed in the 5th class of the TP; 5 TP: liable for the 4th class of the TP; activities categorized under the 4th class of the TP; and 5 TP: livestock merchants. <p>Yes, and only if the turnover < the thresholds indicated in the pertinent column.</p>	<p>B5</p> <p><u>Article 01.02.17</u></p> <p>Accounts-based (itemized) system (prior to May 1). Prior to October 1, Two months from end of fiscal period plus 25 percent.</p> <p><u>Article 20.01.41</u></p> <p>An advance payment [<i>acompte provisionnel</i>] is due every bimonthly period.</p> <p><u>Article 20.01.42</u></p> <p>An advance payment [<i>acompte</i>] is to be made at customs:</p> <ul style="list-style-type: none"> 3 percent of c.i.f. value for registered businesses; and 5 percent of c.i.f. value for nonregistered businesses. <p>Value: raw materials, consumer goods, and products.</p> <p><u>Article 01.02.21</u></p> <p>System applicable to small- and medium-scale enterprises (Tax return to be filed prior to March 1, in the year in which the option is exercised).</p> <p><u>Article 01.02.25</u></p> <p>Registered system [<i>régime greffé</i>] (Tax return prior to March 1).</p>
1.2.7 Nonwage personal income tax [IRNS Greffé] (01.02.50) (General Budget)	<p><u>Article 01.02.20</u></p> <p>Small- and medium-scale enterprises (criteria):</p> <ul style="list-style-type: none"> Number of employees ≤ 50; Pretax turnover below FMG 250,000,000; and Principal responsibilities in production, sale where the management is undertaken by individuals venturing their own capital. <p><u>Article 01.02.24</u></p> <p>Microenterprise (criteria):</p> <ul style="list-style-type: none"> Turnover < FMG 100,000,000 per year for agricultural, crafts-related, or purchase/resale activity; and Turnover < FMG 50,000,000 per year for the provision of services. 			

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<p>1.2.8 Professional taxes. Professional tax¹¹ [<i>Taxe professionnelle</i>—TP] (Budget of the Autonomous Province)</p>	<p><u>Article 10.01.01</u> Professional tax payable in connection with engaging in gainful activity in Madagascar.</p>	<p><u>Article 10.01.11</u></p> <ul style="list-style-type: none"> Limited partners in limited partnerships [<i>sociétés en commandite</i>]; Wage earners; University cafeterias or canteens; Farmers; Fishery and hunting enterprises (with a maximum of five people working for them); Agricultural contractors; Artists; Directors of independent technical and general schools; Newspaper and magazine salesmen; Operations for the provisioning of the (<i>Fokontany</i>) local authorities; Medical operations of enterprises; Intermediaries in government contracts markets for supplies financed by foreign aid; and Military joint mess clubs, army residential establishments, and military rest homes. 	<p><u>Article 10.01.15</u> Table A and B <u>Fixed tax</u>, according to the type of business, population of the community where the enterprise is located, and the number of employees and equipment used in the enterprise (FMG 1,500-240,000). <u>Proportional taxes</u> based on rental value of premises, including equipment used.</p> <p><u>Proportional tax</u>:</p> <ul style="list-style-type: none"> Liberal professions 1/5 VL; Commercial activities, 1st, 2nd and 3rd classes, 1/10 VL; Industries, trades, and services rendered (2nd and 3rd classes), commercial activities (4th and 5th classes), 1/20 VL; and Other activities, 1/30 VL. 	<p><u>Article 10.01.33</u> Before October 15.</p>
<p>1.2.9 Business license tax 1st [<i>Impôt de licence</i>] (Budget of the Autonomous Province)</p>	<p><u>Article 10.06.01</u> Professional tax payable on sales of alcoholic beverages.</p>	<p><u>Article 10.06.06</u> Sales by nonprofits, including:</p> <ul style="list-style-type: none"> University cafeterias; Military mess halls; Canteens, residential establishments, clubs attached to the Army; Pharmacists and drug depositaries in connection with retail sales of raw spirit alcohol; and Restaurateurs and hotel restaurant operators, under certain conditions. 	<p><u>Article 10.06.08</u> Rate as follows:</p> <ul style="list-style-type: none"> Category of licenses (three categories); and Population of the community where the firm is located. <p><u>Article 10.06.09</u> License for fairs: FMG 25,000 per day.</p>	<p><u>Article 10.06.63</u> In the first 20 days of each quarter => pre-existing operation. First 20 days of operation => new sales license. <u>Article 10.06.64</u> Prior to operation => huckster's license tax [<i>impôt de licence foraine</i>].</p>

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2.0 Taxes on property				
2.1 Land tax [<i>Impôt foncier sur les terrains—IFT</i>] (Budget of the settlement communes [<i>communes d'implantation</i>]) ^{1/}	<u>Article 10.02.01</u> Tax levied on the estimated productive value of land based on type of crop use.	<u>Article 10.02.03</u> <ul style="list-style-type: none"> Land owned by government, decentralized local authorities, or public institutions assigned to perform a public service or a service deemed to be in the public interest that generates no revenue. Land earmarked (free of charge) for medical or social charities, free education, or worship; and Land envisaged in Article 10.03.02, liable for the IFPB. 	<u>Article 10.02.07</u> Rate expressed in FMG per hectare (1 st –5 th category), and 1 percent of market value (6 th category).	<u>Article 10.02.08</u> Prior to October 15.
2.2 Tax on buildings ^{1/} [<i>Impôts sur les immeubles bâtis—IFPB</i>] (Commune Budget)	<u>Article 10.03.01</u> Tax levied on rental value of buildings.	<u>Article 10.03.03</u> <ul style="list-style-type: none"> Buildings owned by government, decentralized local authorities, or public institutions assigned to perform a public service or a service deemed to be in the public interest that generate no revenue; and New constructions for a period of five years from their completion date subject to presentation of habitation or occupancy permit (Article 10.03.05). Buildings reserved (on a free-of-charge basis) for charities, medical activities, [free] education, or worship. 	<u>Article 10.03.10</u> Rates set by vote (by the municipal government) based on the rental value determined by the real estate assessment committee: Maximum rate: 5 percent; and Minimum rate: 2 percent. May not be less than FMG 5000 per building.	<u>Article 10.03.11</u> Prior to October 15.
2.3 Local government tax on buildings [<i>Taxe annexée à l'IFPB—TAFB</i>] (Commune Budget)	<u>Article 10.04.01</u> Taxes associated with the tax on buildings based on the rental value of real estate.	Same rules as those governing the IFPB, excluding the temporary exemption and the permanent exemption.	<u>Article 10.04.05</u> Rate set by municipal government vote: Maximum rate: 5 percent; and Minimum rate: 2 percent.	Prior to October 15.
2.4 Additional tax on registration tax [<i>Taxe additionnelle aux droits d'enregistrement</i>] (Commune Budget)	<u>Article 10.05.01</u> Tax in addition to movable and immovable property, sales by auction transfer duties [<i>Droits d'enregistrement sur les actes et les mutations à titre onéreux des biens immeubles et meubles</i>].		<u>Article 10.05.02</u> Rates set by municipal government vote: Maximum rate: 5 percent; and Minimum rate: 2 percent.	

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Tax	Type of Tax	Deductions and Exemptions	Tax Rate	Tax Reporting																																										
2.5 Tax on company cars [Taxe sur les véhicules de tourisme des sociétés] (General Budget)	<u>Article 02.08.01</u> Annual tax levied on all private cars registered in the name of a company or on the balance sheet of individual enterprises.		<u>Article 02.08.02</u> FMG 300,000/year for all vehicles rated as not exceeding 10 HP; and FMG 30,000/year and per HP for vehicles exceeding 10 HP.	<u>Article 02.08.03</u> Prior to end-January => vehicles in circulation as at January 1 of the year; Month purchased => vehicles purchased in the course of the year (brand-new or secondhand).																																										
2.6 Tax on motor vehicles [Taxes sur les véhicules à moteur] (Tax disc) [Vignette] (General Budget)	<u>Article 02.07.01</u> Annual tax on all vehicles in circulation.	<u>Article 02.07.06</u> <ul style="list-style-type: none">• Vehicles registered in the name of the state;• Vehicles exempt from tax pursuant to the terms of international conventions;• Special vehicles (bulldozers, mechanical handling equipment, etc.);• Tractors used exclusively for agricultural activities; and• Vehicles intended for sale or resale (automobile dealers) and brand-new or secondhand mechanical engines.	<u>Article 02.07.01</u> <u>Rate</u> <table><tr><td>Taxable horsepower</td><td>1</td><td>5</td><td>10</td><td>13</td><td></td></tr><tr><td></td><td>To</td><td>To</td><td>To</td><td>To</td><td>>15</td></tr><tr><td>Age</td><td>4</td><td>9</td><td>12</td><td>15</td><td></td></tr><tr><td><5 years</td><td>10,500</td><td>12,000</td><td>13,500</td><td>19,500</td><td>28,500</td></tr><tr><td>5<<10 y</td><td>7,500</td><td>13,000</td><td>10,500</td><td>16,500</td><td>25,500</td></tr><tr><td>10<=20 y</td><td>4,500</td><td>10,500</td><td>7,500</td><td>10,500</td><td>13,500</td></tr><tr><td>>20 years</td><td>2,250</td><td>3,000</td><td>3,750</td><td>7,500</td><td>12,000</td></tr></table>	Taxable horsepower	1	5	10	13			To	To	To	To	>15	Age	4	9	12	15		<5 years	10,500	12,000	13,500	19,500	28,500	5<<10 y	7,500	13,000	10,500	16,500	25,500	10<=20 y	4,500	10,500	7,500	10,500	13,500	>20 years	2,250	3,000	3,750	7,500	12,000	<u>Article 02.07.02</u> Automobiles and boats in active service: prior to end-June. Vehicles previously tax-exempt: within one month of car in circulation, or month acquired, or time of technical inspection, or time of insurance renewal.
Taxable horsepower	1	5	10	13																																										
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Age	4	9	12	15																																										
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>20 years	2,250	3,000	3,750	7,500	12,000																																									
			<u>Article 10.05.02.</u> Commercial vehicles used exclusively for mass transit = FMG 4,000/CF; however, vehicles over 10 years old are taxed on only half their power. Airplanes: FMG 600,000/year/aircraft. Service vehicles of charities and social welfare organizations: FMG 4,000/CF.																																											

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Tax	Type of Tax	Deductions and Exemptions	Tax Rate	Tax Reporting
2.7 Registration duties [Droits d'Enregistrement] (General Budget)	<u>Article 02.01.02</u> Tax levied on registration of all transactions pertaining to the transfer of property, proportional to the value of the assets in question.	<u>Article 02.11.01</u> Special regimes and exemptions: <ul style="list-style-type: none"> • Central government and decentralized local governments; • Societies, associations recognized as being in the public interest; • Religious missions and churches; • Social housing; • Procedural documents [<i>actes de procédure</i>] and judicial decisions with respect to electoral matters; • Instruments and acts of registration; judgments relating to civil status; • Transactions in cases of expropriation in the public interest; and • Instruments and transactions, contracts pertaining to agricultural or socially oriented credit extended by banks. 	<u>Article 02.02.39</u> Buildings and goodwill: 8 percent. Special rates: <u>Sales of immovable assets</u> Association RUP = 6 percent (Art. 2.02.39); Developable land for housing <=500m ² =8 percent (Art. 02.02.39); Traditional housing – 10 percent; and Agricultural land 1/2 12 percent (Art. 02.02.39) <u>Other assets</u> 8 percent (Art. 02.02.44); and Negotiable securities: 4 percent (Art. 02.02.46). Estate tax (Art. 02.03.32-A) Rate – Portion of taxable value (in FMG): <ul style="list-style-type: none"> • 2 percent — FMG 1-10 million; • 4 percent — FMG 2-20 million; • 6 percent — FMG 20-30 million; • 8 percent — FMG 30-40 million; • 10 percent — > FMG 40 million; <u>Memoranda of incorporation</u> : (Art. 02.02.32) Rate graduated by tranche of capital: <ul style="list-style-type: none"> • 2 percent < FMG 50,000,000; • 1 percent between FMG 50,000,000 and FMG 500,000,000; and • 0.5 percent for amounts in excess of FMG 500,000,000. <u>Claims</u> : 1.50 percent (Art. 02.02.48) <u>Prenuptial agreement</u> [<i>contrat de mariage</i>]: 1 percent (Art. 02.02.19). <u>Exchange of building</u> : 4 percent (Article 02.02.20) <u>Partition</u> : 1 percent (Art. 02.02.28) <u>Annuities</u> [<i>Rentes</i>]: 1.5 percent (Art. 02.02.30). <u>Fixed-term lease</u> : 2 percent and 4 percent (Art. 02.02.12). <u>Life tenancy</u> : 8 percent and 12 percent (Art. 02.02.13).	

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	<u>Article 02.02.24</u> Taxes on judgments, arbitration awards, and decisions resulting in conviction.		<u>Art. 02.02.04 through 02.02.06</u> Fixed taxes: • FMG 10,000 => Supreme Court decision => administrative; • FMG 20,000 => Decision of the Court of Appeal, Criminal Court; and • FMG 40,000 => Decision of the Supreme Court => judicial.	
2.8 Tax on real estate advertising [<i>Taxe de publicité foncière</i>] (General Budget)	<u>Article 02.04.01</u> Tax levied on: • Recording of real estate conveyancing transactions (<i>mutations</i>); and • Procedural steps involved in inclusion in land ownership registries.	<u>Article 02.04.09</u> • Central government and decentralized local governments; • Societies, associations recognized as being in the public interest; • Religious missions and churches; and • Social housing.	<u>Article 02.04.05</u> • 1 percent of the value (for leases); • 2 percent => in all other cases; and • 1 percent of value in the case of unconditional partitions [<i>partage pur et simple</i>].	<u>Article 02.09.05</u> Within the first 20 days of each quarter => estimated payment, June 15 => general tax payment.
2.9 Tax on insurance policies [<i>Taxe sur les contrats d'assurances</i>] (General Budget)	<u>Article 02.09.01</u> Tax levied on all insurance contracts providing coverage against risks or in respect of annuities.	<u>Article 02.09.03 and Article 02.09.04</u> • Risks covered outside of Madagascar; • Reinsurance; • Insurance in respect of work-related accidents; and • Insurance against risks associated with shipping or civil aviation, whether inbound or outbound.	<u>Article 02.09.02</u> • 4.5 percent in general; • 20 percent for fire insurance; • 3 percent for life insurance; • 4 percent for insurance against risks associated with shipping, inland water transportation, or civil aviation; and • 5 percent for reverse mortgage annuities [<i>rente viagère</i>].	

