July 2007
IMF Country Report No. 07/236

Republic of Madagascar: 2007 Article IV Consultation—Staff Report; Staff Statement; Public Information Notice on the Executive Board Discussions; and Statement by the Executive Director for Republic of Madagascar

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2007 Article IV consultation with the Republic of Madagascar, the following documents have been released and are included in this package:

- the staff report for the 2007 Article IV consultation, prepared by a staff team of the IMF, following discussions that ended on March 21, 2007 with the officials of Republic of Madagascar on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on June 7, 2007. The views expressed in the staff report are those of the staff team and do not necessarily reflect the views of the Executive Board of the IMF;

- a staff statement of June 25, 2007 updating information on recent developments;

- a Public Information Notice (PIN) summarizing the views of the Executive Board as expressed during its June 25, 2007 discussions of the staff report that concluded the Article IV consultation; and

- a statement by the Executive Director for the Republic of Madagascar.

The document listed below has been or will be separately released.

Selected Issues Paper

The policy of publication of staff reports and other documents allows for the deletion of market-sensitive information.

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INTERNATIONAL MONETARY FUND

REPUBLIC OF MADAGASCAR

Staff Report for the 2007 Article IV Consultation

Prepared by the African Department
(In consultation with other departments)

Approved by Thomas Krueger and Anthony Boote

June 6, 2007

- Discussions for the 2007 Article IV consultation were held in Antananarivo during March 8–21, 2007 and in Washington during April 11–14, 2007. The mission consisted of Messrs. Ames (head), Ellyne, Josz (all AFR) and Hallaert (PDR). It was assisted by Mr. van den Boogaerde, the Fund's Resident Representative, and overlapped with a Financial Sector Strategy Assessment follow up mission headed by Mr. van der Vossen (MCM). The mission met with the Prime Minister, the Minister of Finance and Budget, the Governor of the Central Bank, and other senior government officials, as well as representatives from the parliament, private sector, non-government organizations, press, and donor community.
- During the 2005 Article IV which was completed on June 1, 2005, Executive Directors commended the authorities' ownership of economic policies and track record. They stressed the importance of containing inflation and improving revenue performance.
- Directors on July 21, 2006, approved the authorities' request for a three-year arrangement under the Poverty Reduction and Growth Facility (PRGF) equivalent to 45 percent of quota and the activation of the Trade Integration Mechanism. The program focuses on raising tax revenues, improving public expenditure management, and lowering inflation to single digits. The first review was completed on December 20, 2006.
- Madagascar has accepted the obligations of Article VIII, Sections 2, 3, and 4 of the IMF's Articles of Agreement and maintains an exchange system free of restrictions on the making of payments and transfers for current international transactions (see Informational Annex). The Malagasy exchange rate regime is classified as a managed float with no predetermined path.
- Madagascar's outstanding use of Fund resources through March 2007 amounted to SDR 27.1 million (22.1 percent of quota). It reached the completion point under the Enhanced Heavily Indebted Poor Countries (HIPC) Initiative in October 2004 and received debt relief from the IMF under the Multilateral Debt Relief Initiative (MDRI) in January 2006.
- Relations with the Fund, relations with the World Bank Group, and statistical issues are presented in an informational annex to this report.

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Appendix

Abbreviations and Acronyms

AfDB	African Development Bank
BCM	Central Bank of Madagascar
DSA	Debt Sustainability Analysis
EITI	Extractive Industries Transparency Initiative
FAD	Fiscal Affairs Department
FDI	Foreign direct investment
FTA	Free trade area
HIPC	Heavily indebted poor countries
JIRAMA	Jiro Sy Rano Malagasy (national public utility company)
IFC	International Finance Corporation
MAP	Madagascar Action Plan
MCC	Millennium Challenge Corporation
MCM	Monetary and Capital Markets Department
MDGs	Millennium Development Goals
MDRI	Multilateral Debt Relief Initiative
MID	Interbank Foreign Exchange Market
MFA	Multi Fiber Arrangement
MFI	Microfinance institutions
MFN	Most favored nation
MOFB	Ministry of Finance and Budget
NFA	Net foreign assets
NPV	Net present value
PC	Performance criterion
PFM	Public financial management
PRGF	Poverty Reduction and Growth Facility
REER	Real effective exchange rate
SADC	Southern African Development Community
SSA	Sub-Saharan Africa
SIGFP	Système d'information de gestion des finances publiques (Public finance management information system)

EXECUTIVE SUMMARY

- Madagascar suffered for decades from macroeconomic instability and slow economic growth. Although inflation has been reduced, poverty remains high and growth inadequate to meet the Millennium Development Goals (MDGs).
- The new poverty reduction strategy entitled the Madagascar Action Plan (MAP) presents a vision for addressing the key structural and other problems that have hindered economic development. Key to the realization of the MAP's objectives will be advancements in domestic revenue mobilization and scaling up of donor assistance.
- Against this background, the Article IV consultation discussions centered on four main themes: (i) managing the changing medium-term outlook; (ii) preserving macroeconomic stability; (iii) improving public sector efficiency and transparency; and (iv) fostering private sector growth.
- The authorities intend to base their policies on the more conservative baseline scenario underpinning their PRGF-supported program until higher levels of external financing materialize. This scenario takes into account projected foreign direct investment (FDI) inflows arising from large projects in the mining sector. The domestic spending component of this FDI is placing appreciation pressures on the exchange rate and poses significant challenges for competitiveness and macroeconomic management.
- In order to maintain macroeconomic stability, the authorities need to continue to pursue a monetary policy that is consistent with their foreign reserves and single-digit inflation targets, and a prudent fiscal policy that minimizes recourse to domestic financing. The authorities' exchange rate policy of managed float with no predetermined path remains appropriate.
- Strengthening public financial management and transparency will require steadfast implementation of tax policy and administration reforms, improvements in budget execution and control, adherence to the principles of the Extractive Industry Transparency Initiative (EITI), a financially sound central bank, and enhancement of data collection and management.
- Improving infrastructure (including electricity) will be key to fostering private sector development. Financial intermediation also needs to be broadened and deepened, and access to credit expanded. Continued liberalization on a most favored nation (MFN) basis along with regional integration should also boost growth and exports.
- The authorities have requested a delay in Executive Board consideration of the second review under the PRGF arrangement in order to allow the independent anti-corruption office to complete its audit of deviations from customs clearance and valuation procedures.

I. Background and Key Challenges

1. **Madagascar is one of the poorest countries in sub-Saharan Africa (SSA).** It ranks 146 out of 177 on the U.N. Human Development index and has performed poorly relative to other SSA countries on most macroeconomic indicators (Figure 2). Poverty remains high and progress toward achieving the MDGs has been uneven (Figures 1 and Table 10).

Madagascar and Sub-Saharan African Countries: Macroeconomic Indicators, 1997–2006

	1997–2003		2004–2006	
	Madagascar	Sub-Saharan Africa [1]	Madagascar	Sub-Saharan Africa [1]
	(Annual percent change)			
Real GDP	2.9	3.7	4.9	6.4
Real per capita GDP	-0.1	1.2	1.9	3.9
CPI (period average)	7.4	21.6	14.4	15.9
	(Percent of GDP, unless otherwise indicated)			
Broad money	20.3	25.4	19.8	27.0
Private sector credit [2]	9.2	14.6	10.2	14.4
Tax revenue	9.8	17.3	10.6	20.7
Fiscal balance, excluding grants	-8.3	-5.7	-11.5	-2.6
Current account balance, excluding grants	-6.4	-7.3	-11.7	-4.4
Gross official reserves (months of imports of goods and services)	2.8	3.9	2.9	4.1
Total investment	15.5	18.5	23.9	19.9

Source: National authorities and IMF staff estimates.
[1] Weighted average, excluding South Africa and Nigeria.
[2] For sub-Saharan Africa, data start in 2001.

2. **The mission took place following the re-election of President Ravalomanana, the appointment of a new government, and the launch of the MAP.**[1] The President retained key Ministers from the previous government, including the Minister of Finance and Budget. The MAP provides the authorities' overall strategic framework for accelerating growth and reducing poverty in line with the MDGs and is complemented by more specific sector strategies and actions plans.[2]

3. **Madagascar is prone to exogenous shocks which disrupt economic activity.** Volatility in key commodity prices (notably for oil and vanilla) (Figure 2.1), the termination of the textile quota in early 2005, and the expected termination of the third party provision under the U.S. Africa Growth and Opportunity Act have created uncertainty regarding trade flows. The country is also vulnerable to weather-related shocks, such as the severe tropical storms and flooding that hit Madagascar in late December 2006 and in early 2007 and the drought that affected the southern part of the country.

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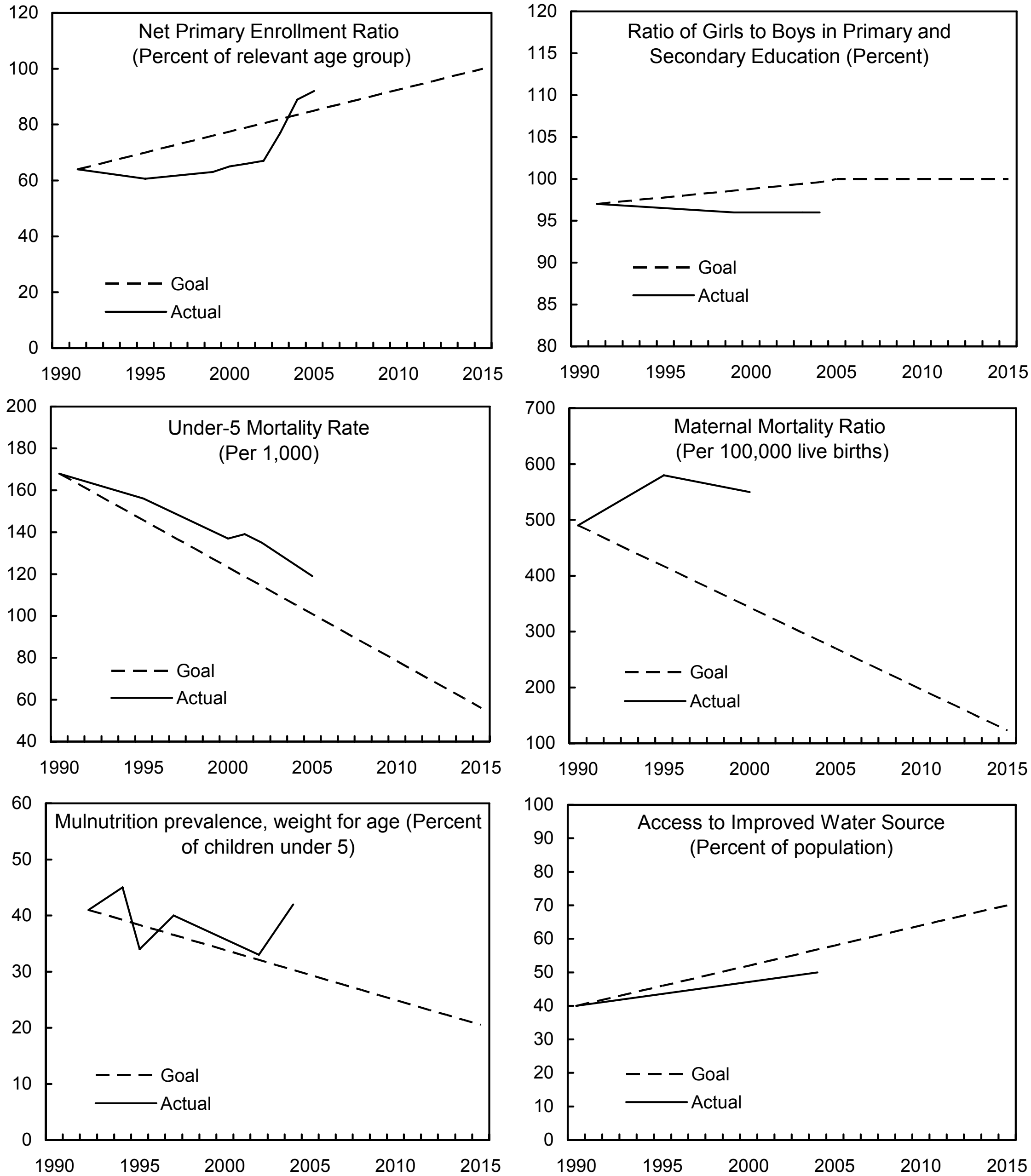
[1] The Madagascar Action Plan (IMF Country Report 07/59, February 5, 2007).