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3. Taxes on goods, products, and services				
3.1 Turnover tax ^U [<i>Taxe sur le chiffre d'affaires</i> —ICA] (General Budget, Budget of the Decentralized Local governments—Article 06.01.01)	<p><u>Article 06.01.02 and Article 06.01.03</u> Tax levied on:</p> <ul style="list-style-type: none"> Commercial, industrial, agricultural, crafts-related, mining, hotel-related, or service-providing transactions; The liberal professions; and Particular types of operations, such as <i>importation</i> and delivery for personal use. <p><u>Article 06.01.35</u> ^U The public investment program (PIP) financed from external sources.</p>	<p><u>Article 06.01.06</u> <u>Exemptions or exonerations</u></p> <ul style="list-style-type: none"> Wages; Books, brochures, similar printed materials; Pharmaceutical drugs and products, medical equipment; Materials and inputs used in the manufacturing of drugs; Packaging used in the retail sale of drugs; <i>Newsprint; importation;</i> publication, and sale of newspapers and magazines; Subject to agreement of reciprocal treatment, the purchases of diplomatic missions holding diplomatic status; Postage stamps and legal tender coins; and Interest on deposits of or loans to members of mutual financial institutions. 	<p><u>Article 06.01.12</u> Value added tax (VAT) - 0 percent; and 20 percent (recoverable).</p> <p><u>Article 06.02.15</u> TST: 5 percent (nonrecoverable).</p>	<p><u>Article 06.01.16</u> Monthly for turnover > FMG 1 billion. Quarterly for turnover < FMG 1 billion.</p> <p><u>Article 06.02.11</u> TST: Bimonthly. Prior to the 20th of the month following each bimonthly period.</p>
3.2 Transaction tax [<i>Taxe sur les transactions</i> —TST]	<p><u>Article 06.02.01</u> Budget of the decentralized local governments.</p>	<p><u>Article 06.02.04 and Article 06.02.05</u></p> <ul style="list-style-type: none"> Assets brought into companies; Services rendered in the context of the health-care professions; School fees; Supply of water and electric power to public local authorities for domestic use, to medical training centers; and Export sales. 	<p><u>Article 06.02.15</u> 5 percent.</p>	<p><u>Article 06.02.11</u> In the first 20 days of the month following each bimonthly period.</p>

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3.3 Excise tax [<i>Droits d'accises</i> DA] (General Budget)	<u>Article 03.01.01</u> Tax levied on particular manufactured or imported products, such as: • Alcoholic beverages or liquids; • Tobacco; • Cosmetic preparations; • Mining products; and • Audiovisual equipment, etc.	<u>Article 03.01.02</u> • Products included as raw materials in other products already subject to excise tax (DA); • Products and materials included in the manufacture of pharmaceuticals; and • Materials for refrigerated production used by professionals.	In accordance with excise tax table: • Rate from 20 percent-180 percent; and • 50 percent tax deduction for cigarettes whose reference price does not exceed the price set pursuant to a decree [<i>arrêté</i>] issued by the Minister (Art. 03.01.01).	Within the first 20 days of the month following each bimonthly period.
3.4 Special tax [<i>Taxe spéciale</i>] (FNPDJSL)	<u>Article 03.02.01</u> Tax payable by manufacturers and importers of: • Alcoholic beverages; and • Manufactured tobacco. Tax payable by operators of gambling establishments		<u>Article 03.02.02</u> Rates set pursuant to regulations.	<u>Article 03.02.04</u> Within the first 20 days of the month following the three-month period within which the product was manufactured or the revenue collected.
3.5 Redevance fees [<i>Redevances</i>] General Budget)	<u>Article 04.01.01</u> Levied on the following products: manufactured tobacco, chemical matches, wheat or maslin flour, alcoholic beverages (excluding group 2) using locally produced or imported sugar, dairy products, and mobile phones communications.	<u>Article 04.01.04</u> • Same product used as in respect of raw materials; • Export sales; and • Raw material used as input in medication.	<u>Article 04.01.10</u> Rates set in accordance with regulations.	<u>Article 04.01.16</u> Products imported: prior to removal. Products manufactured locally and in accordance with conditional relief arrangements [<i>régime suspensif</i>] => within the first 20 days of the month after the goods are released for home use.
3.6 Taxes on gambling and gambling establishments [<i>Prélèvements sur les maisons de jeux</i>] Annual tax on slot machines, etc. [<i>Taxe annuelle sur les appareils automatiques</i>] (Commune Budget) ¹¹	<u>Article 10.07.01</u> Tax payable in connection with the operation of automatic devices known as "slot machines" and other such equipment.		<u>Article 10.07.02</u> • Slot machines: FMG 2,000,000 per apparatus; and • Other equipment: FMG 500,000 per apparatus.	<u>Article 10.07.02</u> On an annual basis—must be made at the time that a statement is issued to the effect that the equipment in question has come on line.

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Stamp tax [<i>Droit de timbre</i>] (General Budget)	<u>Article 03.02.12</u> Tax payable upon admittance to gambling halls.		<u>Article 03.02.12</u> By share: • FMG 50,000 – pass valid for one day; • FMG 200,000 – pass valid for one week; • FMG 700,000 – pass valid for one month; and • FMG 3,000,000 – pass valid for one year.	<u>Article 03.02.12</u> Prior to the 10 th of the following month.
Tax on gambling products [<i>Prélèvement sur les produits des jeux</i>] (Decentralized local government budget to be allocated by decree) ¹¹	<u>Article 10.07.03</u> Tax (in full discharge of the value added tax (VAT) applied to the gross proceeds from money-gambling activities engaged in within clubs, gambling houses, and hotel facilities.		<u>Article 10.07.03</u> Gambling engaged in at clubs and gambling houses: Graduated by threshold of annual earnings (minimum rate of 10 percent, maximum rate of 60 percent). Gambling in hotels: graduated by threshold of earnings (min. 5 percent, max. 40 percent).	<u>Article 10.07.06</u> Within the three days after the end of the ten-day period.
3.7 Annual tax on televisions [<i>Taxe annuelle sur les téléviseurs</i>] (Budget of the Communes)	<u>Article 18</u> Amending Paragraph I of Article 6 of Order [<i>Ordonnance</i>] No. 78009 of May 3, 1978.		FMG 20,000 per TV per year.	
4. Taxes on foreign trade				
4.1 Imports				
4.1.1 Customs duty (<i>Droit de douane à l'entrée</i>)	Levied mostly on c.i.f. value of imports.	Exemptions apply to several products listed in the Code and in the Customs Tariff. Imports of EPZ companies benefit from temporary admission regime.	0, 5, 15, and 20 percent (see note under import tax).	
4.1.2 Import tax (<i>Taxe d'importation</i>)	Levied mostly on c.i.f. value of imports.	Exemptions apply to few products listed in the Code and in the Customs Tariff.	0, 5, 15, 20 or 25 percent (most between 0 and 10 percent). Note: the sum of the customs duty and import duty must be equal to 5, 15, 25, or 30 percent, not exceeding the latter.	
4.1.3 Statistical tax (<i>Taxe Statistique à l'Importation</i> , 150)	Levied mostly on c.i.f. value of imports.	Exemptions apply to few products listed in the Code and in the Customs Tariff.	2 percent.	
4.1.4 Stamp duty on imports (<i>Droit de Timbre à l'Importation</i>)	Levied mostly on c.i.f. value of imports.	Exemptions apply to few products listed in the Code and in the Customs Tariff.	1 percent.	
4.1.3 VAT	Levied mostly on c.i.f. value plus customs duty and import duty.	Exemptions apply to several products listed in the Code and in the Customs Tariff.	20 percent single-stage tax.	

Madagascar: Summary of the Malagasy Tax System, June 2002
(All amounts in Malagasy francs)

Tax	Type of Tax	Deductions and Exemptions	Tax Rate	Tax Reporting
4.1.4 Excise tax	Levied on a few products, mostly luxury items.	Exemptions apply to most products. All imports from EPZ companies.	Rates varying from 10 to 120 percent. FMG 20,000/Knet for secondhand clothing.	
4.1.5 Import tax on petroleum products (<i>Taxe unique sur produits pétroliers</i> —TUPP)	Levied mostly on volume, except lubricants on c.i.f. value, and gases per K/net.	Exemption for lamp oils.	Specific taxes vary per product.	
4.2 Exports	All taxes on exports eliminated as of 1997.			
5. Other taxes				
Stamp tax [<i>Droit de timbre</i>] (General Budget)	<u>Article 02.06.01</u> Tax levied on all paper documents intended for civil and judicial proceedings, as well as for instruments that can be produced in court and entered into evidence.		<u>Article 02.06.16</u> Size stamp tax (from FMG1,000 to 2,000). <u>Article 02.06.28</u> Proportional tax: 5 per mill. <u>Article 02.06.40</u> Receipt tax: at the rate for the proportional tax. <u>Article 02.06.56</u> Stamp tax on visas for foreigners (from FMG 140,000 to 300,000 for new issue according to length of stay, for renewal, or for exit); reduced in half for missionaries of all creed and foreign students in a Madagascar university or equivalent.	<u>Article 02.06.44</u> In the form of a statement, within the 20 days following the end of each month.

Source: Ministry of Budget and Development of Autonomous Provinces.
1/ Levied on behalf of local authorities.

Table 1. Madagascar: Growth and Structure of GDP, 1997-2001

	1997	1998	1999	2000	2001
(Annual change in percent, at 1984 prices)					
Primary sector	1.9	2.1	3.4	0.8	4.0
Agriculture	1.6	-1.6	5.3	-2.4	5.5
Livestock and fisheries	0.6	4.5	-2.7	2.6	3.1
Forestry	7.6	8.3	17.5	5.7	2.1
Secondary sector	4.7	5.3	4.2	5.6	7.6
Food, beverages, and tobacco	2.4	8.9	4.2	4.3	4.9
Energy	17.2	-1.6	4.1	5.0	-6.3
Export processing zone	9.7	20.0	22.4	22.4	40.0
Other	0.7	1.2	0.4	3.4	10.3
Tertiary sector	4.7	5.1	5.5	6.7	6.1
Transport	8.5	4.5	4.4	5.7	5.7
Construction	4.7	13.3	11.6	15.1	13.5
Retail and wholesale	2.8	2.9	3.3	3.3	4.3
Government	0.0	6.1	0.0	0.0	2.0
Other services	3.6	8.6	10.0	11.7	8.3
GDP at market prices	3.7	3.9	4.7	4.8	6.0
Real GDP per capita	0.7	0.9	1.6	1.8	3.0
GDP deflator	7.3	8.4	9.8	7.1	9.0
(In percent of GDP at current prices)					
Primary sector	29.2	28.1	27.2	26.1	27.3
Agriculture	16.2	15.4	14.9	14.3	14.9
Livestock and fisheries	8.0	7.9	7.5	7.2	7.5
Forestry	5.0	4.8	4.8	4.6	4.8
Secondary sector	12.4	12.5	12.5	13.0	13.3
Food, beverages, and tobacco	5.6	5.9	5.7	6.0	6.1
Energy	1.4	1.3	1.4	1.4	1.4
Export processing zone	1.8	1.8	2.0	2.1	2.1
Other	3.7	3.6	3.4	3.5	3.6
Tertiary sector	52.0	52.5	52.3	52.0	52.3
Transport	17.9	18.0	17.3	17.2	17.3
Construction	1.3	1.5	1.5	1.5	1.5
Retail and wholesale	12.4	11.7	11.2	11.2	11.2
Government	4.9	5.2	5.4	5.4	5.4
Other services	15.5	16.2	16.9	16.8	16.9
Of which: public sector ¹	4.6	5.2	5.2	0.0	0.0
Imputed charges	-1.2	-1.2	-1.3	-1.3	-1.3
GDP at factor cost	92.5	91.9	90.7	89.9	92.5
Indirect taxes	7.5	8.1	9.3	10.1	7.5
Net imports of goods and nonfactor services	8.1	7.8	7.7	7.3	3.2
Total available resources	108.2	107.9	107.9	107.3	103.2
Consumption	95.3	93.0	92.8	92.3	87.7
Gross investment	12.3	14.8	14.9	15.0	15.5
Gross domestic savings	4.7	7.0	7.2	7.7	12.3

Sources: Ministry of Economy, Finance, and Budget; and Fund staff estimates.

¹ Excluding public enterprises.

Table 2. Madagascar: Gross Domestic Product at Constant 1984 Prices, 1997-2001
(In billions of Malagasy francs at 1984 prices)

	1997	1998	1999	2000	2001
Primary sector	697	712	736	742	772
Agriculture	320	315	332	324	342
Livestock and fisheries	293	306	298	306	315
Forestry	84	90	106	112	115
Secondary sector	241	253	264	279	300
Food, beverages, and tobacco	109	119	124	129	136
Energy	43	43	44	47	44
Export processing zone	14	17	20	25	35
Other	74	75	75	78	86
Tertiary sector	969	1,018	1,074	1,146	1,217
Transport	336	351	367	388	410
Construction	29	33	37	43	49
Retail and wholesale	226	232	240	248	259
Government	108	108	108	108	110
Other services	269	292	322	359	389
Of which: public sector ¹	0	0	0	0	0
Imputed charges	-33	-37	-39	-40	-43
GDP at factor cost	1,873	1,946	2,034	2,127	2,245
Indirect taxes	173	180	191	204	226
GDP at market prices	2,046	2,126	2,225	2,331	2,471

Sources: Ministry of Economy, Finance, and Budget; and Fund staff estimates.

Table 3. Madagascar: Supply and Use of Resources at Current Prices, 1997-2001
(in billions of Malagasy francs)

	1997	1998	1999	2000	2001
Primary sector	5,266	5,719	6,366	6,858	8,268
Agriculture	2,922	3,124	3,484	3,753	4,525
Livestock and fisheries	1,450	1,615	1,761	1,897	2,287
Forestry	895	980	1,121	1,208	1,456
Secondary sector	2,244	2,549	2,917	3,412	4,023
Food, beverages, and tobacco	1,007	1,190	1,340	1,567	1,848
Energy	246	262	316	370	436
Export processing zone	330	369	466	545	642
Other	662	728	795	930	1,097
Tertiary sector	9,389	10,674	12,228	13,641	15,859
Transport	3,238	3,655	4,035	4,501	5,233
Construction	233	296	355	396	460
Retail and wholesale	2,229	2,386	2,624	2,927	3,403
Government	884	1,051	1,266	1,412	1,642
Other services	2,805	3,286	3,948	4,404	5,121
Imputed charges	-208	-238	-309	-329	-389
GDP at factor cost	16,692	18,705	21,202	23,583	27,761
Indirect taxes	1,359	1,638	2,157	2,659	2,278
Gross domestic product at market prices	18,051	20,343	23,379	26,242	30,334
Net imports of goods and nonfactor services	1,464	1,578	1,809	1,919	959
Exports of goods and nonfactor services	3,947	4,378	5,715	8,036	8,672
Imports of goods and nonfactor services	5,408	5,956	7,524	9,955	9,631
Total available resources	19,512	21,921	25,188	28,161	31,292
Consumption	17,199	18,914	21,704	24,197	26,589
Government	1,960	2,089	2,175	2,403	3,082
Nongovernment	15,239	16,825	19,529	21,795	23,508
Investment	2,313	3,007	3,485	3,948	4,703
Government	1,177	1,612	1,616	1,766	2,181
Nongovernment	1,136	1,395	1,869	2,182	2,522
Gross domestic savings	852	1,429	1,675	2,029	3,744
Government	-213	76	492	665	-53
Nongovernment	1,066	1,353	1,183	1,364	3,797

Sources: Ministry of Economy, Finance, and Budget; and Fund staff estimates.

Table 4. Madagascar: Production of Rice and Other Food Crops, 1997-2001
(In thousands of tons)

	1997	1998	1999	2000	2001
Paddy	2,558	2,447	2,570	2,480	2,662
Maize	178	155	175	170	180
Manioc	2,418	2,412	2,461	2,463	2,510
Sweet potatoes	510	511	522	513	525
Potatoes	280	281	291	287	295

Source: Ministry of Agriculture and Rural Development.

Table 5. Madagascar: Rice Production, Imports, and Availability, 1981-2001

	Population ¹ (Thousands)	Paddy Production (Thousands)	Stocks (End of year) (In thousands of metric tons)	Net imports ² (Exports -) (In thousands of metric tons)	Total Rice Available ³	Availability (Kilograms/person)
1981	8,877	2,012	8	193	1,278	144
1982	9,109	1,970	138	351	1,290	142
1983	9,348	2,147	122	185	1,365	146
1984	9,592	2,131	47	111	1,343	140
1985	9,843	2,060	0	107	1,409	143
1986	10,100	2,116	28	162	1,424	141
1987	10,364	2,178	37	94	1,433	138
1988	10,635	2,149	13	37	1,385	130
1989	10,933	2,380	28	89	1,547	141
1990	11,239	2,420	28	76	1,574	140
1991	11,554	2,342	30	39	1,525	132
1992	11,877	2,450	38	59	1,568	132
1993	12,239	2,550	40	5	1,581	129
1994	12,596	2,357	53	159	1,605	128
1995	12,990	2,450	62	123	1,593	123
1996	13,393	2,500	56	19	1,519	114
1997	13,803	2,558	...	56	1,663	121
1998	14,222	2,447	...	58	1,619	114
1999	14,650	2,570	...	115	1,647	112
2000	15,085	2,480	...	207	1,698	112
2001	15,529	2,662	...	158	1,746	112

Sources: Ministry of Agriculture and Rural Development; and National Institute of Statistics (INSTAT).

¹ May differ from data provided by other sources.

² Madagascar was a net exporter of rice until 1970 (except for 1965).

³ Domestic paddy production converted to rice equivalent plus net change in stocks and net imports.

Table 6. Madagascar: Retail Prices of Ordinary Rice, 1997-2001
(In Malagasy francs per kilogram)

		Free Market	Grocery/ Shop	Official Distribution ¹	Average Price
1997					
	March	2,128	2,056	2,150	2,105
	June	1,608	1,619	1,950	1,640
	September	1,876	1,906	2,036	1,892
	December	2,089	2,006	2,200	2,092
1998					
	March	2,125	2,071	2,167	2,128
	June	1,875	2,000	2,172	1,877
	September	1,979	1,992	2,225	1,983
	December	2,450	2,514	2,417	2,468
1999					
	March	2,473	2,543	2,526	2,508
	June	2,178	2,200	2,434	2,197
	September	2,267	2,291	2,354	2,283
	December	2,379	2,383	2,465	2,381
2000					
	March	2,552	2,449	2,390	2,499
	June	2,309	2,288	2,456	2,300
	September	2,605	2,583	2,602	2,594
	December	2,877	2,933	2,659	2,905
2001					
	March	2,974	3,006	...	2,990
	June	2,303	2,165	...	2,234
	September	1,975	1,998	...	1,987
	December	2,816	2,767	...	2,792

Source: National Institute of Statistics (INSTAT).

¹ The data refer to the price of rice sold from the food security stock, or Stock Tampon.

Table 7. Madagascar: Production of Major Cash Crops, 1997-2001 ¹
(In thousands of tons)

		1997	1998	1999	2000	2001
Export crops						
Coffee ²	Production	55.0	60.0	65.0	58.1	64.5
	Marketed	52.0	53.0	57.2	...	...
Vanilla	Production ³	4.3	5.0	5.4	4.4	4.6
	Marketed ⁴	1.1	1.1	1.2	...	...
Cloves	Production	14.5	13.5	12.5	11.8	11.8
	Marketed	15.0	15.0	11.2	...	...
Pepper	Production	1.5	1.7	1.6	1.6	1.6
	Marketed	1.5	1.7	1.8	...	...
Cocoa	Production	4.3	4.3	4.3	4.4	4.4
	Marketed	4.3	4.3	4.1	...	...
Butter beans	Production	8.0	7.8	8.0	7.5	7.4
	Marketed	7.8	7.0	7.0	...	...
Sisal	Production ⁵	18.0	18.0	17.0	17.1	17.1
Industrial crops						
Cotton ⁶	Production ⁵	36.2	38.6	34.6	27.4	26.5
Sugarcane	Production	2,160.0	2,180.0	2,180.0	2,188.6	2,208.5
	Marketed	1,500.0	1,500.0	1,504.0	...	...
Groundnuts	Production	35.8	34.0	34.5	35.0	35.2
	Marketed	29.0	29.0	29.3	...	...

Source: Ministry of Agriculture and Rural Development.

¹ Data on total production are approximate; those on marketed production are more accurate.

² Unroasted coffee.

³ Green vanilla.

⁴ Prepared vanilla (4.6 kilograms green = 1 kilogram prepared).

⁵ Most of the production is marketed.

⁶ Seed cotton.

Table 8. Madagascar: Indicative Minimum Producer Prices for Major Crops, 1997-2001¹
(In Malagasy francs per kilogram)

	Type of Price	1997	1998	1999	2000	2001
Paddy ¹	Indicative	858	1,070	1,100	1,290	...
Coffee	Indicative	3,000-5,000	6,500	5,500	2,650	...
Cloves	Indicative	9000	9,000	23,000	24,875	...
Vanilla	Indicative	5,000-10,000	10,500	25,000	66,250	...
Sugarcane	Indicative	700	750	800	...	...
Pepper	Indicative	...	3,033	5,000	9,875	...
Wheat	Indicative	1,150	1,200	1,250	1,250	...
Soya beans	Indicative	1,500	1,600	1,500	...	...
Cotton	Indicative	...	2,075	1,784	1,800	...

Sources: Ministry of Agriculture and Rural Development until 1997; thereafter, National Institute of Statistics (INSTAT).

¹ The fixing of producer prices was abolished in 1986. Official indicative minimum prices have been announced since 1987; however, all prices are market determined.

Table 9. Madagascar: Index of Industrial Production, Excluding the Export Processing Zone, 1997-2001

	Weights	1997	1998	1999	2000	2001
(1984=100)						
Agro-industry and food industries	29.18	131.7	126.3	124.5	129.0	140.7
Beverages and tobacco	7.59	109.3	130.5	250.7	255.6	285.3
Textiles and clothing	14.63	62.5	73.1	65.3	82.5	97.3
Wood industries	1.09	67.6	152.2	183.2	377.3	344.8
Paper and printing	4.68	83.1	108.2	71.6	88.4	80.7
Leather goods	2.65	27.0	25.2	93.9	114.6	116.5
Electrical goods	2.19	102.6	103.0	102.9	121.7	120.7
Metal goods	2.43	105.0	112.9	116.6	84.3	115.2
Chemical industries	9.05	138.0	125.1	129.7	128.2	159.1
Energy	18.27	484.0	470.6	471.6	554.5	589.1
Construction materials	2.19	137.9	166.7	173.5	184.3	193.4
Transport materials	1.25	61.9	68.5	72.1	55.2	48.3
Extractive industries	3.86	122.5	143.0	86.2	125.2	124.4
Other	0.96	...	...	...	...	...
Total	100.00	175.4	177.2	183.7	208.3	224.7
(Annual change in percent)						
Agro-industry and food industries		-10.9	-4.1	-1.5	3.6	9.1
Beverages and tobacco		-22.2	19.4	92.1	5.9	7.4
Textiles and clothing		6.1	17.0	-10.7	26.3	18.0
Wood industries		8.3	125.0	20.4	106.0	-8.6
Paper		5.4	30.2	-33.8	23.5	-8.7
Leather goods		-37.7	-6.5	272.4	22.0	1.7
Electrical goods		11.6	0.4	-0.1	18.3	-0.9
Metal goods		5.9	7.4	3.3	-27.7	36.7
Chemical industries		106.0	-9.3	3.7	-1.2	24.0
Energy		33.2	-2.8	0.2	17.6	6.2
Construction materials		-5.4	20.9	4.0	6.2	5.0
Transport materials		-14.8	10.6	5.3	-23.5	-12.5
Extractive industries		-10.7	16.8	-39.7	45.3	-0.6
Total		13.8	1.0	3.7	13.4	7.8

Sources: Ministry of Industry, and Ministry of Energy and Mining.

Table 10. Madagascar: Industrial Production, 1997-2001

	Units	1997	1998	1999	2000	2001 Prov.
Extractive industries						
Graphite	Tons	14,107	20,629	16,137	40,328	2,013
Mica	Tons	1,529	1,232	54	66	90
Chromite	Tons	139,471	134,659	144	131,293	23,637
Food industries						
Tapioca	Tons	309	287	296	305	311
Potato flour	Tons	...	...	...	...	...
Cattle (slaughtered industrially)	Head	8,436	4,219	4,122	4,027	4,927
Hogs (slaughtered industrially)	Head	373	428	418	409	468
Canned meat	Tons	23	21	21	21	15
Cooked pork meats	Tons	...	...	...	...	...
Sugar	Tons	74,280	60,273	61,370	62,487	67,917
Edible oils	Tons	1,439	1,280	1,331	1,354	1,551
Beer	Hectoliters	233,520	297,407	610,074	645,536	691,661
Condensed milk	Tons	2,244	2,285	1,355	1,121	1,142
Salt	Tons	36,763	26,746	26,131	25,530	25,928
Tobacco						
Chewing tobacco	Tons	177	299	60	66	56
Smoking tobacco	Tons	6	...	...	...	...
Cigarettes	Tons	2,826	3,303	3,839	4,139	4,441
Textiles						
Cotton cloth	1,000 meters	26,955	19,582	26,368	23,328	29,641
Bags for packaging	Tons	438	506	259	252	364
Blankets	Tons	1,460	1,675	1,610	1,587	1,662
String	Tons	1,500	1,570	1,641	1,510	1,907
Paper						
Rag paper	Tons	4,646	6,732	3,270	5,672	4,059
Finished paper	Tons	969	1,169	...	...	...
Chemical industries						
Soap	Tons	15,125	14,513	15,884	15,385	15,915
Accumulators	Units	4,597	3,751	4,599	3,693	3,511
Candies	Tons	632	744	743	928	950
Paint	Tons	2,258	2,131	1,918	1,487	1,554
Batteries	1,000 units	25,166	25,166	25,246	30,631	30,433
Oxygen	Cubic meters	524,855	540,585	417,642	62,832	200,046
Acetylene	Cubic meters	116,524	112,451	90,668	23,191	76,692
Petroleum refining						
Butane	Cubic meters	10,861	7,831	9,639	11,864	12,657
Gasoline	Cubic meters	102,783	92,694	98,010	122,567	128,279
Kerosene	Cubic meters	76,293	75,413	65,038	65,228	75,105
Gas oil	Cubic meters	128,582	110,784	119,039	156,434	150,172
Fuel oil	Cubic meters	206,645	217,764	198,848	225,684	247,221
Construction materials						
Cement	Tons	36,217	44,327	45,701	50,938	51,882
Metal works						
Sheet metal	Tons	6,102	6,478	6,821	4,002	6,484
Trunks and boxes	Tons	408	509	536	536	536
Shoes						
Leather	1,000 pairs	126	...	...	...	...
Plastic	1,000 pairs	420	396	375	303	291
Other	1,000 pairs	330	...	...	...	...
Electricity						
Hydraulic	1,000 kilowatt-hours	488,700	510,646	515,374	539,649	563,963
Thermal	1,000 kilowatt-hours	127,600	154,774	205,920	240,198	269,976

Sources: Ministry of Industry, and Ministry of Energy and Mining.

Table 11. Madagascar: Economic Activities of Manufacturing Enterprises in the Export Processing Zone (EPZ), 1997-2001

	EPZ Charters Granted					Cumulative EPZ Charters Granted			Total Commitments, 1990-2001 ¹	
	1997	1998	1999	2000	2001	1999	2000	2001	Employment (Individuals)	Investment (In billions of Malagasy francs)
Sectors										
Agro-food processing	3	2	0	1	1	31	32	33	3,106	113.6
Textiles	15	76	5	14	15	129	143	158	68,649	615.7
Hides and skins	1	-1	1	0	0	6	6	6	761	12.1
Wood processing	1	4	1	0	0	22	22	22	1,589	43.0
Data processing	5	1	2	0	0	28	28	28	2,213	20.9
Chemicals	3	-1	1	0	2	9	9	11	673	31.4
Electrical and mechanical	0	0	0	0	0	4	4	4	129	5.0
Mineral processing	0	-1	1	0	0	6	6	6	424	32.5
Handicrafts	1	-1	1	0	1	16	16	17	2,960	13.7
Jewelry	2	-1	1	0	0	12	12	12	519	11.8
Enterprises promoting and managing EPZs	1	6	-1	0	3	3	3	6	142	28.0
	0	0	0	1	0	1	2	2	106	520.3
Total	32	84	12	16	24	267	283	305	81,271	1,447.9

Source: Ministry of Industry.

¹ Cumulative totals of investment and employment commitments indicated in proposals and business plans of EPZ charter applications.

Table 12. Madagascar: Number of Enterprises with Operating Permits Under the
Export Processing Zone Regime, 1997-2001

	1997	1998	1999	2000	2001
Number of manufacturing enterprises operating under BPZ	241	259	267	283	307
(in percent) ¹	1.5	...	...	...	...
Textiles and hides	120	127	135	149	164
Wood processing	18	22	22	22	22
Food, beverages, and tobacco	29	31	31	32	33
Other (mainly jewelry and handicrafts)	74	79	79	80	88
Total number of employees	38,400	56,200	64,100	81,000	110,000
(in percent) ¹	20.2	24.1	25.8	27.5	29.5
Wages paid (in billions of Malagasy francs)	117	176	202	237	332
(in percent) ¹	17.9	20.5	...	...	...
Value added (in billions of Malagasy francs)	250	304	328	360	447
(in percent) ¹	12.6	13.1	...	...	...
Exports (in billions of Malagasy francs)	747	1,031	1,157	1,236	1,368
(in percent) ¹	49.9	54.7	...	...	...
Imports (in billions of Malagasy francs)	370	468	512	599	735
(in percent) ¹	21.9	27.7	...	...	...