[2] See also the forthcoming Joint Staff Advisory Note on the Madagascar Action Plan (www.imf.org).

Figure 1. Madagascar: Progress Toward Millennium Development Goals, 1990–2015
(Percent, unless otherwise indicated)

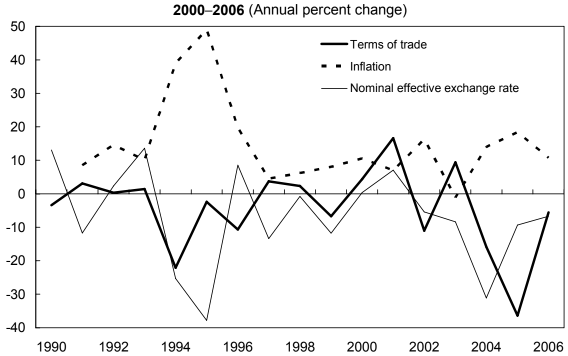


Source: World Bank, http://ddp-ext.worldbank.org; and United Nations, http://unstats.un.org.

Figure 2. Madagascar: Major Economic Challenges

External volatility and high inflation...

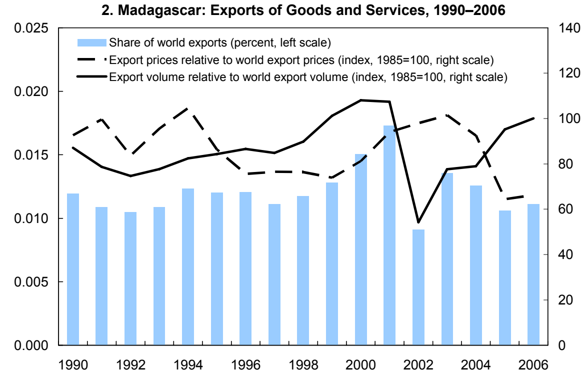
1. Madagascar: Terms of Trade, Nominal Effective Exchange Rate, and Inflation, 2000–2006 (Annual percent change)



Sources: Malagasy authorities and IMF staff estimates.

...contribute to variable export performance...

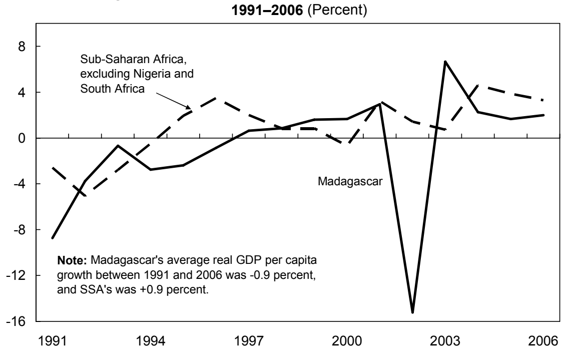
2. Madagascar: Exports of Goods and Services, 1990–2006



Source: National authorities; IMF World Economic Outlook; and IMF staff estimates.

...and per capita economic growth has remained weak and below the average for SSA.

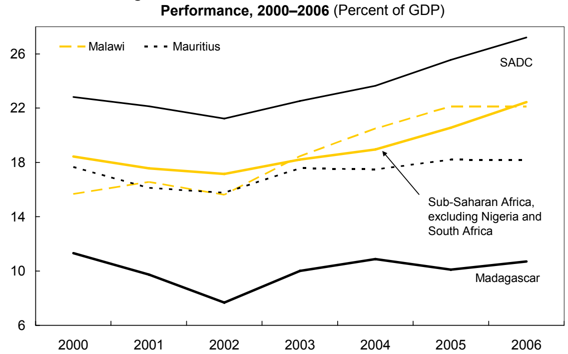
3. Madagascar and Sub-Saharan Africa: Real GDP Growth per Capita, 1991–2006 (Percent)



Sources: Malagasy authorities and IMF staff estimates.

Domestic tax revenues are low compared to the rest of the region...

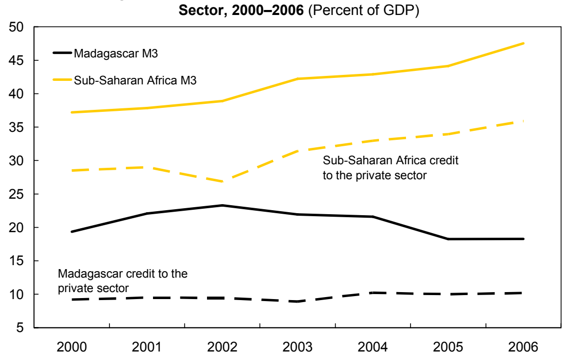
4. Madagascar and Selected Sub-Saharan contries: Tax Revenue Performance, 2000–2006 (Percent of GDP)



Source: IMF World Economic Outlook and IMF staff estimates.

...and the domestic financial system is shallow.

5. Madagascar and Sub-Saharan Africa: M3 and Credit to the Private Sector, 2000–2006 (Percent of GDP)



Sources: Malagasy authorities and IMF staff estimates.

The MDG income poverty target will not be met unless these challenges are addressed.

6. Madagascar: Incidence of Poverty

(Percent of population in poverty, national definition) [1]

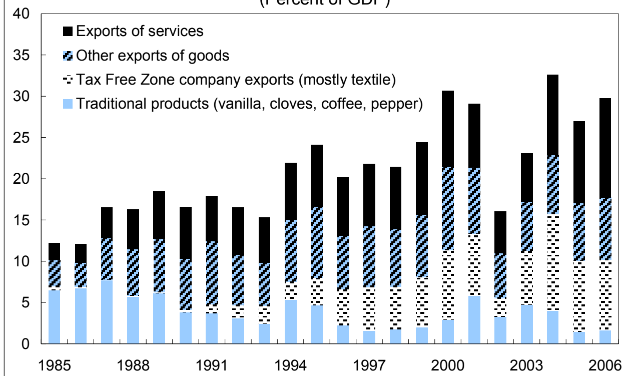
	1980	1993	2001	2004	2005	MDG target
Madagascar						
Overall	80.3	70.4	69.7	72.1	68.7	35.0
Extreme	49.2	59.0	59.0	57.1	54.1	29.5

Source: INSTAT for overall poverty; Work Bank, World Development Indicators, for extreme poverty; and IMF staff estimates.

[1] Poverty threshold defined as income required to purchase minimum daily calorie intake.

4. **Although increasingly open and diversified, Madagascar's economy has been losing market share since 2002.** The trend improvement in export market share since the mid-1990s was reversed by the 2002 political crisis, the drop in vanilla prices from the high levels of 2003, and the loss of textile markets to more efficient producers (Figure 2.2). In spite of pervasive weaknesses in the business environment (also noted in World Bank and World Economic Forum surveys), Madagascar's openness has nonetheless improved: the share of trade in GDP is growing and exports are more diversified—although with products where prices have lagged behind world prices.

Madagascar: Exports of Goods and Services, 1985–2006
(Percent of GDP)



Sources: Malagasy authorities and IMF staff estimates.

Global Competitiveness Index 2006 (Out of 125 countries, best=1, worst=125)	
Madagascar ranks particularly low in higher education and training, macroeconomic stability, and infrastructure.	
Overall ranking of Madagascar	109
Subcategories:	
Innovation	77
Institution	92
Technological readiness	99
Business sophistication	99
Health and primary education	100
Market efficiency	103
Higher education and training	113
Macroeconomic stability	115
Infrastructure	116

Source: World Economic Forum.

Doing Business Indicators 2006 (Out of 175 countries, best=1, worst=175)	
Madagascar ranks relatively well on protecting investors but low on registering property and getting credit.	
Overall ranking of Madagascar	149
Subcategories:	
Protecting investors	46
Paying taxes	86
Enforcing contracts	106
Starting a business	110
Trading across borders	131
Employing workers	136
Closing a business	151
Dealing with licenses	152
Getting credit	159
Registering property	162

Source: World Bank.

5. **Domestic revenue mobilization is amongst the lowest in SSA and is insufficient to finance critical development expenditure in support of the MDGs.** Madagascar has one of the lowest tax revenue-to-GDP ratios in Africa (Figure 2.4); the tax system has been fraught with exonerations, exemptions, and special regimes, and the tax and customs administrations are plagued with severe institutional capacity constraints. This not only impedes the government's ability to finance its own development agenda, but also discourages foreign assistance flows as donors expect recipient countries to improve domestic revenue mobilization.

6. **Other capacity constraints impede implementation of macroeconomic policy.** Weaknesses in public financial management (PFM) hinder the government's ability to design and execute the budget and manage its cash flow. Implementation of monetary and exchange policy is hampered by the central bank's weak financial position and limited monetary policy

instruments. Constraints in data collection and management affect the quality of the data on which macroeconomic policy is based.

7. **The financial system is shallow, and has not been effective at promoting broad-based growth.** Monetization of the Malagasy economy is low, credit to the private sector is limited, and the economy remains largely cash-oriented (Figure 2.5)—all of which constrain private sector-driven growth.

Monetary Statistics of Selected Countries, 2005

	Percent of GDP		Percent of Broad Money
	Broad Money	Credit to the Private Sector	Currency in Circulation
Madagascar	**21.6**	**9.9**	**27.5**
Mozambique	28.4	13.9	16.9
Mauritius	85.8	58.2	...
South Africa	71.2	74.1	4.9
Bangladesh	39.0	28.7	...
Vietnam	82.4	66.0	19.0
Jamaica	37.6	16.9	12.2

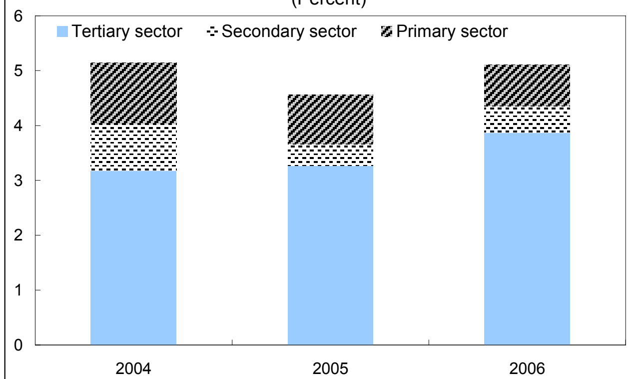
Source: IMF country staff reports.

8. **Large increases in FDI in the mining sector may signal an important shift in the structure of the economy.** Construction by foreign investors of a US$650 million (12 percent of GDP) ilmenite mine began in mid-2006. Construction of another foreign-owned US$2.5 billion (45 percent of GDP) nickel and cobalt mine and processing facility commenced in 2007 and will be completed over the next three years. Production and export of these commodities should begin in 2009/10. These projects contain a large share of local expenditure (about 20 percent), which is placing upward pressure on the exchange rate. Other large mining and petroleum projects are at various stages of discussion and could accentuate this pressure and pose further challenges to macroeconomic management.

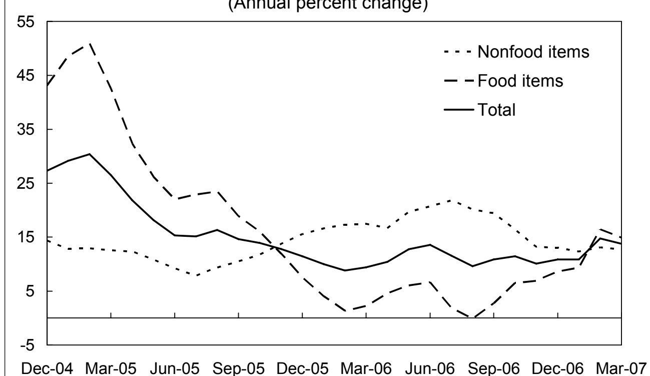
9. **Implementation of past Fund policy advice has been mixed**. The authorities have made good progress in managing liquidity and reducing inflation. They have started ambitious reforms to improve PFM, but ad hoc tax exemptions until mid-2006 and weaknesses in tax and customs administration have continued to dampen revenue performance. The country's statistical capacity remains weak. And limited progress has been made in improving the reliability of power supply, which is a major impediment to private sector development according to most business climate surveys.

II. Recent Economic Developments

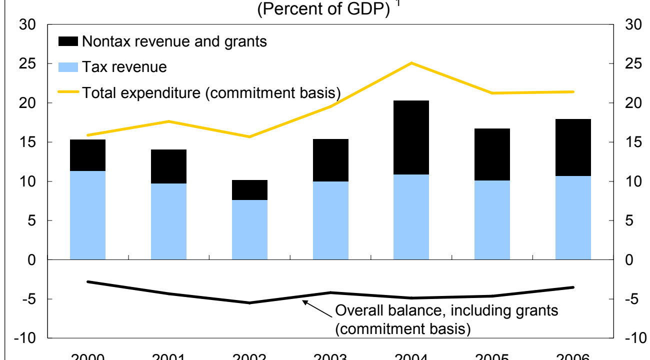
10. **In 2006, economic growth increased while inflation continued to decline.** Growth picked up in 2006, largely because of the startup of construction of a large mining project, sizeable investments in public infrastructure, and strong performance in telecommunication, transportation, and financial services (Table 2). Meanwhile, primary sector growth declined owing to a normal rice harvest after the previous year's bumper crop. Inflation continued on its downward path in 2006 aided by tight monetary policy, low rice prices, a decline in world oil prices during the second half of the year, and the recent appreciation of the nominal exchange rate. Agriculture growth (particularly rice and vanilla) in 2007 has been negatively affected by the recent floods, and inflation rose in the early months of the year owing to an increase in rice prices.



Madagascar: Contribution to Real Growth at Factor Cost, 2004–2006
(Percent)
Sources: Malagasy authorities and IMF staff estimates.



Madagascar: Consumer Price Index, December 2004 – March 2007
(Annual percent change)
Source: Malagasy authorities.



Madagascar: Revenue and Expenditure, 2000–2006
(Percent of GDP) [1]
Source: Malagasy authorities and IMF staff estimates.
[1] For nontax revenue and grants and the overall balance in 2006, excludes MDRI capital transfers.

11. **The authorities achieved their tax revenue target in 2006, but missed their domestic financing target on account of spending overages**. Government revenues and grants rose owing mainly to tax policy measures and an increase in grants in support of the country's poverty reduction strategy. The authorities phased out their capital goods import tax exoneration scheme in September 2005 and increased excise taxes on petroleum products. Despite these measures, tax revenues as a share of GDP remained lower than in 2004. The domestic financing target was missed in 2006 due to higher than programmed obligatory spending, principally the result of under-budgeting of civil service pensions, VAT reimbursements, and correspondingly higher

domestic interest payments (Tables 3a and 3b). MDRI debt relief freed up resources for priority spending.

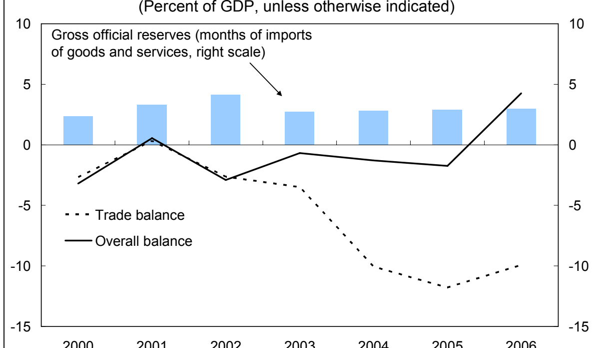
Madagascar: Fiscal Indicators, 2004–06
(Percent of GDP) [1]

	2004	2005 (a)	2006 (b)	(b) - (a)
Total revenue and grants [2]	20.3	16.7	18.0	1.3
Tax revenue	10.9	10.1	10.7	0.6
Nontax revenue	1.2	0.8	0.5	-0.3
Grants [2]	8.2	5.7	6.7	1.0
Total expenditure (commitment basis)	25.1	21.2	21.4	0.2
Current expenditure	12.6	11.0	11.1	0.2
Capital expenditure	12.5	10.3	10.3	0.0
Overall balance (commitment basis, including grants) [2]	-4.9	-4.7	-3.5	1.1
Overall balance (cash basis, including grants) [2]	-5.7	-4.3	-3.8	0.5
Foreign financing [2]	6.4	3.8	3.1	-0.7
Domestic financing [2]	-0.7	0.5	0.7	0.2
Memorandum items:				
Net external aid [2, 3]	13.0	8.6	9.4	0.8
Of which : MDRI flow debt-service savings	...	...	0.6	0.6
Priority PRSP spending	12.0	10.5	11.0	0.5

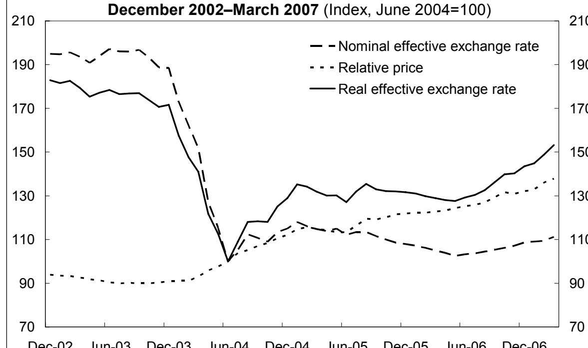
Sources: Ministry of Economy, Finance, and Budget; and IMF staff estimates.

[1] Aggregates may differ from the sum of components due to rounding.
[2] Excluding MDRI capital transfers.
[3] Foreign grants and loans, less debt service.

12. **In 2006, the overall balance of payment deficit shifted to a surplus owing to large foreign direct investment inflows, strong export performance, and a reduction in debt service** (Table 5). The large jump in FDI inflows was due to the large ilimite mining project and an increase in reinvested profits of foreign commercial banks. With the exception of vanilla and textiles, exports were strong owing to a pick up in international prices, as were non-factor services, particularly tourism and business services (owing to the increase in FDI). Debt service declined by 45 percent due to the implementation of the MDRI. The improved



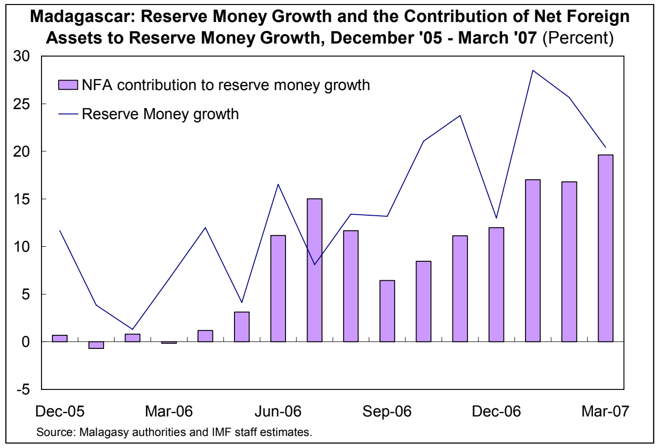
Madagascar: Balance of Payments, 2000–2006
(Percent of GDP, unless otherwise indicated)
Source: Malagasy authorities.



Madagascar: Real and Nominal Effective Exchange Rate and Relative Prices, December 2002–March 2007 (Index, June 2004=100)
Sources: INS.

overall balance of payments allowed gross official reserves to rise to the equivalent of three months of imports, and the real and nominal exchange rates to appreciate since mid-2006.[3]

13. **The demand for real money balances increased during 2006 and was accommodated through higher NFA accumulation** (Table 6). The increase in money demand arose principally from the domestic spending requirements related to rising FDI. The Central Bank of Madagascar (BCM) accommodated the higher money demand by purchasing foreign exchange in the interbank foreign exchange market (MID). To meet its December 2006 NFA and NDA targets, the BCM mopped up MGA 50 billion (about 5 percent of reserve money). During the first quarter of 2007, reserve money grew at an annual rate of 21 percent as the central bank purchased foreign exchange, but without mopping up the liquidity injected.



14. **Banking sector soundness improved.** In 2006, nonperforming loans declined as a share of total loans, capital adequacy increased, and foreign exchange exposure declined (Table 9). A license was issued to a new commercial bank which should increase competition in the banking sector. At end-October 2006, the IMF's MCM estimated that the central bank had a negative net worth of about 5 percent of its balance sheet (0.6 percent of GDP) according to international financial reporting standards. The central bank was recapitalized in May 2007 (¶31).

15. **Performance under the PRGF arrangement has been mixed** (Tables 11–13). All program conditionality was observed with the exception of one quantitative performance criterion (PC) at end-December 2006 and two structural PCs. The quantitative PC on domestic financing of the budget was missed owing to the spending overruns previously

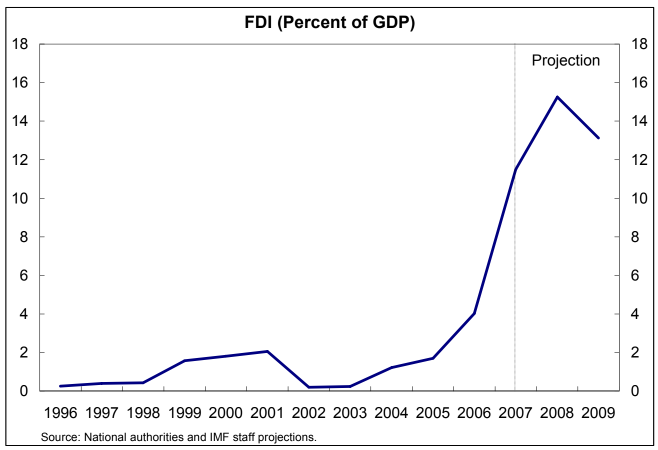
[3] At end-March 2007, the nominal effective exchange rate had appreciated by 8 percent compared to end-May 2006, and the real effective exchange rate by 20 percent.

mentioned (¶11). The authorities have subsequently revised their 2007 budget to fully account for all obligatory spending and will continue to strengthen their control over spending commitments within their PFM action plan. It appears that the continuous structural PC on no departures from the established procedures for valuation and clearance of goods at customs has not been respected, and the authorities have requested the independent anti-corruption office to conduct an audit on compliance with the customs procedures. In turn, they have requested that Executive Board consideration of the second review under the PRGF arrangement be postponed until after the audit has been completed, which is currently expected to be in September.

III. Policy Issues

16. The Article IV consultation discussions centered on four main themes: (i) managing the changing medium-term outlook; (ii) preserving macroeconomic stability; (iii) improving PFM and transparency; and (iv) fostering private sector development.

A. Managing the Changing Medium-Term Outlook



17. **The authorities have revised their base case medium-term projections to take into account projected FDI inflows.** The construction of the two large mining projects includes substantial infrastructure development which is expected to be completed by 2010. Imports should increase substantially over the medium term owing to the high import content of the mining FDI and appreciation of the exchange rate. The current account deficit will rise to about 20 percent of GDP and will be mostly financed by the FDI inflows, thereby allowing the overall balance of payments to remain in surplus (Table 8). Gross official reserves are expected to increase to the equivalent of 3.9 months of imports (excluding mining-related imports) by 2010. Thereafter, the trade balance should shift to a large surplus as mining exports commence. The current account, however, will remain in deficit because of large dividend payments to the mining projects' equity holders. The authorities and staff have revised upward the economic growth projections to 8 percent on average over 2007–11 (more than twice the average over the past decade), while inflation is expected to continue on its downward path to 5 percent as envisaged.