Source: Project Madio, *Le Secteur Industriel Formel à Madagascar: Caractéristiques, Performances, Perspectives*, various issues, 1995-97.

¹ In percent of the total for the manufacturing sector.

Table 13. Madagascar: Production and Export of Major Minerals, 1997-2001

	1997	1998	1999	2000	2001 Prov.
Production (thousands of tons)					
Chromite	139.5	134.7	0.1	131.3	23.6
Graphite	14.1	20.6	16.1	40.3	2.0
Exports (thousands of tons)					
Chromite	134.0	115.2	81.5	70.0	33.5
Graphite	15.3	9.9	14.1	16.8	11.3
Export value (millions of SDRs)					
Chromite	6.1	5.9	3.2	4.3	1.2
Graphite	5.2	3.7	4.3	5.3	3.7
Unit value (SDRs per ton)					
Chromite	45.5	51.3	39.8	60.8	36.2
Graphite	340.7	367.5	305.3	316.2	330.7

Source: Ministry of Energy and Mining.

Table 14. Madagascar: Tourism Indicators, 1997-2001

	1997	1998	1999	2000	2001
Number of tourists	100,762	121,207	138,253	160,071	170,208
Annual growth in percent	21.9	20.3	14.1	15.8	6.3
Hotel capacity (number of rooms)	6,246	6,637	7,207	7,779	8,435
Average capacity utilization (in percent) ¹	57	58	60	63	66
Number of tourist nights (in thousands)	1,410,668	2,302,933	2,626,807	3,041,349	3,233,952
Annual growth in percent	21.9	63.3	14.1	15.8	6.3
Average length of stay (days)	15	20	20	20	20
Foreign exchange receipts from tourism (in millions of SDRs)	52.9	65.5	72.9	92.0	90.2
Annual growth in percent	18.6	23.8	11.3	26.2	-2.0

Source: Ministry of Transportation, Meteorology, and Tourism; Directorate of Tourism.

¹ Survey coverage is not complete.

Table 15. Madagascar: Production and Consumption of Electricity, 1997-2001
(In millions of kilowatt-hours)

	1997	1998	1999	2000	2001
Production ¹	616.3	665.4	721.3	779.8	833.9
Hydroelectric	488.7	510.6	515.4	539.6	564.0
Thermal	127.6	154.8	205.9	240.2	270.0
Consumption	485.4	524.4	571.5	616.5	644.2
Public lighting	7.7	8.0	8.3	8.8	9.3
Households	200.0	225.3	253.6	281.3	298.2
Other	277.8	291.1	309.5	326.4	336.7

Source: Ministry of Energy and Mining.

¹ Electric power generated by the electricity and water company, that is, excluding electricity generated by industries for their own consumption.

Table 16. Madagascar: Prices of Petroleum Products, 1997-2001 ¹
(In Malagasy francs per liter, unless otherwise indicated)

	Gasoline (Regular)	Gasoline (Premium)	Gas Oil	Kerosene	Natural Gas ²
1997 March	1,913	2,236	1,553	1,420	34,000
June	2,000	2,383	1,650	1,500	34,000
September	2,000	2,383	1,650	1,450	34,000
December	2,000	2,383	1,650	1,450	34,000
1998 March	2,106	2,530	1,727	1,450	42,000
June	2,090	2,530	1,700	1,450	42,000
September	2,090	2,530	1,700	1,450	42,000
December	2,090	2,530	1,700	1,450	42,000
1999 March	2,090	2,530	1,700	1,460	45,000
June	2,290	2,910	1,770	1,520	55,000
September	2,480	3,350	1,840	1,630	55,000
December	2,950	3,980	2,110	1,850	55,000
2000 March	3,139	4,408	2,232	2,100	55,000
June	3,400	5,000	2,400	2,100	55,000
September	3,750	5,100	2,750	2,300	55,000
December	4,200	5,500	3,000	2,500	76,000
2001 March	4,200	5,500	3,000	2,686	76,000
June	4,533	5,583	3,000	2,656	77,000
September	4,300	5,300	3,000	2,566	73,500
December	4,130	5,120	2,900	2,385	73,500

Source: Ministry of Energy and Mining.

¹ Wholesale prices from storage facilities; retail prices are higher by a small, fixed profit margin.

Prices recorded in the capital city only.

² Prices are for a 12.5 kilogram container.

Table 17. Madagascar: Population and Labor Force, 1997-2001
(In thousands, unless otherwise indicated)

	1997	1998	1999	2000	2001
Population	13,803	14,222	14,650	15,085	15,529
Percentage change	3.1	3.0	3.0	3.0	2.9
Labor force ¹	...	...	...	...	...
Agriculture	...	...	...	...	...
Manufacturing and mining	...	...	...	...	...
Construction	...	...	...	...	...
Commerce, banking, and insurance	...	...	...	...	...
Transportation and telecommunications	...	...	...	...	...
Administration	...	...	...	...	...
Miscellaneous	...	...	...	...	...

Source: National Institute of Statistics (INSTAT).

¹ No data have been published by the National Social Security Fund since 1993.

Table 18. Madagascar: Distribution of Population and Civil Servants, 1997-2001

(In percent of total)

Region	Population	Civil Servants				
	1997 Est.	1997	1998	1999	2000	2001 Prov.
Antananarivo	29.0	43.0	42.8	42.4	43.0	44.2
Antsiranana	7.8	6.3	6.3	6.4	6.6	6.9
Fianarantsoa	21.7	17.1	16.8	17.2	17.1	16.1
Mahajanga	11.1	9.6	9.7	9.9	9.8	9.6
Toamasina	15.8	12.8	12.8	12.7	12.6	12.4
Toliara	14.6	11.2	11.6	11.4	10.9	10.8
Total	100.0	100.0	100.0	100.0	100.0	100.0

Sources: Ministry of Economy, Finance, and Budget; and Fund staff estimates.

Table 19. Madagascar: Minimum and Maximum Monthly Wages, 1994-2002 ¹
(In Malagasy francs)

	Agricultural ²		Nonagricultural ³	
	Minimum	Maximum	Minimum	Maximum
January 1994 - February 1995	64,236	158,772	63,313	155,997
March 1995 - October 1996	112,435	244,080	110,550	239,993
November 1996 - February 1998	123,778	268,704	121,591	263,947
March 1998 - May 1999	142,280	308,880	134,860	303,638
June 1999 - February 2000	156,514	339,768	153,846	334,002
March 2000 - December 2000	162,583	352,944	160,156	347,811
January 2001 - March 2001	174,800	379,200	172,290	374,046
Since April 2001	182,600	396,000	180,090	390,859

Source: Ministry of Civil Service.

¹ "Minimum" indicates the minimum wage in the lowest wage category, and "maximum" indicates the minimum wage in the highest wage category.

² On the basis of 200 working hours per month.

³ On the basis of 173.33 working hours per month.

Table 20. Madagascar: Consumer Price Index by Product, 1997-2000
(period averages unless otherwise indicated; August 1971-July 1972 = 100)

	Weights	1997				1998				1999				2000			
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
Traditional households ¹																	
Food	60.35	4159	4011	4019	4293	4382	4312	4285	4457	4674	4768	4915	5272	5522	5508	5533	5835
Lighting and fuel	9.14	3615	3626	3668	3739	4042	4051	3950	4004	4001	4021	4059	4089	4231	4398	4507	4647
Domestic services	1.82	1052	1052	1052	1052	1052	1052	1052	1052	1331	1331	1331	1331	1331	1331	1331	1331
Maintenance, clothing, & medicine	14.85	3405	3475	3515	3565	3674	3717	3737	3753	3818	3837	3908	3924	3932	3940	3941	3982
Miscellaneous	13.84	4506	4541	4483	4375	4408	4707	4838	4846	4899	5091	5266	5407	5583	5708	5773	6047
General index	100.00	3989	3916	3923	4087	4189	4195	4191	4301	4456	4544	4671	4910	5100	5126	5160	5399
Annual change (in percent)	...	6.3	2.4	4.0	5.2	5.0	7.1	6.8	5.2	6.4	8.3	11.4	14.2	14.5	12.8	10.5	9.9
Modern households																	
Food	45.16	4137	4144	4322	4480	4737	4968	5103	5156	5264	5315	5527	5592	5871	6119	6072	6093
Lighting and fuel	6.08	2500	2500	2589	2766	3133	3157	3246	3308	3232	3250	3494	3514	3622	3702	3799	4309
Domestic services	11.26	1371	1371	1371	1371	1371	1371	1371	1371	1732	1732	1732	1732	1732	1732	1732	1732
Maintenance, clothing, and medicine	17.99	3507	3544	3663	3841	3909	3955	3981	4011	4127	4199	4310	4386	4460	4559	4568	4675
Miscellaneous	19.51	3574	3516	3542	3711	3863	3767	3776	3841	4038	4030	4159	4467	4769	4885	4914	5355
General index	100.00	3503	3501	3614	3761	3941	4036	4109	4155	4299	4334	4490	4595	4799	4957	4949	5094
Annual change (in percent)	...	9.6	5.7	8.0	10.9	12.5	15.3	13.7	10.5	9.1	7.4	9.3	10.6	11.6	14.4	10.2	10.9
Combined consumer price index ²	100.00	3867	3842	3845	4005	4127	4155	4171	4265	4416	4491	4626	4831	5025	5083	5107	5323

Source: National Institute of Statistics (INSTAT).

¹Low-income households.

²Weights of 0.75 and 0.25 are applied to the index of traditional households and to the index of modern households, respectively.

Table 21. Madagascar: New Consumer Price Index by Product, 2001 ¹

		2001			
	Weight	I	II	III	IV
		(Period averages; January 2000 - December 2000 = 100)			
General index	10,000	108.4	105.8	106.2	109.2
Foodstuffs, beverage and tobacco	4,965	109.7	102.6	95.6	99.4
Clothing	679	104.8	106.6	110.8	108.7
Shelter, water, lighting, gas, and other fuel	1,860	106.8	107.0	115.9	117.8
Furniture, household equipment, and maintenance	456	103.3	107.9	111.7	111.7
Health	240	104.8	107.1	110.5	110.8
Transportation	829	112.9	116.1	128.2	134.3
Entertainment and culture	245	101.8	103.5	116.8	119.1
Education	396	109.8	113.7	123.5	129.3
Hotel and restaurant	151	101.1	101.3	102.6	102.3
Other goods and services	179	104.4	108.9	112.3	115.6
		(Annual percentage change)			
		10.0	6.7	6.3	5.0
Foodstuffs, beverage and tobacco		9.1	2.3	-4.3	-4.6
Clothing		11.9	9.7	9.7	7.2
Shelter, water, lighting, gas, and other fuel		10.2	9.8	18.1	16.0
Furniture, Household Equipment, Maintenance		2.0	5.9	9.7	9.2
Health		4.4	6.1	8.2	6.8
Transportation		23.0	20.4	27.0	21.8
Entertainment and culture		8.1	10.3	20.7	18.4
Education		17.4	19.0	22.4	18.7
Hotel and restaurant		-0.1	-2.1	0.3	0.0
Other goods and services		10.8	14.3	15.9	15.1

Source: National Institute of Statistics (INSTAT).

¹ Since 2001.

Table 22. Madagascar: Central Government Financial Operations, 1997-2001
(In billions of Malagasy francs)

	1997	1998	1999	2000	2001
Total revenue and grants	2,703.2	2,872.6	3,509.9	4,014.4	4,190.6
Total revenue	1,746.8	2,164.8	2,667.4	3,067.7	3,029.0
Budgetary revenue	1,746.8	2,076.8	2,667.4	3,067.7	3,029.0
Of which: tax revenue	1,687.9	1,964.4	2,580.1	2,972.1	2,906.4
Extrabudgetary and capital revenue	0.0	0.0	0.0	0.0	0.0
Grants	956.5	707.8	842.5	946.7	1,161.6
Current grants	377.7	59.8	171.9	178.9	427.7
Project grants	578.8	648.0	670.6	767.8	733.9
Total expenditure	3,137.1	3,819.3	3,790.9	4,168.6	5,262.6
Current expenditure	1,960.2	2,156.1	2,175.0	2,402.5	3,081.7
Budgetary expenditure	1,801.6	2,052.1	2,172.4	2,416.5	3,001.0
Personnel	669.6	826.4	1,000.6	1,042.4	1,337.6
Other noninterest expenditure	583.0	671.9	679.0	761.8	1,071.5
Foreign interest obligations	503.5	466.5	325.0	371.2	349.1
Domestic interest obligations	45.4	87.3	167.8	241.1	242.8
Treasury operations (net) ¹	120.1	94.0	2.6	-56.5	54.3
Emergency expenditure ²	38.5	0.0	0.0	40.6	25.0
Counterpart funds-financed operations	...	...	...	2.0	1.4
Capital expenditure	1,176.9	1,673.1	1,615.9	1,766.1	2,180.9
Domestic financing	274.5	465.6	439.6	581.2	942.3
Foreign financing	902.0	1,207.5	1,186.3	1,184.9	1,238.6
Overall balance (commitment basis, excluding the cost of structural reforms)					
Including grants	-433.9	-946.7	-281.0	-154.2	-1,072.0
Excluding grants	-1,390.4	-1,654.5	-1,123.5	-1,100.9	-2,733.6
Net cost of structural reforms ³	0.0	-236.7	-369.7	-582.7	-223.1
Exceptional revenue	0.0	0.0	45.6	17.7	11.5
Cost of structural reforms	0.0	236.7	415.3	600.4	234.6
Overall balance (commitment basis, including the cost of structural reforms)					
Including grants	-433.9	-1,183.4	-650.7	-737.0	-1,295.1
Excluding grants	-1,390.4	-1,891.2	-1,493.2	-1,683.7	-2,456.7
Domestic balance ⁴	15.2	-217.1	18.1	-127.6	-868.9
Change in arrears	-139.4	-101.8	67.6	-135.9	-27.0
Total overall balance (cash basis, including grants)	-573.3	-1,285.2	-583.1	-872.8	-1,322.0
Financing	573.3	1,285.3	583.1	872.8	1,322.0
Foreign (net)	692.3	379.4	284.9	704.7	635.6
Drawings	1,029.3	672.5	515.7	802.4	723.4
Budget	...	...	...	385.3	218.7
Projects	...	...	...	417.1	504.7
Amortization due	-508.9	-662.1	-607.5	-621.5	-581.0
Change in external arrears	-5,459.7	88.6	27.6	-49.5	-68.2
External debt relief	5,631.7	280.5	349.1	573.2	561.3
Financing gap	0.0	0.0	0.0	0.0	0.0
Domestic (net)	-119.0	901.5	246.4	121.9	580.9
Banking system	-146.0	741.2	167.1	3.1	468.4
Nonbanking system	27.0	160.3	79.3	118.8	112.5
Privatization receipts	0.0	4.4	51.8	46.3	104.1

Sources: Ministry of Economy, Finance, and Budget; and Fund staff estimates.