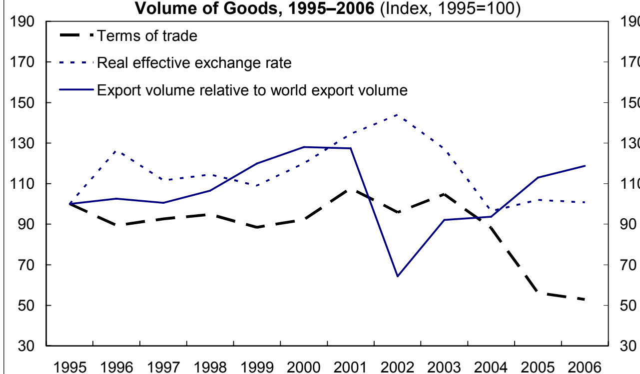
18. **The increase in private sector FDI poses important challenges to competitiveness.** The mission discussed the potential danger of "Dutch disease" arising from the large external inflows and the impact that an appreciation of the real exchange rate could have on the competitiveness of traditional exports. The authorities acknowledged that such a risk exists, but were confident that competitiveness could be maintained through the

productivity-enhancing public investments (i.e., education, health, and infrastructure) and structural reforms (i.e., rehabilitation of the public utility company, streamlining of business regulations, etc.) that were underway. They reiterated that the government's strategy is to encourage FDI and believed that on balance the economy would benefit from these inflows.

19. **Despite these challenges, the authorities saw no need to change the current exchange rate regime (managed float with no predetermined path).** The authorities expected both the pace and degree of appreciation experienced since the middle of 2006 to subside as the demand for imports picked up in the aftermath of the presidential, legislative, and municipal elections. They believed that the economy was undergoing a permanent structural change, that the exchange rate should be allowed to move to its new equilibrium, and that intervention should be limited to achieving the foreign reserve target and smoothing day-to-day volatility. To help reduce pressure on the exchange rate, the authorities have recently implemented measures to liberalize foreign exchange controls such as lengthening the time period allowed to repatriate export proceeds and increasing the ceiling on the open foreign exchange position of commercial banks.

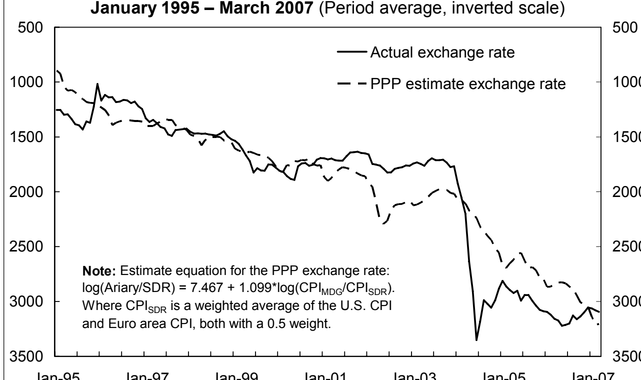
20. **The staff concurred that the exchange rate regime has been appropriate, but suggested that some "leaning against the wind" could be helpful in avoiding possible overshooting.** Staff analysis suggests that the exchange rate has moved, albeit with a lag, broadly in line with macroeconomic fundamentals, and that the real effective rate has broadly reflected movements in the terms of trade and allowed export volume to grow strongly in recent years. Moreover, although the real exchange rate appreciated since the middle of 2006, a large share of the competitiveness gains achieved by the 2004 depreciation of the currency has been preserved (Figure, ¶12). However, in view of the thinness of the foreign exchange market and the magnitude of FDI inflows, overshooting was a risk. In this light, intervention could help avoid the exchange rate moving too far ahead of productivity gains, resulting in a major loss of competitiveness; it would also provide an opportunity to build foreign exchange reserves.

Madagascar: Real Effective Exchange Rate, Terms of Trade, and Export Volume of Goods, 1995–2006 (Index, 1995=100)



Source: National authorities; IMF World Economic Outlook; and IMF staff estimates.

Madagascar: Ariary per SDR, Actual Versus PPP Estimated Exchange Rate, January 1995 – March 2007 (Period average, inverted scale)



Source: Malagasy authorities and IMF staff estimates.

The authorities agreed on the need to closely monitor real exchange rate and export developments, and on the merits of foreign exchange interventions if signs of overshooting emerged.

21. **The staff also noted the substantial scope for improving the efficiency of the foreign exchange market in line with MCM recommendations**. The staff urged caution, however, regarding liberalizing capital account transactions, as such liberalization needed to be carefully sequenced with efforts to strengthen the framework for banking supervision and prudential regulations. Staff also reminded the authorities of the need not to compromise prudential regulations in this process.

22. **While the authorities agreed that running a fiscal surplus could help reduce appreciation pressure on the exchange rate, they did not believe that this was feasible from a political economy point of view given the need to increase poverty-reducing spending.** They believed that the fiscal program, which allows only very limited recourse to domestic financing, was already tight. Any further expenditure cuts would therefore come at the expense of making progress towards the MDGs. The staff concurred but noted that a further exchange rate appreciation could also be detrimental to poverty reduction. Staff therefore recommended the identification of contingency spending reduction plans in nonpriority spending to cope with recurrent problems of revenue shortfalls and expenditure overruns.

23. **The authorities have prepared an alternative high case scenario within the context of the MAP.** The MAP foresees somewhat higher growth rates, tax revenues, government investment, and gross official reserves relative to the base case scenario, while the inflation objective would be broadly the same. Net external aid (including grants) is assumed to be substantially higher, resulting in a lower current account balance (including grants). The authorities' preliminarily estimate the cost for achieving the MAP's objectives at Euro 1.5 billion per year over the period 2007–12.[4] Based on estimates provided by Madagascar's main development partners, however, net external foreign assistance is expected to decline by 2.5 percentage points of GDP over the period 2006–09, while the MAP's high case scenario assumes that donor assistance would increase by about 3 percentage points of GDP per annum. The authorities agreed, however, that they should continue to base their policies and budgets on the more conservative baseline scenario until the assumed higher levels of financing materialize. The staff noted that the fiscal stance could be relaxed if additional concessional external financing was forthcoming, subject to progress in increasing absorptive capacity and reducing inflation.

[4] See Chapter 1 of the forthcoming Selected Issues Paper (www.imf.org).

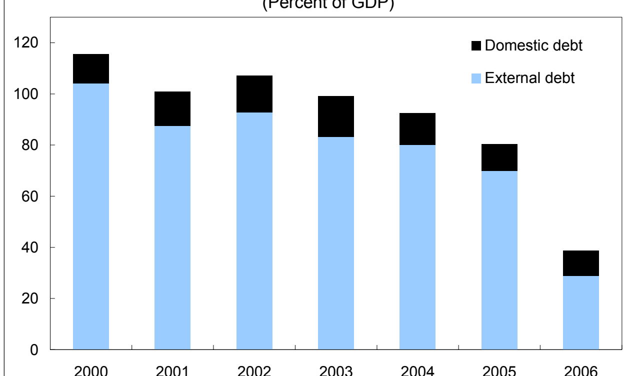
Madagascar: Key Targets under PRGF and MAP Scenarios			
	Average	Average, 2007-2011	
	2004-06	PRGF	MAP
		(Percentage change)	
Real GDP growth	4.9	8.0	8.3
CPI (period average)	14.4	6.5	6.4
		(Percent of GDP)	
Investment	23.9	28.6	26.0
Government	11.0	9.1	11.6
Nongovernment	12.9	19.5	14.4
Tax revenue	10.6	11.9	12.9
Overall fiscal balance (incl. grants)	-7.0	-4.3	-4.2
Current account balance (incl. grants)	-9.6	-15.0	-7.0
Net external aid [1]	10.4	7.3	10.6
Foreign direct investment	2.3	9.2	3.4
Gross official reserves (months of imports)	2.9	3.1	4.4

Sources: Madagascar Action Plan (MAP); Malagasy authorities; and IMF staff estimates and projections.

[1] Foreign grants and loans, less debt service (excl. MDRI capital transfers in 2006).

24. **The sustainability of Madagascar's debt outlook has improved thanks to the MDRI and improved prospects for growth and exports.** A joint Bank/Fund debt sustainability analysis (DSA) was carried out based on the low-income debt sustainability framework (Appendix I). It reveals that the key debt indicators in 2005, which were already below the thresholds of a medium performer such as Madagascar, fell sharply in 2006 as relief was granted under the MDRI, and will fall further owing to the impact of the mining sector FDI on GDP and exports. Even under the most extreme stress cases, the ratio would remain far below the 150 percent threshold from 2010 onward. The debt service-to-exports ratio would also remain significantly below the 20 percent threshold.

Madagascar: Stock of Public Debt, 2000–2006
(Percent of GDP)



Sources: Malagasy authorities and IMF staff estimates.

Madagascar: External Debt Sustainability Indicators, 2005–06

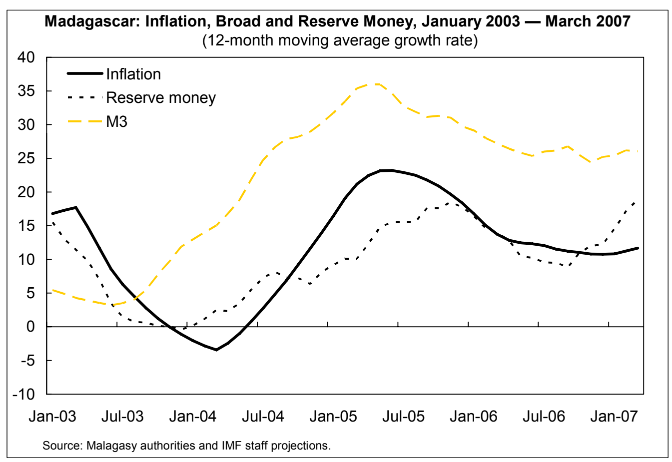
	2005 [1]	2006	Debt sustainability thresholds [2]
		(Percent)	
NPV of debt-to-exports ratio	134.3	38.7	150.0
NPV of debt-to-GDP ratio	35.8	11.5	40.0
NPV of debt-to-fiscal revenue ratio	215.0	64.2	250.0
Debt service-to-exports ratio	8.4	3.5	20.0
Debt service-to-fiscal revenue ratio	16.3	8.0	30.0
Memorandum item:			
MDRI debt relief (in percent of GDP)	...	42.0	...

Sources: IMF staff projections.

[1] IMF Country Report No. 06/306.

[2] For a medium performer according to the World Bank Country and Policy Institutional Assessment (CPIA).

B. Preserving Macroeconomic Stability



25. **The authorities confirmed their monetary policy objective for 2007 was to achieve single-digit inflation.** The staff noted that the rise in the demand for real money balances (¶13) would allow the money supply to increase correspondingly without jeopardizing the inflation objective. The authorities agreed that reserve money would not need to grow at the same pace as broad money given that financial intermediation is expected to increase and excess bank reserves to decline. With a view to accommodating money demand while also increasing foreign reserves, the central bank plans to augment its holdings of NFA.

26. **To help achieve their monetary policy objectives, the authorities will use open market operations and closely monitor core inflation.** With assistance from MCM, the authorities have converted the consolidated government debt owed to the central bank (1.6 percent of GDP) into marketable securities bearing market rates of interest. The BCM can now use these securities to conduct open market operations, thereby providing an additional monetary policy instrument beyond the short-term deposit auctions (*appel d'offres)*. In assessing the appropriateness of the monetary stance vis-à-vis the inflation objective and given the volatility in food and energy prices, the staff suggested that the authorities also use a measure of "core" inflation (Box 1). Such an indicator removes the

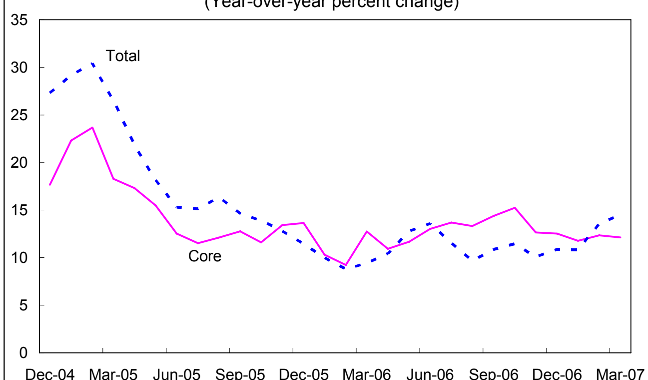
effect of highly volatile rice and oil prices that are susceptible to supply-related shocks. The authorities agreed that core inflation is a useful indicator for assessing the conduct of monetary policy.

Box 1. Madagascar: Core Inflation [1]

Core inflation generally refers to a measure of inflation that excludes volatile and supply-driven elements such as food and energy prices. It is often used as an indicator in determining the effectiveness of monetary policy because it captures demand-related pressures. In the case of Madagascar, the staff calculated core inflation as the weighted average of the price changes for the consumer price index excluding rice and energy products.

Core inflation can assist policy makers in assessing the underlying trend in inflation and determining the appropriate monetary policy to pursue. For example, overall inflation was lower than core inflation during the second half of 2006 owing to lower rice and energy prices. If the monetary authorities focused solely on general inflation, they could have concluded that monetary policy should be loosened when in fact it should have remained tight in order to achieve their price stability objective.

Madagascar: Core Inflation, December 2004 – March 2007
(Year-over-year percent change)



Source: Malagasy authorities and IMF staff estimates.

[1] See Chapter 4 of forthcoming Selected Issues Paper (www.imf.org).

27. **A prudent fiscal stance is essential for preserving macroeconomic stability.** The authorities concurred that total spending should be kept in line with domestic revenues and concessional external financing, keeping domestic financing of the budget deficit to a minimum so not to crowd out private sector credit. They intended to absorb the shock of cyclones and flooding since the beginning of the year with humanitarian aid and expenditure switching within the envelope approved in the 2007 budget. However, they believed that the 2007 fiscal program should be revised to take into account the impact of the expected appreciation on government revenue and expenditure (0.3 percent of GDP), the underestimation of obligatory spending (0.2 percent of GDP), and additional transfers to the electricity company (0.3 percent of GDP) (¶34). Moreover, as the cost of recapitalizing the central bank (0.9 percent of GDP) was not known at the time of budget preparation, it should now be included. With a view to minimizing the government's recourse to domestic

financing, the authorities will undertake reductions in nonpriority spending equivalent to 0.5 percent of GDP. As the recapitalization expenditure would not have an impact on aggregate demand, it could be financed domestically without undermining the inflation objective. The staff agreed that the revised fiscal stance was broadly consistent with the authorities' macroeconomic objectives for 2007.

Madagascar: Fiscal Indicators, 2007
(Percent of GDP) [1]

	Prog. (a)	Proj. (b)	(b) - (a)
Total revenue and grants	16.5	16.1	-0.5
Tax revenue	11.2	10.9	-0.3
Nontax revenue	0.2	0.2	0.0
Grants	5.1	5.0	-0.2
Total expenditure (commitment basis)	20.7	21.7	0.9
Of which: central bank recapitalization	0.0	0.9	0.9
Overall balance (commitment basis, including grants)	-4.2	-5.6	-1.4
Overall balance (cash basis, including grants)	-4.4	-5.8	-1.4
Without: central bank recapitalization	-4.4	-4.9	-0.5
Foreign financing	4.1	4.3	0.1
Domestic financing	0.3	1.5	1.2
Without: central bank recapitalization	0.3	0.6	0.3

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

[1] Aggregates may differ from the sum of components due to rounding.

C. Improving PFM and Transparency

28. **Problems in tax policy and tax and customs administration continue to undermine the country's revenue mobilization effort in support of the MDGs.** The authorities indicated that the MAP's objective is to raise the tax-to-GDP ratio from 10.7 percent in 2006 to 15 percent by 2011. In the area of tax policy, they plan to implement a simplified corporate and personal income tax system within the context of the 2008 Finance Law. Following FAD recommendations, the authorities will incorporate the export processing zone (EPZ) companies into the common law regime and simplify the corporate and personal income tax structure (Box 2). They indicated, however, that some recommended measures (i.e., taxation of fringe benefits at market value, elimination of low yielding taxes which finance local authorities) would need to be implemented gradually. The staff underlined that urgent efforts to tighten the administration of large-and medium-size tax payers were required to meet the revenue targets in 2007–08. Remedial actions were also needed to address serious shortfalls in customs valuation and clearance procedures, which appear to have permitted about 20 percent of imports to depart from established procedures. The authorities were confident that the installation of Tradenet—a state-of-the-art electronic information system that traces imports in real time—would dramatically curtail opportunities for fraud at customs. The staff concurred with the priority being placed on tax policy and

administration, but warned that the MAP revenue objective appears ambitious and will require considerable progress in tax and customs administration. In light of the mining and oil exploration potential of the country, the staff urged the authorities to review whether the fiscal regimes for mining and oil projects were in line with international standards.

Box 2. Madagascar: Tax Policy Reform Priorities[1]

At around 10.7 percent, the ratio of tax revenue to GDP in Madagascar is some 3 percentage points lower than the average in comparable low income countries. Most of this underperformance stems from the low yield of the personal and corporate income tax, and the limited reliance on trade taxes.

Poor revenue performance arises both from policy measures that erode the tax base and poor tax and customs administration. The tax system is being poorly administered, most notably in relation to customs procedures and VAT refunds. This leads to pressures for special treatment to avoid these burdens which further complicates the tax system.

Tax policy reform priorities for promoting growth and strengthening revenue performance include: integrating the EPZ companies into a common and more attractive corporate tax structure, while respecting the benefits already granted to the existing EPZ companies; raising the threshold of the VAT which will enable scarce administrative resources to be better focused on core tasks such as refunding excess credits; imposing the VAT on agricultural inputs; reviewing the rate structure and exemptions under the personal income tax; removing protection hidden in the structure of domestic excises by raising rates on domestic products; eliminating a wide range of low-yielding taxes; and reviewing the fiscal regime of mining and oil projects. The resulting streamlined tax code will foster resource allocation by the private sector in line with Madagascar's comparative advantages.

Madagascar and Low Income Countries: Composition of Tax Revenue.
(Percent of GDP)

	Year	Tax Revenue	Taxes on Income, Profits and Capital Gains			Property Taxes	Domestic Taxes on G. and S.				International Trade Taxes
				Of which:				Of which:			
			Total	Individual	Corporate		Total	Sales Tax or VAT	Excises	Other	
Madagascar	2005-06	10.4	2.4	0.8	1.6	0.1	6.7	5.1	1.5	0.1	1.2
Low income countrries [1]	2000-01	13.7	3.9	1.9	2.0	0.2	5.9	3.5	2.0	0.4	3.7
Difference		-3.3	-1.5	-1.1	-0.4	-0.1	0.8	1.6	-0.5	-0.3	-2.5

Source: Ministry of Finance and Budget; and Fund staff.

[1] 26 countries.

[1] See Chapter 3 of forthcoming Selected Issues Paper (www.imf.org).

29. **Better public expenditure management is essential for improved budget execution and control.** Building on the 2005 and 2006 Public Expenditure and Financial Accountability assessments, the authorities have been implementing a priority action plan to improve budget and cash management with donor support, including the IMF. Good progress has been made in budget preparation and execution with the implementation of the budget information system (SIGFP) and the early preparation of the 2008 budget. The staff indicated, however, that major weaknesses remained owing to the lack of comprehensive and timely reports on budget execution and poor application of the Procurement Code. The authorities agreed that they should place highest priority in 2007 on implementing SIGFP in the main spending ministries. They would also strengthen procurement practices with the assistance of the World Bank. The staff noted that the pay-as-you-go civil service pension system appears to be severely unbalanced and, if unaddressed, could crowd out priority budgetary spending in the medium term.[5] The authorities agreed and proposed that civil service pension reform be a key focus of the next program review.

30. **The authorities confirmed their commitment to adhere to the principles of the EITI.** They are creating an EITI committee to be comprised of representatives from the government, the natural resource companies, and civil society (including the media) and are launching a public information campaign. They are also considering the possible creation of an offshore future generation fund for the management of natural resource receipts, with technical support from Norway. With large-scale mining activities coming on line and with the possibility of significant offshore oil discoveries in the future, the staff considered these initiatives to be very timely and helpful in addressing the ensuing macroeconomic challenges, but insisted on the need for full accountability and transparency of such a fund in the fiscal accounts.

31. **A financially sound central bank is vital for the conduct of monetary and exchange rate policy**. The staff welcomed the authorities' decision to recapitalize the central bank and to remunerate central bank claims on the treasury at market rates of interest. In addition, it stressed the need to reduce the central bank's operating costs, including the costs of banknotes, and to remove from the central bank law the possibility to distribute unrealized foreign exchange valuation gains. The authorities indicated that this would be done as part of an overhaul scheduled for 2008 of the central bank law to make it compatible with the SADC treaty. The BCM expects to propose a cost reduction plan next Fall.

32. **Data are adequate for surveillance purposes, but need to be improved** (Informational Annex). The authorities recognized the deficiencies and agreed with staff that they should redouble their efforts to improve the provision of macroeconomic economic data, particularly real sector data. Madagascar is benefiting from technical assistance from STA

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[5] Two thirds of the civil servants will reach retirement age (55) within the next seven years.

and the French authorities in the areas of national accounts statistics, and a revised set of accounts should be produced next year. The authorities have agreed to publish the statistical appendix on the government web sites.

D. Fostering Private Sector Development

33. **The authorities are undertaking further trade liberalization, both on a multilateral and regional basis.** Madagascar unilaterally reduced some of its tariffs resulting in a drop of its simple average MFN tariff from 16.2 percent at the end of 2005 to 12.9 percent in 2007. The authorities have also taken important steps towards regional integration into the Southern African Development Community (SADC), and believe that the economic gains from regional integration would be substantial. The findings of a recent staff study indicate that the direct impact of SADC membership on economic growth in Madagascar is likely to be quite limited (Box 3). The staff urged the authorities to complement regional trade liberalization with a multilateral liberalization whose gains were likely to be larger. The authorities noted that trade liberalization should continue on an MFN basis in parallel to regional integration.

Box 3. The Economic and Fiscal Impact of Joining the SADC Free Trade Area[1]

Madagascar plans to phase out its tariff on imports from SADC over the period 2007-12. This will liberalize 5.6 percent of Madagascar 2006 imports, of which 88 percent will be imports from South Africa. Because the trade affected by the SADC FTA is small, the gains to real GDP are estimated to be limited to 0.4 percent. Nevertheless, staff simulations suggest that the SADC FTA would affect significantly the trade structure as well as the structure of production:

- Madagascar's trade with SADC, mainly South Africa, would increase by about 5 percent while its trade with the rest of the world would decline.

- The product composition of Madagascar's trade would change. The textiles and clothing industries would be the major beneficiaries and could increase by almost 1 percent.

- Customs revenue could decline by about 8 percent, but total revenue from taxes on international trade (which accounted for about half of Madagascar's tax revenue in 2006) would be reduced by less than 3 percent in the first year. The impact will be more limited in 2007 since the tariff cut initially scheduled to take place in January 2007 has been delayed.

- A simulation of SADC FTA membership complemented by a small multilateral liberalization produces much larger gains.

[1] See Chapter 2 of forthcoming Selected Issues Paper (www.imf.org).