¹ Includes annexed budgets of quasi-public entities, including port authorities, the post office, government printing office, civil service retirement funds, and correspondent accounts of local authorities.

² For 2000, the government budgeted FMG 69 billion to address exceptional developments related to the resurgence of a cholera epidemic and the devastating effects of three typhoons in the year.

³ The net cost of structural reforms comprises (i) as receipts, loan recovery by the debt-recovery unit that holds the nonperforming loans of the two (former) public banks (BFV and BTM) after their assets have been financially restructured; and (ii) as expenditures, those related to civil service reform (i.e., mining, bonuses, and wage discontinuities), to the upgrading of pay and equipment in the justice services; to privatization (severance pay, administrative costs, transfers to the regional development fund that provides grants and concessional loans for basic social infrastructure purposes or to employees affected by privatization, and indemnization payments to formerly expropriated owners); and to the capital transfers for the asset restructuring at the two insolvent banks (BFV and BTM).

⁴ Total revenue minus expenditure, excluding foreign interest payments and foreign-financed capital expenditure.

Table 23. Madagascar: Central Government Fiscal Indicators, 1997-2001
(In percent of GDP, unless otherwise indicated)

	1997	1998	1999	2000	2001
Total revenue and grants	15.0	14.1	15.0	15.3	13.8
Total revenue	9.7	10.6	11.4	11.7	10.0
Of which: tax revenue	9.4	9.8	11.0	11.3	9.6
Grants	5.3	3.5	3.6	3.6	3.8
Current grants	2.1	0.3	0.7	0.7	1.4
Project grants	3.2	3.2	2.9	2.9	2.4
Total expenditures	17.4	18.8	16.2	15.9	17.3
Current expenditure	10.9	10.5	9.3	9.2	10.2
Noninterest expenditure	6.9	7.4	7.2	6.9	7.9
Personnel	3.7	4.1	4.3	4.0	4.4
Other noninterest expenditure	3.2	3.3	2.9	2.9	3.5
Interest obligations	3.0	2.7	2.1	2.3	2.0
Treasury operations (net) ¹	0.7	0.5	0.2	-0.2	0.2
Emergency expenditures ²	0.2	0.0	0.0	0.2	0.1
Capital expenditure	6.5	8.2	6.9	6.7	7.2
Domestically financed expenditure	1.5	2.3	1.8	2.2	3.1
Foreign-financed expenditure	5.0	5.9	5.1	4.5	4.1
Overall balance (commitment basis, excluding the cost of structural reforms)					
Including grants	-2.4	-4.7	-1.2	-0.6	-3.5
Excluding grants	-7.7	-8.1	-4.8	-4.2	-7.4
Net cost of structural reforms ³	0.0	-1.2	-1.6	-2.2	-0.7
Exceptional revenue	0.0	0.0	0.2	0.1	0.0
Cost of structural reforms	0.0	1.2	1.8	2.3	0.8
Overall balance (commitment basis, including the cost of structural reforms)					
Including grants	-2.4	-5.8	-2.8	-2.8	-4.3
Excluding grants	-7.7	-9.3	-6.4	-6.4	-8.1
Domestic balance ⁴	0.1	-1.1	0.1	-0.5	-2.9
Change in arrears	-0.8	-0.5	0.3	-0.5	-0.1
Total overall balance (cash basis, including grants)	-3.2	-6.3	-2.5	-3.3	-4.4
Financing	3.2	6.3	2.5	3.3	4.4
Foreign (net)	3.8	1.9	1.2	2.7	2.1
Drawings	5.7	3.3	2.2	3.1	2.4
Budget	...	...	...	1.5	0.7
Projects	...	...	...	1.6	1.7
Amortization due	-2.8	-3.3	-2.6	-2.4	-1.9
Change in external arrears	-30.2	0.4	0.1	-0.2	-0.2
External debt relief	31.2	1.4	1.5	2.2	1.9
Financing gap	0.0	0.0	0.0	0.0	0.0
Domestic (net)	-0.7	4.4	1.1	0.5	1.9
Of which: banking system	-0.3	2.6	0.6	0.0	1.5
Privatization receipts	0.0	0.0	0.2	0.2	0.3
Memorandum items:					
Nominal GDP (in billions of Malagasy francs)	18,051	20,343	23,579	26,242	30,334

Sources: Ministry of Economy, Finance, and Budget; and Fund staff estimates.

¹ Includes advanced budgets of quasi-public entities, including port authorities, the post office, government printing office, civil service retirement funds, and correspondent accounts of local authorities.

² For 2000, the government budgetized FMG 69 billion to address exceptional developments related to the resurgence of a cholera epidemic and the devastating effects of three cyclones the year.

³ The net cost of structural reforms comprises (i) as receipts, loan recovery by the debt-recovery unit that holds the nonperforming loans of the two (former) public banks (BTV and BTM) after their assets have been financially restructured; and (ii) as expenditures, those related to civil service reform (i.e., training, bonuses, and wage decompression); to the upgrading of pay and equipment in the justice services; to privatization (severance pay, administrative costs, transfers to the regional development fund that provides grants and concessional loans for basic social infrastructure purposes or to employees affected by privatization, and indemnization payments to formerly expropriated owners); and to the capital transfers for the asset restructuring at the two insolvent banks (BTV and BTM).

⁴ Overall balance, excluding grants, foreign-financed capital expenditures, and foreign interest payments.

Table 24. Madagascar: Budgetary Revenue, 1997-2001
(In billions of Malagasy francs)

	1997	1998	1999	2000	2001
Tax revenue	1,688	1,984	2,580	2,972	2,906
Taxes on net income	329	340	398	467	595
Companies	262	217	207	236	301
Individuals	87	98	190	231	293
Tax on income (IRNS)	20	26	23	27	38
Tax on wages and salaries (IRSA)	67	72	106	126	166
Other	41	38	62	78	90
Taxes on property	27	23	25	31	34
Taxes on goods and services	370	528	662	865	804
Value-added tax (VAT)	178	319	389	513	536
Excises	66	78	128	160	110
Fiscal monopoly profits	112	117	111	179	146
Other	14	14	33	13	12
Taxes on foreign trade	948	1,241	1,481	1,591	1,452
Import duties	941	1,241	1,481	1,591	1,452
Customs duty	132	167	149	123	116
Fiscal duty	235	279	265	241	232
VAT on imports	341	478	624	712	722
Petroleum products	187	280	340	398	272
Other	46	38	15	18	6
Export duties	7	0	0	0	0
Export duty	7	0	0	0	0
Export surcharge	0	0	0	0	0
Other taxes	15	14	14	18	22
Nontax revenue	59	92	87	96	123
Budgetary revenue	1,747	2,077	2,667	3,068	3,029

Source: Ministry of Economy, Finance, and Budget.

Table 25. Madagascar: Current Budgetary Expenditure, 1997-2001

	1997	1998	1999	2000	2001
(In billions of Malagasy francs)					
Economic classification					
Current expenditure	1,960.2	2,146.1	2,175.0	2,402.6	3,081.7
Personnel	669.6	826.4	1,000.6	1,042.4	1,337.6
Other noninterest expenditure	583.0	671.9	679.0	761.8	1,071.5
Goods and services	336.7	318.0	402.2	499.5	686.5
Transfers and subsidies	246.3	353.9	276.8	262.3	385.0
Interest on public debt	548.9	553.8	492.8	612.3	591.9
Foreign interest obligations	503.5	466.5	325.0	371.2	349.1
Domestic interest obligations	45.4	87.3	167.8	241.1	242.8
Treasury operations ¹	120.1	94.0	2.6	-56.5	54.3
Emergency expenditure ²	38.5	0.0	0.0	40.6	25.0
Counterpart funds-financed operations	...	...	...	2.0	1.4
Functional classification					
Budgetary expenditure	1,960.2	2,146.1	2,175.0	2,402.6	3,081.7
General expenditure ³	688.7	635.9	695.0	880.0	1,067.5
Of which: defense	267.4	274.5	282.8	319.7	428.4
Education	258.5	289.0	392.0	555.5	736.6
Of which: universities	67.2	75.2	80.1	91.4	131.6
Health	98.7	141.2	150.3	182.6	265.4
Social and community services	19.3	27.7	34.1	46.3	48.0
Economic services	122.1	120.7	143.2	160.9	163.2
Of which					
Agriculture ⁴	68.7	51.9	55.9	83.2	72.4
Public works	16.5	29.4	41.7	18.8	25.3
Other ⁵	772.9	931.6	760.4	577.3	801.0
Memorandum items:					
(In percent of GDP)					
Noninterest budgetary expenditure	6.9	7.4	7.2	6.9	7.9
Social sector current expenditure ⁶	2.1	2.3	2.5	3.0	3.5
Of which: health	0.5	0.7	0.6	0.7	0.9
Defense	1.5	1.3	1.2	1.2	1.4

Sources: Ministry of Economy, Finance, and Budget; and Fund staff estimates.

¹ Beginning in 1999, treasury revenue is classified as a negative outlay in treasury expenditures, which from then on are reported on a net basis.² For 2000, the government budgetized FMG 69 billion to address exceptional developments related to the resurgence of a cholera epidemic and the devastating effects of recent cyclones.³ Including national defense and security expenditures.⁴ Including livestock, fishing, water, and forestry.⁵ Including revenue sharing with local governments and payments to international organizations.⁶ Including expenditure on education, health, and social and community services.

Table 26. Madagascar : Central Government Capital Expenditure, 1997-2001 ¹

	1997	1998	1999	2000	2001
(In percent of total government capital expenditures)					
General public services	25.0	14.0	20.3	35.2	32.5
Education	6.4	7.0	10.1	4.9	5.4
Health	5.5	7.0	8.1	6.5	4.8
Social and community services	1.7	12.0	1.5	1.7	2.3
Economic services	61.4	60.0	59.8	51.7	55.1
Agriculture ²	24.9	19.0	24.0	20.9	19.9
Industry, energy, and mining	5.6	10.0	5.8	5.2	7.6
Transportation	1.2	4.0	2.6	2.6	1.8
Communication services	0.1	0.0	0.0	0.6	0.4
Public works ³	26.7	26.0	26.5	21.0	24.5
Trade	1.4	1.0	0.4	0.7	0.3
Scientific research	1.4	0.0	0.4	0.7	0.6
Total	100	100	100	100	100
(In billions of Malagasy francs, unless otherwise indicated)					
Budgetary capital expenditure	489.5	815.2	794.5	940.9	1307.7
Domestically financed	208.4	392.1	364.8	599.1	878.3
Foreign loans	281.1	423.1	429.7	341.8	429.4
Extrabudgetary	66.1	64.9	83.8	55.2	63.9
On-lending ⁴	42.1	74.8	86.0	75.3	75.3
External grant	578.8	640.1	670.6	767.8	733.9
Autofinancing	0.0	17.4	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0
Total	1,176.5	1,612.4	1,634.9	1,839.2	2,180.9
(In percent of GDP)	6.5	7.9	7.0	7.0	7.2

Sources: Ministry of Economy, Finance, and Budget; and Fund staff estimates.

¹ On a payment order basis for domestically financed expenditure and on a cash basis for other components.² Including livestock, fishing, water, and forestry.³ Mainly roads, ports, bridges, and other infrastructure.⁴ Foreign loans on-lent by the central government to public enterprises for investment purposes..

Table 27. Madagascar: Central Government Personnel Expenditure and Number of Civil Servants, 1997-2001

(In thousands of Malagasy francs, unless otherwise indicated)

	1997	1998	1999	2000	2001
Personnel expenditure (commitment basis) ^{1,2}	669.6	826.4	1,000.6	1,042.4	1,337.6
Annual change in percent	28.0	23.4	21.1	4.2	28.3
In percent of current budgetary expenditure	34.2	38.5	46.0	43.4	43.4
In percent of total government expenditure	21.3	21.6	26.4	25.0	25.4
In percent of GDP	3.7	4.1	4.3	4.0	4.4
Civil servants (number at end-December) ³					
Civilian	93,971	103,831	113,728	109,603	111,372
Military	21,760	21,760	21,760	21,760	21,491
Total	115,731	125,591	135,488	131,363	132,863
Annual percent change	0.7	8.5	7.9	-3.0	1.1
Memorandum items:					
Average monthly civil servants' salary					
In thousand of Malagasy francs	418.2	467.9	553.4	661.5	701.0
Annual change in percent	11.6	11.9	18.3	19.5	6.0
Annual percent change in real terms ⁴	7.1	5.7	8.4	7.6	-1.4
Total government expenditure (billions of Malagasy francs)	3,137.1	3,819.3	3,790.9	4,168.6	5,262.6
Nominal GDP (billions of Malagasy francs)	18,051.0	20,343.0	23,379.1	26,242.0	30,333.8

Sources: Ministry of Economy, Finance, and Budget; and Fund staff estimates.

¹ Including only regular staff. Expenditure on some categories of temporary personnel is included in goods and services outlays.² Excluding medical expenses.³ Data on actual positions filled, which may differ from other sources.⁴ Annual average percentage change in the average civil servants' salary deflated by the consumer price index.

Table 28. Madagascar: Structure and Adjustment of Public Sector Salaries, 1997-2002
(In thousands of Malagasy francs)

	Jan. 1997 - Dec. 1997	Jan. 1998 - Apr. 1998	May 1998 - Feb. 1999	Mar. 1999 - Feb. 2000	Mar. 2000 - Jan. 2001	Feb. 2001 - Dec. 2001	Starting Jan. 2002
Category I							
Minimum	208.9	239.3	...	267.5	296.9	313.2	354.2
Maximum	287.0	317.5	...	355.0	453.8	496.0	537.0
(midpoint)	248.0	278.4	...	311.3	375.4	404.6	445.6
Category II							
Minimum	242.8	273.5	...	305.7	342.2	369.1	410.1
Maximum	331.1	365.7	...	408.9	566.3	635.2	676.2
(midpoint)	287.0	319.6	...	357.3	454.3	502.2	543.2
Category III							
Minimum	264.2	295.2	328.6	367.3	404.1	435.3	476.3
Maximum	417.7	460.5	484.6	541.8	782.0	878.9	919.9
(midpoint)	341.0	377.9	406.6	454.6	593.1	657.1	698.1
Categories IV and V							
Minimum	308.4	341.4	357.6	399.8	583.1	620.9	661.9
Maximum	559.5	613.0	660.6	702.0	1,145.5	1,254.9	1,295.9
(midpoint)	434.0	477.2	509.1	550.9	864.3	937.9	978.9
Categories VI and VII							
Minimum	350.0	385.6	414.9	452.0	680.7	727.5	768.5
Maximum	619.0	672.6	750.6	818.2	1,448.5	1,587.6	1,628.6
(midpoint)	484.5	529.1	582.8	635.1	1,064.6	1,157.6	1,198.6
Categories VIII and IX							
Minimum	399.4	438.4	491.3	535.6	823.3	882.3	923.5
Maximum	734.9	800.6	926.1	1,044.1	1,744.5	1,902.0	1,943.0
(midpoint)	567.2	619.5	708.7	789.9	1,283.9	1,392.3	1,433.3
Category X							
Minimum	413.0	455.7	511.0	667.1	1,565.0	1,699.4	1740.4
Maximum	898.9	975.3	1,198.9	1,306.8	2,183.5	2221.1	2262.1
(midpoint)	656.0	715.5	855.0	987.0	1874.3	1960.3	2001.3

Sources: Ministry of Economy, Finance, and Budget.