34. **Restructuring and rehabilitating the public utility company (JIRAMA) is essential for increasing private sector investment, sustaining economic growth, and strengthening public finances.** Private sector representatives complained about the frequent power surges and outages which disrupted economic activity and increased production costs. According to the International Finance Corporation (IFC) and the World Bank, at current

electricity tariffs JIRAMA would need to increase average electricity tariffs by 45 percent in order to cover its operating costs. The authorities indicated that they were prepared to phase in electricity tariff increases (15 percent in October 2007, April 2008, and October 2008, respectively) and would henceforth adopt an automatic pricing index formula. To address the interim shortfalls in operating revenues and to finance urgent rehabilitation investment, they will allocate annual budgetary transfers equivalent to 0.5 percent of GDP to JIRAMA in 2007–08, and identify priority rehabilitation investments in close consultation with the IFC and the World Bank. Once JIRAMA becomes profitable, the authorities intend to transfer its management to a private operator through a lease-type agreement, for which an international tender is tentatively scheduled for end-2008.

35. **Financial intermediation needs to be broadened and access to credit expanded in order to sustain broad-based economic growth and development.** The staff noted that the part of the FDI inflows that remains in the country will significantly expand bank deposits and present an opportunity to improve financial intermediation and expand access to credit**.** Building on the recommendations of the Financial System Stability Assessment,[6] the authorities have developed a draft medium-term financial sector strategy (Box 4), which they wish to further elaborate in collaboration with Bank/Fund staff, including through a supporting technical assistance program. They intend to improve financial intermediation by encouraging competition and licensing more banks, creating a credit bureau, and improving the payments system. They pointed to the strong expansion of microfinance institutions (MFIs), which would improve access to credit and support more broad-based growth, and noted that the MFI regulatory framework and surveillance were being improved. The staff supported the authorities' initiatives and emphasized the importance of close oversight during this expansionary period.

[6] Country Report No. 06/305, Republic of Madagascar: Financial System Stability Assessment, including Reports on the Observance of Standards and Codes on the following topics: Banking Supervision, and Anti-Money Laundering.

Box 4. Key Elements of Financial Sector Strategy

The authorities have prepared a draft medium-term national financial sector strategy and are in the process of developing a supporting technical assistance program. The main objectives are to:

1. **Support the operational independence of the central bank**
   - Improve monetary operations and introduce open market operations (*2007*).
   - Ensure more effective BCM intervention in the MID and enforcement of MID guideline (*ongoing*).
   - Revise the central bank statute to conform with SADC requirements and best practices (*2007/08*).
2. **Build up banking sector supervision**
   - Implement decrees under new banking law (*2007*).
   - Increase resources allocated to the banking supervision office (*ongoing*).
3. **Strengthen the nonbank sector**
   - Improve supervision of microfinance sector and implement decrees covering MFIs (*2007/08, with assistance of World Bank and Millennium Challenge Corporation [MCC]*).
   - Improve supervision of insurance companies and pension funds (*2008*).
   - Audit public pension funds (*2008*).
4. **Improve the efficiency of the financial sector**
   - Encourage banking sector competition and license more banks (*ongoing*).
   - Create a credit bureau for banks and microfinance institutions (*2008*).
   - Reduce payment delays in banking system (*diagnostic study in process under MCC, 2007/08*).

IV. Staff Appraisal

36. **Madagascar has suffered from decades of macroeconomic instability arising from political crises, poor macroeconomic polices, and exogenous shocks.** Poverty remains high, inflation persists at double-digit levels, and growth has been insufficient for making adequate progress toward achieving the MDGs.

37. **The authorities' new poverty reduction strategy (MAP) presents a vision for addressing the key structural and other problems that have hindered economic development.** Key to the realization of the MAP's objectives will be advancements in domestic revenue mobilization, public financial management, scaling up of donor assistance, foreign direct investment, and electricity sector reform.

38. **Macroeconomic policies should be based on a more conservative base case scenario until scaling up of aid materializes**. Accommodation should be made for

additional priority expenditure in support of growth and poverty if financed on a concessional basis and if capacity to absorb these funds is in place.

39. **Large FDI in the mining sector signals a important shift in the structure of the economy.** The domestic spending component of these FDI flows places appreciation pressures on the exchange rate as it moves to its new equilibrium. This appreciation poses significant challenges for the competitiveness of the non-mining tradable sector and macroeconomic management.

40. **The authorities' exchange rate policy of a managed float with no predetermined path remains appropriate.** This policy has allowed the exchange rate to move in line with macroeconomic fundamentals and has maintained the competitiveness of exports. But, exports and real exchange rate developments need to be closely monitored and there would be scope for foreign exchange intervention to help avoid an overshooting of the exchange rate and to utilize capital inflows to help boost foreign exchange reserves. The authorities should be cautious regarding liberalizing capital account transactions, however, as such liberalization needs to be carefully sequenced with efforts to strengthen the framework for banking supervision and prudential regulations.

41. **The authorities need to continue to pursue a monetary policy that is consistent with their foreign reserves and single-digit inflation targets.** They should therefore be prepared to mop up any excess liquidity, including through their new monetary instrument (i.e., tradable government securities), while ensuring that the money supply increases in line with the higher demand for money balances arising from the FDI flows.

42. **A prudent fiscal policy needs to be maintained**. While running a fiscal surplus would in principle help alleviate appreciation pressures on the exchange rate, reducing expenditure at this time would undermine efforts to increase spending in support of the MDGs. The authorities should continue to keep domestic financing of the budget at low levels so as not to crowd out credit to the private sector and place pressure on domestic interest rates, while redoubling their efforts to increase revenues. Strengthening the operations of large-and medium-size tax payers units and customs administration is indispensable to meet the revenue targets. They should also include contingency spending reductions plans in future budget submissions to address possible revenue shortfalls and avoid repeated expenditure overruns.

43. **The exchange rate appreciation reinforces the need to implement structural reforms critical to private sector development.** The restructuring and rehabilitation of JIRAMA, the deepening of financial intermediation, and the liberalization of trade on an MFN basis should be implemented without delay.

44. **Addressing institutional capacity constraints will alleviate risks to policy implementation.** Exogenous shocks, uncertainty over donor assistance, and institutional

capacity constraints could impede policy implementation. The country's debt situation is sustainable, especially in the aftermath of the MDRI. Action plans in the areas of tax and customs administration, public financial management, monetary and exchange rate management, and statistics, for which the authorities receive substantial technical assistance, need steadfast implementation. The central bank recapitalization should be followed by steps to reduce its operating costs.

45. **It is proposed that the next Article IV consultation with Madagascar take place within 24 months subject to the provisions of the decision on consultation cycles in program countries.**

Table 1. Madagascar: Selected Economic and Financial Indicators, 2005–09

	2005	2006			2007		2008		2009
		Prog.[1]	Proj.[2]	Est.	Prog.[2]	Proj.	Proj.[2]	Rev. Proj.	Proj.
	(Percentage change, unless otherwise indicated)								
National income and prices									
Nominal GDP growth	23.8	16.8	16.5	16.7	15.8	16.5	13.3	14.2	13.5
Real GDP growth	4.6	4.7	4.7	4.9	5.6	6.5	5.6	7.3	7.5
GDP deflator	18.4	11.5	11.2	11.3	9.7	9.5	7.3	6.4	5.6
Consumer price index (period average)	18.4	11.2	10.7	10.8	9.6	9.8	7.1	7.1	5.5
Consumer price index (end of period)	11.4	11.3	10.8	10.9	8.0	7.9	6.0	6.0	5.0
External sector									
Export of goods volume	16.5	-1.6	3.8	7.8	1.3	3.0	4.8	3.2	6.8
Import of goods volume	-13.0	-9.7	-6.1	-6.1	2.5	33.9	6.4	16.4	-0.2
Terms of trade (deterioration = –)	-36.4	-7.1	-4.4	-5.5	-1.8	3.0	1.9	-0.6	0.8
Money and credit [3]									
Reserve money [4]	11.7	12.2	12.2	13.0	13.6	21.8	11.9	19.3	17.1
Broad money	3.1	15.6	17.0	25.6	15.5	26.7	13.3	24.1	19.4
Net foreign assets	1.9	22.8	24.2	29.9	5.3	7.1	4.9	7.9	3.6
Net domestic assets	1.2	-7.2	-7.2	-4.3	10.1	19.6	8.4	16.2	15.9
Credit to government	-5.3	-16.8	-16.8	-16.3	0.5	4.4	-0.2	-0.1	-0.1
Credit to the private sector [4]	22.4	24.5	21.2	19.5	23.0	29.4	19.7	37.0	32.2
Velocity of money (M3; average)	4.6	4.7	4.6	4.3	4.6	4.0	4.6	3.6	3.5
	(Percent of GDP)								
Public finance									
Total revenue (excluding grants)	10.9	11.7	11.4	11.2	11.4	11.1	12.1	11.6	12.1
Of which: tax revenue	10.1	11.0	10.7	10.7	11.2	10.9	11.7	11.4	11.9
Grants [5]	5.7	49.5	47.5	48.0	5.1	5.0	4.0	3.5	3.4
Total expenditure	21.2	21.9	21.5	21.4	20.7	21.7	20.7	19.4	19.6
Current expenditure	11.0	10.3	10.5	11.1	10.4	11.8	10.4	10.2	10.4
Capital expenditure	10.3	11.5	11.0	10.3	10.3	9.9	10.3	9.2	9.2
Domestic balance	-2.2	-0.9	-1.2	-2.0	-1.4	-2.7	-1.4	-1.3	-1.3
Overall balance (cash basis, incl. grants)	-4.3	38.7	36.8	37.5	-4.4	-5.8	-4.5	-4.3	-4.1
Overall balance (cash basis, excl. grants)	-10.1	-10.8	-10.7	-10.5	-9.5	-10.7	-8.6	-7.8	-7.5
Domestic financing	0.5	-3.1	-3.1	-2.5	0.3	1.5	0.1	0.3	0.3
Excluding central bank recapitalization	...	...	...	...	...	0.6	...	...	...
Savings and investment									
Investment	22.5	21.8	21.8	24.8	22.1	29.2	22.2	33.9	31.7
Government	10.3	11.5	11.0	10.3	10.3	9.9	10.3	9.2	9.2
Nongovernment	12.3	10.3	10.8	14.5	11.7	19.3	11.9	24.7	22.5
Gross domestic savings	8.4	8.1	8.7	13.6	9.3	9.9	9.7	11.8	11.7
Gross national savings	11.7	11.4	11.8	16.0	12.2	11.7	12.3	13.0	12.5
External sector and public debt									
Exports of goods, f.o.b.	17.0	15.4	16.9	17.7	15.9	14.5	15.5	12.8	12.4
Imports of goods, c.i.f.	33.9	30.4	31.7	32.5	30.6	33.7	29.8	33.6	30.2
Current account balance (excl. grants)	-12.1	-11.6	-11.2	-10.0	-10.7	-18.2	-10.6	-21.3	-19.6
Current account balance (incl. grants)	-10.9	-10.5	-10.0	-8.8	-9.9	-17.5	-10.0	-20.9	-19.2
Public debt	80.3	34.2	34.2	38.6	34.7	36.4	35.8	34.8	35.4
External	69.9	25.6	25.6	28.8	27.2	26.8	29.4	26.2	27.5
Domestic	10.4	8.5	8.6	9.8	7.4	9.6	6.4	8.6	7.8
Net present value (NPV) of external debt									
NPV of debt-to-exports ratio	134.3	58.8	52.1	38.7	59.4	46.2	66.4	54.1	60.9
NPV of debt-to-fiscal revenue ratio	215.0	83.5	83.4	64.2	93.8	71.2	105.2	78.1	83.3
	(Units as indicated)								
Gross official reserves (millions of SDRs)	337.4	348.7	360.9	381.6	391.8	460.3	419.7	554.7	623.8
Months of imports of goods and services	2.9	2.9	2.9	3.0	3.0	2.7	3.0	2.7	2.9
Months of imports, excl. large mining projects	...	...	...	...	...	3.3	...	3.6	3.7
Financing gap	0.0	9.2	7.9	0.0	15.7	15.7	23.3	15.7	7.9
Ariary per SDR (period average)	2,958	3,135	3,167	3,146	...	...	...	...	...
GDP per capita (U.S. dollars)	282	294	296	299	319	374	338	439	473
Nominal GDP (billions of ariary)	10,095	11,795	11,760	11,781	13,622	13,729	15,432	15,677	17,788

Sources: Malagasy authorities and IMF staff estimates and projections.