Table 29. Madagascar: Monetary Survey, 1997-2001

(In billions of Malagasy francs: unless otherwise indicated, end of period)

	1997	1998	1999	2000	2001
Net foreign assets	1,771.1	1,172.0	1,711.5	2,006.3	2,571.1
Central bank	1,105.3	596.1	1,055.3	1,170.5	1,787.7
Commercial banks	665.8	576.0	656.2	835.9	783.5
Long-term foreign liabilities	-206.8	-211.2	-261.0	-229.3	-264.2
Central bank	-173.5	-186.1	-190.8	-167.5	-149.0
Commercial banks	-33.3	-25.1	-70.2	-61.7	-115.2
Net domestic assets	2,281.9	3,208.2	3,530.6	4,139.8	5,050.7
Net credit to government	680.1	1,453.3	1,715.0	1,856.5	2,477.1
Net claims on government ¹	584.3	1,325.5	1,560.7	1,563.3	2,047.8
Central bank	387.7	1,031.1	1,220.6	1,162.7	1,207.8
Commercial banks	196.6	294.4	340.0	400.6	840.0
Other claims	95.8	127.8	154.4	293.2	429.2
Credit to the economy	1,814.1	1,828.2	1,955.4	2,415.0	2,778.3
Central bank	15.1	15.9	15.8	111.2	276.4
Commercial banks	1,797.6	1,811.8	1,937.5	2,303.3	2,500.8
Other claims	1.4	0.5	2.1	0.5	1.2
Other items (net)	-212.3	-73.2	-139.9	-131.8	-204.7
Foreign currency adjustment	240.3	225.7	65.9	84.6	55.4
Central bank	59.5	70.9	92.4	190.0	166.0
Commercial banks	-512.2	-369.9	-298.2	-406.4	-426.1
Broad money (M3)	3,846.2	4,169.1	4,981.1	5,916.8	7,357.7
Currency in circulation	1,025.6	1,168.2	1,434.9	1,786.6	2,159.6
Total deposits	2,820.6	3,000.8	3,546.2	4,130.2	5,198.1
Demand deposits	1,658.6	1,801.2	2,145.9	2,342.1	3,266.1
Quasi money	1,161.9	1,199.7	1,400.3	1,788.2	1,932.0
Of which					
Resident deposits in foreign currencies	441.9	474.7	614.5	841.4	773.9
Short-term obligations	70.4	123.8	151.8	169.3	172.7
Memorandum items:					
Net foreign assets	18.6	-15.6	12.9	5.9	9.5
Net domestic assets	1.9	24.1	7.7	12.2	15.4
Net credit to government	-3.3	20.1	6.3	2.8	10.5
Credit to the economy	6.7	0.4	3.1	9.2	6.1
Change from previous year (in percent)	13.4	0.8	7.0	23.5	15.0
Broad money (M3)	19.8	8.4	19.5	18.8	24.4

Sources: Central Bank of Madagascar; and Fund staff estimates.

¹ In 2001, the change in net claims on government differs from the amount indicated in the government operations tables because the latter does not include the assumption by the government of the state petroleum companies' (SOLIMA) debt to the central bank, estimated at FMO 61.8 billion.

Table 30. Madagascar: Summary Accounts of the Central Bank, 1997-2001
(In billions of Malagasy francs, unless otherwise indicated; end of period)

	1997	1998	1999	2000	2001
Net foreign assets	1,105.3	596.1	1,055.3	1,170.5	1,787.7
Foreign assets	1,492.7	926.6	1,486.9	1,866.9	2,644.1
Foreign liabilities (short term)	-18.8	-16.9	-20.1	-13.7	-12.2
Poverty Reduction and Growth Facility	-368.6	-313.6	-411.5	-682.7	-844.2
Long-term foreign liabilities	-173.5	-186.1	-190.8	-167.5	-149.0
Net domestic assets	768.3	1,446.6	1,479.7	1,608.9	1,746.5
Claims on government (net)	387.7	1,031.1	1,220.6	1,162.7	1,207.8
Credit to government	1,253.8	1,689.3	1,857.4	2,023.0	2,096.5
Statutory advances	143.7	107.9	197.3	377.5	448.5
Consolidated loans	1,099.6	1,099.6	1,099.6	1,099.6	1,099.6
Foreign currency loans	0.0	441.0	544.9	533.5	540.1
Other	10.5	40.9	15.5	12.4	8.4
Government deposits	-866.1	-658.2	-636.7	-860.3	-888.7
Claims on public companies and customers	15.1	15.9	15.8	111.2	276.4
Net claims on banks	57.3	102.7	75.1	59.5	40.4
Claims on banks	107.3	102.7	75.1	59.5	40.4
Reverse auctions	-50.0	0.0	0.0	0.0	0.0
Other items (net)	308.2	296.9	168.1	275.5	221.9
Currency valuation adjustment	248.7	226.0	75.7	85.5	56.0
Net capital	-90.8	-90.5	-87.8	-116.3	-116.3
Others	150.3	161.4	180.2	306.3	282.3
Reserve money	1,697.1	1,847.0	2,322.0	2,610.0	3,384.9
Currency outside banks	1,025.6	1,168.2	1,434.9	1,786.6	2,159.6
Currency in banks	26.3	36.8	77.4	78.4	84.9
Bank deposits	645.3	642.0	809.7	745.0	1,140.4
Deposits of other banking institutions	0.0	6.2	16.9	1.7	0.2
Resident deposits in foreign currency	3.0	3.5	5.2	0.1	0.2

Sources: Central Bank of Madagascar; and Fund staff estimates.

Table 31. Madagascar: Summary Accounts of Commercial Banks, 1997-2001
(In billions of Malagasy francs, unless otherwise indicated; end of period)

	1997	1998	1999	2000	2001
Net bank liquidity	1,246.8	1,126.9	1,398.0	1,538.0	1,853.1
Net foreign assets	665.8	576.0	656.2	835.9	783.5
<i>Of which</i> : nonresident nonbank deposits	55.7	89.2	114.9	107.9	101.1
Long-term foreign liabilities	-33.3	-25.1	-70.2	-61.7	-115.2
Reserves	671.5	678.8	887.1	823.4	1,225.3
Currencies in banks	26.3	36.8	77.4	78.4	84.9
Deposits at central bank	645.3	642.0	809.7	745.0	1,140.4
Net recourse to central bank	57.3	102.7	75.1	59.5	40.4
Recourse to central bank	107.3	102.7	75.1	59.5	40.4
Reverse auctions	-50.0	0.0	0.0	0.0	0.0
Net domestic assets	1,473.7	1,736.0	1,969.6	2,296.6	2,914.2
Claims on government (net)	196.6	294.4	340.0	400.6	840.0
Credit to government	356.5	436.4	481.0	606.5	1,182.4
Government deposits	-159.9	-142.0	-140.9	-205.9	-342.4
<i>Of which</i> : deposits of administrative agencies	-155.0	-138.9	-132.6	-197.2	-332.8
Claims on private sector	1,797.6	1,811.8	1,937.5	2,303.3	2,500.8
<i>Of which</i> : in foreign currency	...	36.7	0.0	0.0	0.0
In millions of SDRs	...	4.8	0.0	0.0	0.0
Net capital	-645.9	-399.5	-445.8	-517.9	-620.7
Other items (net)	125.3	29.3	137.9	110.6	194.1
Currency valuation adjustment	-8.4	-0.3	-9.7	-0.9	-0.5
Other	133.7	29.6	147.6	111.5	194.6
Deposits	2,650.1	2,733.1	3,215.8	3,665.3	4,594.5
Demand deposits	1,643.7	1,783.1	2,115.8	2,228.9	3,074.1
Time deposits	567.4	478.8	490.7	595.2	746.7
Foreign currency	439.0	471.3	609.3	841.3	773.7
In millions of SDRs	...	61.9	67.8	98.5	92.9
Short-term bonds	70.4	129.8	151.8	169.3	172.7

Sources: Central Bank of Madagascar; and Fund staff estimates.

Table 32. Madagascar: Foreign Reserve Assets and Liabilities of the Central Bank, 1997-2001

(In millions of SDRs, unless otherwise indicated; end of period)

	1997	1998	1999				2000				2001			
	December		Mar.	Jun.	Sep.	Dec.	Mar.	Jun.	Sep.	Dec.	Mar.	Jun.	Sep.	Dec.
Foreign assets	208.4	121.8	134.4	124.5	140.5	165.5	175.5	148.9	212.5	218.7	243.9	264.2	263.8	317.5
<i>Of which:</i> time deposits	6.6	67.4	30.6	110.5	120.1	121.7	148.4	92.2	156.0	129.4	147.2	149.7	206.1	258.9
Foreign liabilities	54.1	43.4	41.3	38.6	51.0	48.0	46.3	44.8	75.0	81.6	91.6	92.3	91.5	102.8
Nonresident deposits	2.4	1.9	1.3	2.5	1.9	2.1	1.6	1.3	1.6	1.4	1.5	1.9	0.8	0.9
International organizations	0.3	0.3	0.1	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.1	0.1
IMF	51.5	41.2	39.9	36.1	48.9	45.8	44.5	43.2	73.2	80.0	90.0	90.0	90.0	101.4
External payments arrears	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net foreign assets	154.3	78.3	93.0	85.9	89.4	117.5	129.2	104.1	137.5	137.1	152.4	172.0	172.2	214.7
Excluding IMF and arrears	205.8	119.6	133.0	122.0	138.3	163.3	173.8	147.4	210.7	217.1	242.4	262.0	262.2	316.0
Memorandum item:														
Exchange rate: Malagasy francs per SDR	7,161.5	7,608.2	8,194.4	9,003.1	8,774.5	8,984.5	9,437.3	8,779.0	8,735.7	8,537.8	8,617.2	8,430.7	8,136.4	8,327.5

Source: Central Bank of Madagascar.

Table 33. Madagascar: Structure of Market Interest Rates, 1997-2001
(In percent per annum)

Central Bank				Money Market				Treasury Bills					Secondary market (Weighted average)
Base rate	Lending 2-10 days	Overnight lending	Lending on bid	Deposits on bid	Inter- bank	Open market	Primary market						
							4	12	24	Weighted average			
							weeks	weeks	weeks				
(End of period)				(Weighted period average)									
1997	9.0	14.00	16.00	...	6.48	10.27	...	8.13	7.73	9.05	8.34	6.40	
1998	10.00	12.50	14.50	...	5.44	10.46	13.20	9.47	11.29	11.59	11.13	8.39	
1999	15.00	17.50	19.50	...	...	16.11	15.23	12.30	15.15	15.44	14.64	14.99	
2000	12.00	14.50	16.50	...	...	16.61	16.51	12.82	15.27	15.40	14.56	...	
2001	10.50	13.00	15.00	...	...	9.90	...	7.31	10.91	10.98	9.98	...	
2001	Jan.	12.00	14.50	16.50	...	...	12.51	...	11.07	14.05	14.48	13.42	11.10
	Feb.	12.00	14.50	16.50	...	...	13.00	...	10.46	13.90	14.07	13.32	10.68
	Mar.	12.00	14.50	16.50	...	...	12.00	...	9.78	13.35	13.44	12.30	10.14
	Apr.	12.00	14.50	16.50	...	...	...	...	9.12	12.68	12.96	12.20	9.26
	May	12.00	14.50	16.50	...	...	12.00	...	8.11	12.17	12.52	11.62	8.89
	Jun.	10.50	13.00	15.00	...	...	...	...	7.40	10.91	11.35	9.65	7.79
	Jul.	10.50	13.00	15.00	...	...	10.50	...	7.05	9.99	10.19	9.34	7.68
	Aug.	10.50	13.00	15.00	...	...	10.50	...	6.50	9.49	9.70	8.45	8.39
	Sep.	10.50	13.00	15.00	...	...	10.50	...	6.09	9.06	9.41	8.56	7.57
	Oct.	10.50	13.00	15.00	...	...	10.05	...	5.86	8.93	9.20	8.26	8.12
	Nov.	9.00	11.50	13.50	...	...	9.00	...	5.75	9.04	9.19	8.18	7.37
	Dec.	9.00	11.50	13.50	...	...	9.00	...	5.47	8.99	9.11	8.05	5.31
2002	Jan.	9.00	11.50	13.50	...	...	9.00	...	5.50	8.89	9.04	8.19	7.38
	Feb.	9.00	11.50	13.50	...	...	...	...	...	...	...	...	6.67
	Mar.	9.00	11.50	13.50	...	...	...	...	...	...	...	...	...
	Apr.	9.00	11.50	13.50	...	...	...	...	...	...	...	...	5.50
	May	9.00	11.50	13.50	...	...	...	9.44	...	...	...	...	8.93
	Jun.	9.00	11.50	13.50	...	...	...	8.44	...	...	...	...	8.44
	Jul.	9.00	11.50	13.50	...	9.00	9.00	9.50	...	...	...	...	9.47
	Aug.	9.00	11.50	13.50	...	9.00	9.50	9.45	...	...	...	...	8.41
	Sep.	9.00	11.50	13.50	...	...	...	...	...	...	...	...	...
	Oct.	9.00	11.50	13.50	...	...	...	...	11.00	11.90	12.70	12.09	...

Source: Central Bank of Madagascar.

Table 34. Madagascar: Structure of Commercial Bank Interest Rates, 1997-2001
(In percent per annum)

		Base Rate	Lending Rates		Deposit Rates		Lending Rates		Deposit Rates	
			Short term	Medium term	Time and > one year	Foreign currency	Short term	Medium term	Time and > one year	Foreign currency
(Midpoint of the range; end of period) ¹						(Midpoint of weighted averages) ²				
1997		14.01	19.00	17.90	7.25	2.68	19.90	19.36	9.69	1.07
1998		13.50	18.25	17.38	5.00	2.50	17.63	15.47	9.33	1.44
1999		16.50	21.13	17.75	7.50	1.75	18.59	16.58	10.20	1.63
2000		13.42	18.75	17.25	9.00	2.60	20.25	14.93	10.99	1.67
2001		12.10	16.88	15.44	6.50	2.60	17.82	13.98	7.37	1.79
2000	I	15.08	19.50	18.25	9.17	1.78	19.09	16.22	10.79	1.70
	II	16.08	19.50	18.25	8.50	2.60	21.02	14.99	11.16	1.70
	III	15.22	19.00	18.25	9.00	2.60	21.02	14.53	11.28	1.65
	IV	13.42	18.75	17.25	9.00	2.60	19.87	14.00	10.75	1.63
2001	I	13.38	18.25	16.75	8.50	2.25	19.07	14.48	8.30	1.95
	II	13.55	18.25	16.75	8.50	2.60	19.07	14.19	7.81	1.94
	III	12.46	17.75	16.25	7.50	2.75	18.73	13.50	7.11	1.85
	IV	12.10	16.88	15.44	6.50	2.60	14.43	13.74	6.27	1.44
2002	I	11.50	16.63	15.44	7.50	2.60	16.05	12.90	6.62	1.51
	II	12.47	16.63	15.34	7.00	2.60	15.81	12.90	6.68	1.74

Source: Central Bank of Madagascar.

¹ On new business only; reported as a range by commercial banks.

² Calculated by the banks on their outstandings; the midpoint is a simple average of the highest and lowest rates reported by the banks.

Table 35. Madagascar: Issues and Outstandings of Treasury Bills, 1997-2001
(Nominal values, in billions of Malagasy franc, unless otherwise indicated)

		Total Issues				Of Which: Nonbanking Sector ¹				Total Outstanding		Of Which: Nonbanking Sector					
		Treasury announcement ²		Total bid	Per-centage	Bids accepted	Per-centage	Total bid	Per-centage	Bids accepted	Per-centage	Net purchases	Stock at end of period	Net purchases	Stock at end of period	Percentage of total	
		Total	Of which: competitive market ³														
		(1)	(1a)	(1a)(1)	(2)	(2)(1)	(3)	(3)(2)	(4)	(4)(1a)	(5)	(5)(4)	(6)	(7)	(8)	(9)	(9)(7)
1997		1,099.5	1,059.5	96.4	2,909.5	274.6	1,650.0	56.7	286.1	27.0	177.2	61.9	198.4	475.0	49.1	128.3	27.0
1998		2,338.0	1,925.0	82.3	2,901.0	150.7	1,951.2	67.3	845.5	43.9	632.9	74.9	156.1	631.1	163.0	291.3	46.2
1999		2,095.0	1,890.0	90.2	3,282.4	173.7	2,545.1	77.5	1,382.0	72.7	1,084.0	78.8	18.1	649.2	111.9	403.2	62.1
2000		1,810.0	1,550.0	85.6	4,425.3	285.5	3,769.4	85.2	1,674.0	110.5	1,445.0	85.5	331.5	950.7	120.4	523.6	55.1
2001		2,505.0	2,105.0	84.0	7,015.5	333.3	5,536.4	78.9	1,917.9	91.1	1,439.0	75.0	757.6	1,708.3	119.6	643.2	37.7
2000	Jan.	140.0	120.0	85.7	413.0	344.2	312.9	75.8	107.9	89.9	77.8	72.1	99.0	748.2	7.9	411.2	55.0
	Feb.	140.0	120.0	85.7	576.9	480.8	424.4	73.6	191.8	159.8	144.7	75.4	162.8	911.0	57.9	469.0	51.5
	Mar.	210.0	180.0	85.7	444.4	246.9	430.0	96.8	188.4	104.7	182.0	96.6	1.9	912.9	3.4	472.5	51.8
	Apr.	140.0	120.0	85.7	355.1	295.9	305.6	86.1	117.1	97.6	102.3	87.4	63.9	976.8	3.8	476.3	48.8
	May	140.0	120.0	85.7	326.0	271.7	307.6	94.4	159.2	132.7	144.3	90.6	-43.0	933.8	14.4	490.7	52.5
	Jun.	140.0	120.0	85.7	261.5	217.9	244.5	93.5	127.7	106.4	123.2	96.5	-53.0	880.8	7.9	498.6	56.6
	Jul.	130.0	110.0	84.6	162.6	147.8	159.7	98.2	82.6	75.1	79.7	96.5	-75.9	804.9	-9.6	489.0	60.8
	Aug.	140.0	120.0	85.7	223.8	186.5	217.3	97.1	112.3	93.6	112.3	100.0	-59.6	745.3	13.7	502.7	67.5
	Sep.	210.0	180.0	85.7	511.7	284.3	408.1	79.8	145.1	80.6	124.7	85.9	67.0	812.3	-37.5	465.2	57.3
	Oct.	140.0	120.0	85.7	391.4	326.7	297.2	75.9	123.9	103.3	91.9	74.2	43.0	855.3	6.7	471.9	55.2
	Nov.	140.0	120.0	85.7	502.0	418.3	418.9	83.4	191.2	159.3	133.6	69.9	72.7	928.0	6.5	478.4	51.6
	Dec.	140.0	120.0	85.7	256.9	214.1	243.2	94.7	133.8	111.5	120.1	89.8	22.7	950.7	45.3	523.7	55.1
2001	Jan.	150.0	130.0	86.7	283.3	219.5	230.9	80.9	101.8	78.3	80.9	79.5	16.4	967.1	25.4	549.1	56.8
	Feb.	190.0	170.0	89.5	586.6	345.1	461.9	78.7	176.0	103.5	127.8	72.6	88.8	1,055.9	32.6	581.7	55.1
	Mar.	230.0	200.0	87.0	504.9	252.5	430.3	85.2	184.8	92.4	139.2	75.3	56.5	1,112.4	21.6	603.3	54.2
	Apr.	160.0	140.0	87.5	360.3	400.2	387.0	69.1	123.5	88.2	90.2	73.0	104.7	1,217.1	-7.7	395.6	48.9
	May	220.0	190.0	86.4	617.3	324.9	432.1	70.0	190.7	100.4	77.6	49.7	36.7	1,253.8	-49.2	546.5	43.6
	Jun.	170.0	130.0	76.5	773.3	594.8	458.9	59.3	169.3	130.2	90.4	53.4	169.9	1,423.7	-16.6	529.8	37.2
	Jul.	200.0	160.0	80.0	688.5	430.3	523.9	76.1	181.3	113.3	151.5	83.6	42.4	1,466.1	33.9	563.7	38.5
	Aug.	275.0	225.0	81.8	770.0	342.2	666.5	86.6	293.9	130.6	226.4	77.0	13.7	1,479.8	63.7	627.4	42.4
	Sep.	180.0	150.0	83.3	470.9	313.9	399.7	84.9	111.2	74.1	96.0	86.3	57.7	1,537.5	-0.2	627.3	40.8
	Oct.	330.0	290.0	87.9	591.5	204.0	589.2	99.6	111.1	98.3	108.8	98.0	-29.2	1,508.3	-13.8	613.4	40.7
	Nov.	180.0	140.0	77.8	458.2	327.3	389.2	84.9	133.2	95.1	131.0	98.3	36.8	1,545.1	22.9	626.3	41.2
	Dec.	220.0	180.0	81.8	708.7	393.7	566.8	80.6	141.1	78.4	119.2	84.5	163.2	1,708.3	7.0	643.3	37.7

Source: Central Bank of Madagascar.

¹ Competitive market only, since May 16, 1997.

² Since May 16, 1997 only.

³ The noncompetitive segment of the market is open only to intermediaries in the secondary market; bills are sold at a price equal to the average of bids in the competitive auction market.

Table 36. Madagascar: Microfinance Institutions, Key Indicators, 2000-01

	Number of Branches		Number of Members		Own Capital and Long-Term Resources (millions of Malagasy francs)		Deposits (millions of Malagasy francs)		Loans Outstanding (millions of Malagasy francs)		Nonperforming Loans (NPL) (millions of Malagasy francs)	
	12/31/00	12/31/01	12/31/00	12/31/01	12/31/00	12/31/01	12/31/00	12/31/01	12/31/00	12/31/01	12/31/00	12/31/01
CECAM¹												
YAKINANKARATRA	46.0	45.0	8,359.0	61,248.0	2,567.9	4,351.4	1,369.3	2,841.8	2,861.3	4,147.7	17.9	128.0
AMORONT' MANIA	22.0	21.0	3,576.0	4,686.0	1,408.0	2,273.2	277.0	402.0	1,556.6	2,312.0	71.3	21.5
BONGOLAVA	15.0	14.0	5,477.0	5,313.0	3,842.0	3,921.8	648.8	414.4	2,718.1	2,063.5	357.4	205.3
ITASY	22.0	22.0	5,153.0	581	1,824.4	2,354.7	954.5	745.6	2,734.4	2,170.8	202.8	57.3
VON IME RINA	25.0	27.0	4,628.0	5,813.0	3,801.8	3,589.8	481.9	581.1	3,560.5	2,014.2	534.2	450.8
SOFIA	25.0	29.0	5,980.0	1,898.3	1,898.3	3,013.4	159.9	298.1	1,526.5	2,385.5	22.5	164.3
Total CECAM	155.0	158.0	33,183.0	40,532.0	15,342.4	19,603.7	3,782.4	5,283.0	14,957.4	15,712.9	1,206.1	1,027.4
Credits/deposits (in percent)	...	...	...	...	...	...	...	...	395.5	297.4	...	...
NPL/loans (in percent)	...	...	...	...	...	...	...	...	...	...	8.1	6.5
TIAVO¹												
Total TIAVO	24.0	27.0	4,819.0	6,223.0	170.9	2,807.1	1,271.5	1,804.9	1,063.8	881.8	125.0	47.0
Credits/deposits (in percent)	...	...	...	...	...	...	...	...	83.7	48.9	...	...
NPL/loans (in percent)	...	...	...	...	...	...	...	...	...	...	23.6	30.0
OTIV¹												
ANTANANARIVO	12.0	16.0	9,891.0	14,886.0	462.8	741.9	3,753.6	5,370.4	1,815.2	1,213.7	746.7	442.4
TOAMASINA	38.0	39.0	17,979.0	25,264.0	2,187.4	5,178.9	10,548.7	19,817.1	6,768.0	9,732.0	1,175.4	1,470.6
AMBATONDRKAZAXA	12.0	12.0	9,886.0	10,192.0	2,316.6	1,640.5	4,503.5	5,180.1	4,011.2	3,106.3	1,446.0	2,357.1
SAVA	18.0	18.0	8,510.0	11,285.0	1,207.7	1,928.7	9,209.5	17,209.2	2,743.7	1,944.0	141.3	500.0
Total OTIV	80.0	85.0	45,466.0	61,627.0	6,174.5	9,490.0	28,155.3	47,376.8	14,838.1	15,996.2	3,499.4	4,800.1
Credits/deposits (in percent)	...	...	...	...	...	...	...	...	52.7	33.8	...	...
NPL/loans (in percent)	...	...	...	...	...	...	...	...	...	...	23.6	30.0
AECA¹												
TAFITA	45.0	27.0	2,011.0	1,925.0	811.6	674.1	70.4	94.6	338.3	566.1	10.9	565.9
AVOIRA	18.0	18.0	1,114.0	1,073.0	550.4	416.5	51.7	29.4	250.5	430.4	38.9	429.8
TSARAJ ORG	9.0	9.0	1,419.0	1,570.0	105.3	105.3	88.7	88.7	691.8	302.2	...	...
Total AECA	54.0	54.0	4,544.0	4,568.0	1,382.0	1,197.9	122.1	213.2	1,270.6	1,298.7	49.8	995.7
Credits/deposits (in percent)	...	...	...	...	...	...	...	...	1,040.6	609.2	...	...
NPL/loans (in percent)	...	...	...	...	...	...	...	...	...	...	3.9	76.7
ADEFI¹												
Total ADEFI	23.0	29.0	3,942.0	4,027.0	11,377.4	11,944.2	677.5	1,071.5	10,936.9	12,412.1	61.3	109.3
Credits/deposits (in percent)	...	...	...	...	...	...	...	...	1,614.3	1,158.4	...	...
NPL/loans (in percent)	...	...	...	...	...	...	...	...	...	...	0.6	0.9
Grand total	336.0	353.0	91,954.0	116,977.0	34,447.2	45,042.9	34,008.8	55,749.4	43,066.8	45,301.7	4,941.6	6,979.5
Credits/deposits (in percent)	...	...	...	...	...	...	...	...	126.6	83.1	...	...
NPL/loans (in percent)	...	...	...	...	...	...	...	...	...	...	11.5	15.1

Source: Madagascar Banking and Financial Supervision Commission.

¹ CECAM: Caisse d'Epargne et de Crédit Agricole Mutuelle; TIAVO: Tabiky Ihamonjiana Amin'ny Voto; OTIV: Ombon-tahiry Ihampianborana; AECA: Associations d'Epargne et de Crédit Auto-gérées; and ADEFI: Actions pour le Développement et le Financement des Micro-Entreprises.

Table 37. Madagascar: Summary Balance of Payments, 1997-2001
(In millions of SDRs, unless otherwise indicated)

	1997	1998	1999	2000	2001
Current account	-142.7	-205.0	-147.2	-164.6	-46.4
Goods and services	-208.2	-213.8	-210.7	-214.8	-114.3
Trade balance	-127.1	-110.5	-115.9	-78.6	11.6
Exports	368.5	385.0	427.1	628.5	757.9
Imports	-495.6	-495.5	-543.0	-707.1	-746.3
Net services	-81.1	-103.3	-94.8	-136.2	-125.9
Services, receipts	194.1	208.1	238.5	270.9	276.3
Services, payments	-275.2	-311.4	-333.3	-407.1	-402.2
Income	-66.6	-54.2	-31.1	-52.5	-46.7
Receipts	14.2	18.0	15.1	16.6	18.7
Payments	-80.8	-72.2	-46.2	-69.1	-65.4
Of which: dividends	-5.0	-5.0	-6.4	-20.0	-30.0
interest	-75.8	-67.2	-39.8	-40.1	-44.4
Of which: government interest	-71.7	-63.2	-38.0	-38.8	-41.4
Current transfers	132.1	63.0	94.6	102.6	114.6
Government	57.8	12.6	25.8	25.5	24.9
Budget aid	45.7	8.1	20.8	16.5	36.7
Other (net) ¹	12.1	4.5	5.0	9.0	-11.8
Private	74.3	50.4	68.8	77.1	89.7
Capital and financial account	162.3	78.3	137.3	82.3	67.6
Capital transfers	77.6	73.5	94.2	87.0	88.6
Government	82.4	73.5	94.2	87.0	88.6
Project grants	82.4	73.5	94.2	87.0	88.6
Other	0.0	0.0	0.0	0.0	0.0
Private sector	-4.8	0.0	0.0	0.0	0.0
Financial account	64.1	24.4	41.8	36.6	91.1
Direct investment	10.0	11.9	42.7	52.9	73.1
Of which: privatization receipts	0.0	0.7	15.4	5.3	10.9
Portfolio investments	0.0	0.0	0.0	0.0	0.0
Other	54.1	12.5	-0.9	-16.3	18.0
Government	78.1	0.5	-2.1	8.7	21.5
Drawings	155.5	90.2	75.0	86.9	90.2
Of which: project drawings	54.0	64.0	56.5	46.2	60.4
budgetary support	98.3	19.3	11.6	39.3	26.8
Amortization	-77.4	-89.7	-77.1	-78.2	-68.7
Private sector (net)	-5.4	-5.3	-1.3	0.0	-7.3
Banks (net)	-18.6	17.3	2.4	-25.0	3.8
Other (including errors and omissions) ²	20.7	-19.6	1.3	-41.3	-112.2
Of which: indemnification	0.0	-2.5	-4.5	-4.9	-3.3
Overall balance	19.7	-126.6	-9.9	-82.3	21.1