[1] IMF Country Report No. 06/306, Republic of Madagascar: Request for a Three-Year Arrangement Under the Poverty Growth Facility and Activation of the Trade Integration Mechanism.

[2] IMF Country Report No. 07/7, Republic of Madgascar: First Review under the Three-Year Arrangement under the PRGF. The 2006 fiscal numbers correspond to a revised program (see Table 3a).

[3] Growth in percent of beginning of period money stock (M3).

[4] Year-on-year growth.

[5] Includes MDRI capital transfers in 2006.

Table 2. Madagascar: National Accounts and Savings-Investment Balance, 2005–2009

	2004 GDP Share	2005	2006 Est.	2007	2008 Proj.	2009
Real supply side growth		(Annual percent change at constant prices)				
Primary sector	0.32	2.5	2.1	2.6	3.2	3.2
Agriculture	0.15	4.5	2.6	2.3	3.5	3.5
Cattle and fishing	0.14	0.8	1.9	3.2	3.2	3.2
Forestry	0.03	1.0	1.0	1.0	1.5	1.5
Secondary sector	0.12	3.0	3.7	6.4	6.6	7.1
Food and drink	0.04	0.3	4.7	9.3	9.2	9.2
Export processing zone	0.02	0.0	0.0	0.0	0.0	0.0
Energy	0.01	2.5	4.4	5.6	5.6	5.6
Extractive industry	0.00	4.4	9.1	10.5	11.5	31.6
Other	0.04	8.2	10.3	5.9	6.3	6.1
Tertiary sector [1]	0.45	6.0	6.8	8.9	10.1	10.3
Transportation	0.15	5.3	7.3	9.3	10.9	10.8
Services	0.13	6.7	6.0	8.4	9.6	9.6
Trade	0.10	4.5	4.4	7.3	8.9	8.9
Public administration	0.05	3.0	2.1	2.5	4.1	5.6
Public works/construction	0.03	18.8	22.5	22.8	18.1	18.0
Indirect taxes	0.11	6.3	6.2	6.7	6.7	6.7
Real GDP at market prices	1.00	4.6	4.9	6.5	7.3	7.5
Nominal demand side composition		(Percent of GDP)				
Resource balance		-14.1	-11.2	-19.3	-22.1	-20.0
Imports of goods and nonfactor services		41.0	40.9	44.0	43.9	41.2
Exports of goods and nonfactor services		26.9	29.7	24.7	21.8	21.2
Current account balance (including grants) = (S-I)		-10.9	-8.8	-17.5	-20.9	-19.2
Consumption		91.6	86.4	90.1	88.2	88.3
Government		8.4	8.8	9.9	8.7	9.1
Nongovernment		83.2	77.6	80.2	79.4	79.1
Investment		22.5	24.8	29.2	33.9	31.7
Government		10.3	10.3	9.9	9.2	9.2
Non-government		12.3	14.5	19.3	24.7	22.5
Of which : foreign direct investment		1.7	4.0	11.5	15.3	13.1
National savings		11.7	16.0	11.7	13.0	12.5
Government [2]		5.9	6.3	4.1	4.9	5.1
Nongovernment		5.7	9.8	7.6	8.1	7.3
Memoranda items:		(Billions of ariary unless otherwise specified)				
Nominal GDP (at market prices)		10,095	11,781	13,729	15,677	17,788
Net factor income		-157	-171	-154	-171	-247
Transfers [3]		805	5,964	938	812	883
Nominal GNP		10,744	17,574	14,513	16,317	18,423

Sources: Malagasy authorities and IMF staff estimates.

[1] Includes non-inputed banking services.

[2] Excluding MDRI capital transfers in 2006.

[3] Including MDRI capital transfers in 2006.

Table 3a. Madagascar: Government Financial Operations, 2005–2009
(Billions of ariary, unless otherwise indicated)

	2005	2006			2007		2008		2009
		Prog.[1]	Rev. prog.[2]	Est.	Prog.[2]	Proj.	Proj.[2]	Rev. proj.	Proj.
Total revenue and grants	1,682.2	7,214.3	6,920.9	6,978.5	2,251.4	2,205.1	2,487.7	2,370.2	2,762.4
Total revenue and grants (excl. MDRI capital transfers)	...	2,044.9	2,020.2	2,116.1	...	...	...	...	...
Total revenue	1,102.7	1,376.6	1,340.1	1,323.1	1,552.1	1,521.1	1,865.1	1,815.2	2,148.6
Tax revenue	1,020.0	1,295.8	1,259.3	1,260.8	1,523.8	1,492.8	1,803.4	1,782.9	2,111.9
Domestic taxes	529.0	636.2	636.2	631.9	765.8	773.7	898.4	989.8	1,222.6
Taxes on foreign trade	491.0	659.6	623.1	628.9	758.0	719.1	905.0	793.0	889.3
Nontax revenue	82.8	80.8	80.8	62.2	28.3	28.3	61.7	32.3	36.7
Grants	579.5	5,837.7	5,580.8	5,655.4	699.3	684.1	622.5	555.0	613.9
Current grants	141.0	182.0	193.8	173.2	150.5	132.0	133.1	98.8	107.5
Capital grants	438.5	5,655.7	5,387.0	5,482.2	548.8	552.1	489.5	456.2	506.4
Project grants	438.5	486.3	486.3	619.8	548.8	552.1	489.5	456.2	506.4
Capital transfers MDRI	...	5,169.4	4,900.7	4,862.4	...	...	...	...	...
Total expenditure (commitment basis)	2,145.5	2,580.5	2,531.0	2,521.3	2,822.4	2,973.3	3,189.6	3,047.7	3,489.1
Current expenditure	1,107.2	1,221.3	1,240.6	1,312.5	1,415.6	1,617.0	1,597.8	1,596.3	1,847.4
Personnel	456.4	599.8	596.9	589.9	721.1	721.1	827.1	836.1	965.8
Interest obligations	266.6	235.4	253.4	284.8	221.1	251.2	218.8	230.4	220.7
Foreign interest obligations [3]	97.9	50.6	47.8	55.5	21.5	33.5	47.9	36.4	42.2
Domestic interest obligations	168.7	184.8	205.6	229.3	199.6	217.6	171.0	193.9	178.5
Other	300.0	373.6	377.8	381.1	459.7	475.7	536.4	462.4	584.4
Treasury operations (net) [4]	84.2	12.5	12.5	56.7	13.7	169.0	15.4	67.4	76.4
Of which : central bank recap.	...	...	...	...	0.0	110.0	...	...	...
Capital expenditure	1,038.3	1,359.2	1,290.4	1,208.8	1,406.8	1,356.3	1,591.8	1,451.4	1,641.7
Domestically financed	304.8	304.2	286.3	286.2	349.0	306.5	525.3	466.2	567.3
Foreign-financed	733.5	1,055.0	1,004.1	922.6	1,057.8	1,049.8	1,066.4	985.3	1,074.4
Net cost of structural reforms	-8.5	-6.2	-6.2	-9.9	0.0	0.0	0.0	0.0	0.0
Domestic balance (commitment basis) [5]	-219.8	-104.5	-145.2	-230.0	-191.0	-368.9	-210.1	-210.8	-223.9
Float [6]	44.9	-40.7	-40.7	-25.4	-3.3	0.0	0.0	0.0	0.0
Variation of domestic arrears	-10.9	-20.0	-20.0	-4.7	-23.4	-23.4	0.0	0.0	0.0
Overall balance (cash basis)									
Excluding grants	-1,017.2	-1,270.8	-1,257.8	-1,238.2	-1,297.0	-1,475.7	-1,324.4	-1,232.5	-1,340.6
Including grants	-437.7	4,566.9	4,323.0	4,417.2	-597.8	-791.6	-701.9	-677.5	-726.7
Including grants, excl. MDRI capital transfers and central bank recap.	...	-602.5	-577.7	-445.2	-597.8	-667.5	...	...	...
Financing	437.7	-4,566.9	-4,323.0	-4,417.2	597.8	791.6	701.9	677.5	726.7
Foreign (net)	387.8	-4,210.3	-3,966.3	-4,133.2	560.3	585.3	680.6	631.5	683.0
Drawings	454.5	710.8	683.8	467.2	634.4	605.3	732.5	651.6	704.1
Amortization [3]	-177.0	-4,921.0	-4,650.1	-4,600.4	-74.1	-20.0	-52.4	-20.5	-21.5
External debt relief	110.3	0.0	0.0	0.0	0.0	0.0	0.5	0.4	0.4
Domestic (net)	49.4	-362.1	-361.8	-289.0	37.5	202.3	21.3	46.0	43.7
Banking system	-111.6	-365.2	-366.0	-355.4	12.1	120.5	-5.0	-5.0	-5.0
Of which: MDRI account	...	-325.5	-325.5	-325.5	36.2	36.2	36.2	36.2	36.2
Nonbanking system	120.0	3.1	4.2	73.5	25.4	81.8	26.3	51.0	48.7
Treasury correspondent accounts (net)	41.0	0.0	0.0	-7.1	0.0	0.0	0.0	0.0	0.0
Privatization receipts	0.6	5.5	5.0	5.0	0.0	4.0	0.0	0.0	0.0
Memorandum items:									
MDRI flow debt-service savings	...	73.4	72.5	65.5	111.6	101.1	123.4	104.8	115.4
Net domestic financing [7]	84.0	-55.7	-55.7	47.6	10.8	182.9	21.3	46.0	43.7
Excluding central bank recap.	...	...	...	...	10.8	58.8	...	...	...
Priority spending [8]	1,060.5	1,292.2	1,292.2	1,294.2	1,500.8	1,500.8	...	...	...

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

[1] IMF Country Report No. 06/306, Republic of Madagascar: Request for a Three-Year Arrangement Under the Poverty Reduction and Growth Facility and Activation of the Trade Integration Mechanism.

[2] IMF Country Report No. 07/7, Republic of Madgascar: First Review under the Three-Year Arrangement under the PRGF.

[3] After MDRI debt relief from 2006 onward.

[4] Includes annexed budgets of quasi-public entities (i.e. port authorities, post office, government printing office, civil service, retirement funds, and correspondent accounts of local authorities).

[5] Total revenue minus expenditure, excluding foreign interest payments and foreign-financed capital expenditure.

[6] Difference between committed and paid expenditure.

[7] Banking system, nonbanking system, Treasury correspondent accounts (net), privatization receipts, float, and variation in arrears, excluding capital transfer flowing from MDRI assistance from IMF via central bank in 2006.

[8] Spending of Education, Health, Agriculture, Public works, Justice and Environment ministries.