Table 37. Madagascar: Summary Balance of Payments, 1997-2001 (concluded)
(In millions of SDRs, unless otherwise indicated)

	1997	1998	1999	2000	2001
Financing	-19.7	126.6	9.9	82.3	-21.1
Net foreign assets (increase -)	-39.5	76.6	-34.0	28.4	-76.9
Use of Fund credit (net)	0.7	-10.3	9.7	34.8	21.4
Purchase	13.6	0.0	13.6	38.6	22.7
Repurchases	-12.9	-10.3	-3.8	-3.8	-1.3
Other assets (net, increase -)	-40.2	86.9	-43.7	-6.3	-98.3
Net change in arrears (excluding the central bank)	-783.2	12.0	3.1	-5.7	0.0
Arrears accumulation	47.4	18.1	3.1	0.0	0.0
Repayment of arrears	-72.1	-6.1	0.0	-5.7	-8.1
Rescheduling of arrears	-758.5	0.0	0.0	0.0	8.1
Debt relief and cancellation	803.0	38.0	40.8	59.6	55.8
Current maturities	44.5	38.0	40.8	59.6	55.8
Arrears	758.5	0.0	0.0	0.0	0.0
Residual financing gap	0.0	0.0	0.0	0.0	0.0
Of which: Paris Club	0.0	0.0	0.0	0.0	0.0
Memorandum items:					
External current account / GDP ¹ (in percent)					
Excluding net official transfers	-7.8	-7.9	-6.4	-6.5	-2.0
Including net official transfers	-5.5	-7.4	-5.4	-5.6	-1.3
Scheduled debt service ² (before debt relief)	27.2	26.4	17.6	13.2	10.9
Scheduled debt service ² (after debt relief)	19.3	20.0	11.4	6.5	3.7
Public sector scheduled debt service ⁴ (before relief)	58.0	52.1	34.9	31.3	25.4
Annual percentage changes					
Export volume	-1.6	9.5	17.2	26.3	9.5
Import volume	13.7	7.3	8.7	19.3	6.6
Real GDP	3.7	3.9	4.7	4.8	6.0
Gross official reserves	208.4	121.8	165.5	218.7	317.5
(weeks of goods and nonfactor services imports)	14.1	7.8	9.8	10.2	14.4
(excluding privatization receipts)	21.9	12.7	14.4	15.7	21.4

Sources: Central Bank of Madagascar; and Fund staff estimates.

¹ Other official grants less payments due to scholarships and contributions to international organizations.

² Includes commercial credits received or granted.

³ In percent of exports of goods and nonfactor services, before rescheduling.

⁴ In percent of government revenue, before rescheduling.

Table 38. Madagascar: Composition of Exports, f.o.b., 1997-2001
(Unless otherwise indicated, values in millions of SDRs, volumes in thousands of tons,
and unit values in SDRs per kilogram)

	1997	1998	1999	2000	2001
Coffee					
Value	23.9	29.4	21.9	6.2	2.5
Volume	25.9	30.0	27.9	13.0	6.2
Unit price	0.9	1.0	0.8	0.5	0.4
Vanilla					
Value	6.9	11.8	20.2	44.2	128.8
Volume	0.7	0.7	1.3	1.1	1.6
Unit price	10.7	17.3	15.2	39.8	78.5
Cloves					
Value	8.9	6.9	12.0	34.5	75.4
Volume	15.8	9.9	7.8	14.9	20.2
Unit price	0.6	0.7	1.5	2.3	3.7
Pepper					
Value	2.1	0.9	1.7	1.1	1.1
Volume	0.9	0.4	0.6	0.6	0.7
Unit price	2.3	2.5	2.8	1.8	1.5
Shellfish					
Value	46.8	50.9	57.8	60.8	72.7
Volume	8.0	8.5	12.2	11.5	12.0
Unit price	5.8	6.0	4.7	5.3	6.1
Sugar					
Value	8.2	5.0	9.0	4.4	5.4
Volume	20.6	11.6	31.2	14.0	21.0
Unit price	0.4	0.4	0.3	0.3	0.3
Meat					
Value	0.9	0.1	0.01	0.1	0.0
Volume	0.6	0.0	0.0	0.1	0.0
Unit price	1.4	1.0	1.1	0.8	2.1
Cocoa					
Value	0.6	1.0	0.9	2.0	2.5
Volume	0.7	0.9	1.0	2.3	3.2
Unit price	0.9	1.1	0.9	0.9	0.9
Cotton cloth					
Value	12.3	28.1	21.5	27.6	17.5
Volume	2.5	6.5	4.4	4.4	6.0
Unit price	5.0	4.3	4.9	6.3	2.9
Sisal					
Value	1.4	1.2	1.5	1.5	2.7
Volume	3.8	2.7	4.6	5.3	11.2
Unit price	0.4	0.4	0.3	0.3	0.2

Table 38. Madagascar. Composition of Exports, f.o.b., 1997-2000 (concluded)
(Unless otherwise indicated, values in millions of SDRs, volumes in thousands of tons,
and unit values in SDRs per kilogram)

	1997	1998	1999	2000	2001
Petroleum products					
Value	10.6	8.0	9.8	17.2	20.0
Volume	162.9	159.9	152.3	163.2	103.4
Unit price	0.1	0.1	0.1	0.1	0.2
Chromite					
Value	6.5	5.8	3.3	4.2	5.1
Volume	117.8	115.2	96.2	91.8	125.0
Unit price	0.1	0.1	0.0	0.0	0.0
Graphite					
Value	5.0	5.0	3.2	4.4	3.1
Volume	14.0	13.1	9.2	13.7	9.6
Unit price	0.4	0.4	0.4	0.3	0.3
Essence of cloves					
Value	3.8	2.8	3.1	4.2	9.2
Volume	1.4	1.0	1.2	1.3	1.1
Unit price	2.7	2.7	2.7	3.3	8.2
Other items (including reexports)					
Value	94.9	84.9	97.2	168.3	144.7
Volume	0.8	0.8	0.9	1.5	1.3
Unit price	116.0	104.6	102.4	110.8	108.2
Exports of the export processing zone (EPZ)					
Value	135.8	143.4	163.8	248.1	267.2
Volume	1.2	1.4	1.6	2.2	2.5
Unit price	116.0	104.6	102.4	110.8	108.2
Total value	368.5	385.0	427.1	628.5	757.9
(percentage change)	2.2	4.5	10.9	47.2	20.6
Memorandum items:					
Traditional exports¹	41.8	51.9	48.9	55.9	207.8
In percent of total	11.4	13.6	11.5	8.9	27.4
Nontraditional exports²	324.9	330.7	377.0	572.7	550.1
In percent of total	88.6	86.4	88.5	91.1	72.6
Manufactured exports³	251.8	262.0	291.1	461.1	449.3
In percent of total	68.7	68.5	68.4	73.4	59.3

Sources: Central Bank of Madagascar; and Fund staff estimates.

¹ Value; comprises coffee, vanilla, cloves, and pepper.

² Value; comprises cotton cloth, petroleum, other items, and EPZ exports.

³ Value; comprises EPZ exports, cotton cloth, petrol, and other items.

Table 39. Madagascar: Composition of Imports, c.i.f., 1997-2001

	1997	1998	1999	2000	2001
(In millions of SDRs)					
Food	35.3	39.9	33.5	58.4	65.7
Rice	12.3	12.8	9.5	30.7	36.8
Other	23.0	27.1	24.0	27.7	29.0
Energy (petroleum)	84.9	74.8	90.2	160.4	131.8
Equipment goods	106.3	109.6	117.1	126.6	128.7
Raw materials and spare parts	100.0	91.2	97.6	123.1	103.1
Consumer goods	88.3	108.1	112.8	85.4	103.9
Other imports (including EPZ) ¹	168.3	159.3	198.9	278.1	344.8
Total imports, c.i.f.	583.0	582.9	645.0	831.9	878.0
Total imports, f.o.b.	495.6	495.5	543.0	707.1	746.3
(In percent of total imports, c.i.f.)					
Food	6.1	6.8	5.2	7.0	7.5
Rice	2.1	2.2	1.5	3.7	4.2
Other	3.9	4.6	3.7	3.3	3.3
Energy (petroleum)	14.6	12.8	14.0	19.3	15.0
Equipment goods	18.2	18.8	18.2	15.2	14.7
Raw materials and spare parts	17.1	15.6	15.1	14.8	11.7
Consumer goods	15.1	18.5	17.5	10.3	11.8
Other imports (including EPZ) ¹	28.9	27.3	30.0	33.4	39.3
Total imports, c.i.f.	100.0	100.0	100.0	100.0	100.0

Sources: Central Bank of Madagascar; and Fund staff estimates.

¹ Includes the imports of the enterprises set up in the export processing zone (EPZ) and enterprises under special tax regimes (ARD).

Table 40. Madagascar: Direction of Trade, 1997-2001 ¹
(In percent of total)

	1997	1998	1999	2000	2001
Exports, f.o.b.	100.0	100.0	100.0	100.0	100.0
European Union	54.2	56.6	43.3	46.5	33.3
<i>Of which:</i> France	34.1	39.6	34.5	39.8	29.7
Other Europe	3.6	2.0	0.4	1.4	0.9
United States	4.7	5.9	5.4	22.5	13.9
Asia and the Middle East	11.9	8.7	17.1	11.8	12.6
<i>Of which:</i> Japan	3.2	1.9	1.4	0.8	0.6
Africa	13.0	12.4	16.8	5.1	4.6
<i>Of which:</i> Mauritius	4.9	6.9	4.1	2.3	2.6
Réunion (France)	5.5	3.8	3.2	1.6	1.4
Other countries	12.5	14.4	16.9	12.7	34.7
Imports, c.i.f.	100.0	100.0	100.0	100.0	100.0
European Union	41.7	40.2	38.8	18.8	27.8
<i>Of which:</i> France	26.0	24.1	26.8	14.6	21.5
Other Europe	1.1	1.6	0.8	0.5	0.8
United States	5.1	4.0	3.9	5.9	4.2
Asia and the Middle East	22.7	27.8	27.5	23.3	23.8
<i>Of which:</i> Iran, Islamic Republic of	2.2	7.1	0.0	0.0	0.1
China	4.9	4.7	0.1	6.9	9.1
Japan	7.0	6.2	6.6	2.9	4.4
Africa	8.2	8.3	5.4	6.0	4.3
<i>Of which:</i> Mauritius	1.0	1.1	1.6	1.5	2.9
Réunion (France)	0.2	0.1	0.1	0.1	0.2
South Africa	6.3	6.0	...	4.0	5.5
Other countries	21.2	18.1	23.7	45.6	39.1

Source: Central Bank of Madagascar.

¹ Problems with the classification of local purchases and sales of export processing zone enterprises prevented the authorities from providing consistent export data for 1999 and import data for 1999 and 2000.

Table 41. Madagascar: Balance of Services, 1997-2001
(In millions of SDRs, unless otherwise indicated)

	1997	1998	1999	2000	2001
Credit	200.3	217.2	244.9	279.3	286.5
Freight and insurance on goods	3.3	3.5	4.0	4.8	8.0
Other transport	40.4	42.8	39.1	35.0	40.2
Travel	52.9	65.5	72.8	91.9	90.2
Investment income	5.7	9.5	6.6	8.4	10.2
Other services, public	20.9	19.6	26.9	38.7	60.6
Other services, private	77.1	76.3	95.6	100.6	77.3
Debit	321.6	385.2	374.1	470.8	485.6
Freight and insurance on goods	79.2	78.6	78.8	104.0	119.8
Percent of imports, c.i.f.	13.6	13.5	12.2	12.5	13.6
Other transport	34.3	33.6	37.3	57.1	62.3
Travel	56.9	84.8	81.4	87.9	102.1
Investment income	44.8	72.2	46.2	63.7	83.4
Interest	39.8	67.2	39.8	43.7	44.4
Dividends	5.0	5.0	6.4	20.0	30.0
Other services, public	69.4	78.2	87.0	96.0	68.0
Government expenditures	10.7	14.8	17.4	19.6	20.8
Services linked to project loans and grants	58.7	63.4	69.6	76.4	47.2
Other services, private	37.0	37.9	43.4	62.1	50.0
Net services	-121.3	-168.0	-129.2	-191.5	-199.1
Nonfactor services	-82.2	-115.4	-89.6	-136.2	-125.9
Factor services	-39.1	-52.6	-39.6	-55.3	-73.2

Sources: Central Bank of Madagascar; and Fund staff estimates.

Table 42. Madagascar: Stock of External Debt, 1997-2001
(In millions of SDRs, unless otherwise indicated)

	1997	1998	1999	2000	2001
Medium- and long-term official debt	2,448.9	2,473.2	2,562.4	2,668.8	2,633.3
Bilateral creditors	1,187.2	1,173.1	1,173.4	1,163.9	1,108.1
Paris Club ¹	1,169.7	1,153.9	1,144.7	1,136.2	1,080.4
Other countries	17.6	19.3	28.6	27.7	27.7
International organizations	1,256.6	1,296.5	1,386.8	1,502.6	1,522.0
IMF	51.5	41.2	45.8	80.0	101.4
Others	1,205.2	1,255.3	1,341.0	1,422.7	1,420.6
Of which: World Bank Group	903.4	953.0	1,020.7	1,094.1	1,092.7
African Development Bank	28.6	23.5	23.5	248.6	23.0
African Development Fund	189.2	194.4	194.4	229.5	304.9
Private creditors	5.0	3.6	2.3	2.3	3.2
Commercial banks	0.7	0.5	0.4	2.3	3.2
Others	4.3	3.1	1.9	0.0	0.0
Total arrears	409.4	355.7	386.2	455.0	499.1
Paris Club ¹	75.3	4.2	40.0	89.9	140.3
Other bilateral creditors	301.0	317.0	312.3	345.3	340.8
International organizations	1.0	0.0	0.0	0.0	0.1
Private creditors	32.1	34.5	33.9	19.8	17.9
Total external debt outstanding ²	2,858.3	2,828.9	2,948.6	3,123.9	3,132.4
Memorandum items:					
Total external debt/GDP (in percent)	111.1	102.6	108.3	106.4	88.1
Total external debt (in percent of exports of goods and nonfactor services)	509.2	479.2	437.5	346.8	311.7
Total debt to official creditors after debt relief	2,821.2	2,790.8	2,912.5	3,101.7	3,111.3

Sources: Central Bank of Madagascar; and Fund staff estimates.

¹ Reflects Paris Club flow rescheduling on Naples terms obtained for the period January 1997- July 2000 and assumes that agreements with all Paris Club creditors became effective in 1997.

² After traditional debt relief (Naples flow rescheduling of 1997).