Table 3b. Madagascar: Government Financial Operations, 2005–2009
(Percent of GDP, unless otherwise indicated)

	2005	2006			2007		2008		2009
		Prog.[1]	Rev. prog.[2]	Est.	Prog.[2]	Proj.	Proj.[2]	Rev. proj.	Proj.
Total revenue and grants	16.7	61.2	58.8	59.2	16.5	16.1	16.1	15.1	15.5
Total revenue and grants (excl. MDRI capital transfers)	...	17.3	17.2	18.0	...	...	...	...	...
Total revenue	10.9	11.7	11.4	11.2	11.4	11.1	12.1	11.6	12.1
Tax revenue	10.1	11.0	10.7	10.7	11.2	10.9	11.7	11.4	11.9
Domestic taxes	5.2	5.4	5.4	5.4	5.6	5.6	5.8	6.3	6.9
Taxes on foreign trade	4.9	5.6	5.3	5.3	5.6	5.2	5.9	5.1	5.0
Nontax revenue	0.8	0.7	0.7	0.5	0.2	0.2	0.4	0.2	0.2
Grants	5.7	49.5	47.5	48.0	5.1	5.0	4.0	3.5	3.5
Current grants	1.4	1.5	1.6	1.5	1.1	1.0	0.9	0.6	0.6
Capital grants	4.3	48.0	45.8	46.5	4.0	4.0	3.2	2.9	2.8
Project grants	4.3	4.1	4.1	5.3	4.0	4.0	3.2	2.9	2.8
Capital transfers MDRI	...	43.8	41.7	41.3	...	...	...	...	...
Total expenditures (commitment basis)	21.2	21.9	21.5	21.4	20.7	21.7	20.7	19.4	19.6
Current expenditure	11.0	10.3	10.5	11.1	10.4	11.8	10.4	10.2	10.4
Personnel	4.5	5.1	5.1	5.0	5.3	5.3	5.4	5.3	5.4
Interest obligations	2.6	2.0	2.2	2.4	1.6	1.8	1.4	1.5	1.2
Domestic Interest	1.7	1.6	1.7	1.9	1.5	1.6	1.1	1.2	1.0
Foreign Interest [3]	1.0	0.4	0.4	0.5	0.2	0.2	0.3	0.2	0.2
Other	3.0	3.2	3.2	3.2	3.4	3.5	3.5	2.9	3.3
Treasury operations [4]	0.8	0.1	0.1	0.5	0.1	1.2	0.1	0.4	0.4
Of which : central bank recap.	...	...	...	...	0.0	0.8	...	0.0	...
Capital expenditure	10.3	11.5	11.0	10.3	10.3	9.9	10.3	9.3	9.2
Domestically financed expenditure	3.0	2.6	2.4	2.4	2.6	2.2	3.4	3.0	3.2
Foreign-financed expenditure	7.3	8.9	8.5	7.8	7.8	7.6	6.9	6.3	6.0
Net cost of structural reforms	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0
Domestic balance (commitment basis) [5]	-2.2	-0.9	-1.2	-2.0	-1.4	-2.7	-1.4	-1.3	-1.3
Float [6]	0.4	-0.3	-0.3	-0.2	0.0	0.0	0.0	0.0	0.0
Variation of domestic arrears	-0.1	-0.2	-0.2	0.0	-0.2	-0.2	0.0	0.0	0.0
Overall balance (cash basis)									
Excluding grants	-10.1	-10.8	-10.7	-10.5	-9.5	-10.7	-8.6	-7.9	-7.5
Including grants	-4.3	38.7	36.8	37.5	-4.4	-5.8	-4.5	-4.3	-4.1
Including grants, excl. MDRI capital transfers and central bank recap.	...	-5.1	-4.9	-3.8	-4.4	-4.9	...	...	...
Financing	4.3	-38.7	-36.8	-37.5	4.4	5.8	4.5	4.3	4.1
Foreign (net)	3.8	-35.7	-33.7	-35.1	4.1	4.3	4.4	4.0	3.8
Drawings	4.5	6.0	5.8	4.0	4.7	4.4	4.7	4.2	4.0
Amortization [3]	-1.8	-41.7	-39.5	-39.0	-0.5	-0.1	-0.3	-0.1	-0.1
External debt relief	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Domestic (net)	0.5	-3.1	-3.1	-2.5	0.3	1.5	0.1	0.3	0.2
Banking sector	-1.1	-3.1	-3.1	-3.0	0.1	0.9	0.0	0.0	0.0
Nonbanking sector	1.2	0.0	0.0	0.6	0.2	0.6	0.2	0.3	0.3
Treasury correspondent accounts (net)	0.4	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0
Privatization receipts	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Memorandum items:									
Nominal GDP (billions of ariary)	10,095	11,795	11,760	11,781	13,622	13,729	15,432	15,677	17,788
MDRI flow debt-service savings	...	0.6	0.6	0.6	0.8	0.7	0.8	0.7	0.6
Net domestic financing [7]	0.8	-0.5	-0.5	0.4	0.1	1.3	0.1	0.3	0.2
Excluding central bank recap.	…	…	…	…	0.1	0.4	…	…	…
Priority spending [8]	10.5	...	11.0	11.0	11.0	10.9	…	…	…
Net external aid [9]	8.6	10.3	10.2	9.4	9.1	9.0	8.1	7.3	7.1

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

[1] See Table 3a, footnote 1.

[2] See Table 3a, footnote 2.

[3] See Table 3a, footnote 3.

[4] See Table 3a, footnote 4.

[5] See Table 3a, footnote 5.

[6] See Table 3a, footnote 6.

[7] See Table 3a, footnote 7.

[8] See Table 3a, footnote 8.

[9] Foreign grants and loans, less debt service (excluding MDRI capital transfers in 2006).

Table 4. Madagascar: Quarterly Government Financial Operations, 2007
(Billions of ariary, cumulated since the beginning of the year, unless otherwise indicated)

	March		June		September		December	
	Prog.[1]	Proj.	Prog.[1]	Proj.	Prog.[1]	Proj.	Prog.[1]	Proj.
Total revenue and grants	501.6	409.7	1,135.6	1,080.0	1,659.1	1,558.4	2,251.4	2,205.1
Total revenue	340.8	292.5	767.2	749.8	1,154.9	1,105.3	1,552.1	1,521.1
Tax revenue	339.7	291.3	761.3	743.9	1,136.9	1,087.3	1,523.8	1,492.8
Domestic taxes	162.1	138.0	392.3	397.7	574.0	574.8	765.8	773.7
Taxes on foreign trade	177.5	153.4	369.0	346.2	563.0	512.5	758.0	719.1
Nontax revenue	1.1	1.1	5.9	5.9	17.9	17.9	28.3	28.3
Grants	160.8	117.2	368.4	330.2	504.2	453.1	699.3	684.1
Current grants	7.2	56.1	88.5	81.6	92.7	107.3	150.5	132.0
Capital grants	153.7	61.1	279.9	248.6	411.6	345.8	548.8	552.1
Total expenditure	721.2	585.9	1,378.4	1,494.7	2,065.0	2,139.8	2,822.4	2,973.3
Current expenditure	363.8	320.4	705.7	848.2	1,044.9	1,217.0	1,415.6	1,616.9
Personnel	180.3	180.3	360.6	360.6	540.8	540.8	721.1	721.1
Interest expenditure	54.5	59.0	115.2	127.0	163.0	186.3	221.1	251.1
Foreign interest obligations [2]	1.9	6.1	11.4	17.3	12.8	23.2	21.5	33.5
Domestic interest obligations	52.6	52.9	103.8	109.7	150.2	163.1	199.6	217.6
Of which : central bank recapitalization	0.0	0.0	0.0	4.9	0.0	9.6	0.0	14.1
Other	120.2	66.1	217.2	223.6	328.2	337.8	459.7	475.7
Treasury operations (net) [3]	8.9	15.0	12.7	137.0	12.8	152.0	13.7	169.0
Of which : central bank recapitalization	0.0	0.0	0.0	110.0	0.0	110.0	0.0	110.0
Capital expenditure	357.4	265.5	672.7	646.5	1,020.1	922.8	1,406.8	1,356.3
Domestically financed	61.2	60.0	133.2	137.9	226.7	199.2	349.0	306.5
Foreign financed	296.2	205.5	539.5	508.6	793.4	723.6	1,057.8	1,049.8
Net cost of structural reforms	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overall balance (commitment basis)								
Excluding grants	-380.5	-293.5	-611.2	-744.9	-910.1	-1,034.5	-1,270.3	-1,452.2
Including grants	-219.7	-176.3	-242.8	-414.7	-405.8	-581.5	-571.1	-768.2
Including grants, excluding central bank recapitalization	-219.7	-176.3	-242.8	-299.8	-405.8	-461.9	-571.1	-644.1
Domestic balance (commitment basis) [4]	-82.4	-81.9	-60.3	-219.0	-103.9	-287.7	-191.0	-368.9
Float [5]	-10.0	-14.2	17.2	1.5	9.2	38.1	-3.3	0.0
Variation of domestic arrears	-23.4	0.0	-23.4	-23.4	-23.4	-23.4	-23.4	-23.4
Overall balance (cash basis)								
Excluding grants	-413.9	-307.7	-617.4	-766.8	-924.3	-1,019.8	-1,297.0	-1,475.6
Including grants	-253.1	-190.5	-249.0	-436.6	-420.0	-566.7	-597.8	-791.6
Including grants, excluding central bank recapitalization	-253.1	-190.5	-249.0	-321.7	-420.0	-447.2	-597.8	-667.5
Financing	253.1	190.5	249.0	436.6	420.0	566.7	597.8	791.6
Foreign (net)	132.7	138.9	259.5	281.5	459.6	469.8	560.3	585.3
Drawings	142.5	144.4	294.8	290.8	507.2	485.3	634.4	605.3
Budget	0.0	0.0	35.2	30.8	125.4	107.5	125.4	107.5
Projects	142.5	144.4	259.6	260.0	381.8	377.8	509.0	497.8
Amortization [2]	-9.8	-5.5	-35.2	-9.3	-47.6	-15.5	-74.1	-20.0
Domestic (net)	120.3	51.5	-10.6	154.1	-39.6	95.5	37.5	202.3
Banking system	52.0	-32.2	-4.6	87.3	-41.3	67.9	12.1	120.5
Central bank	2.0	-82.8	5.4	107.3	8.7	92.9	12.1	150.5
Of which: MDRI account	9.0	9.0	18.1	18.1	27.1	27.1	36.2	36.2
Commercial banks & OPCA	50.0	50.7	-10.0	-20.0	-50.0	-25.0	0.0	-30.0
Nonbanking system	68.3	83.7	-5.9	66.8	1.7	27.6	25.4	81.8
Treasury correspondent accounts (net)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Privatization receipts	0.0	0.0	0.0	1.0	0.0	1.4	0.0	4.0
Memorandum items:								
MDRI flow debt-service savings	27.9	25.2	55.8	50.5	83.7	75.7	111.6	100.9
Net domestic financing [6]	86.9	37.4	-16.8	133.2	-53.8	111.6	10.8	182.9
Excluding central bank recapitalization	86.9	37.4	-16.8	18.3	-53.8	-7.9	10.8	58.8

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

[1] See Table 3a, footnote 2.
[2] See Table 3a, footnote 3.
[3] See Table 3a, footnote 4.
[4] See Table 3a, footnote 5.
[5] See Table 3a, footnote 6.
[6] See Table 3a, footnote 7.

Table 5. Madagascar: Balance of Payments, 2005–2011
(Millions of SDRs)

	2005	2006			2007		2008		2009	2010	2011
		Prog.[1]	Proj.[2]	Est.	Prog.[2]	Proj.	Proj.[2]	Rev. Proj.		Proj.	
Current account	-371	-393	-372	-329	-403	-828	-439	-1187	-1204	-610	-683
Goods and services	-481	-516	-485	-420	-521	-912	-551	-1255	-1250	185	314
Trade balance	-402	-394	-371	-372	-413	-667	-433	-896	-832	423	563
Exports	580	580	629	662	645	688	684	725	776	1921	2231
Of which: big mining projects	...	...	...	...	...	...	...	...	23	1096	1352
Imports	-982	-974	-1000	-1034	-1058	-1355	-1116	-1621	-1608	-1498	-1668
Of which: big mining projects	...	...	...	-87	...	-322	...	-514	-403	-219	-270
Net services	-80	-121	-114	-48	-109	-245	-118	-359	-418	-238	-250
Income (net)	-53	-42	-49	-54	-43	-53	-51	-62	-87	-931	-1138
Receipts	16	16	16	20	17	22	18	21	21	21	21
Payments	-69	-58	-65	-74	-60	-75	-69	-83	-108	-952	-1159
Of which: government interest [3]	-33	-16	-15	-18	-7	-12	-14	-13	-15	-16	-16
Current transfers	164	164	162	145	161	138	163	130	134	137	140
Government	44	44	45	46	32	34	27	23	23	26	28
Budget aid	53	54	57	55	44	44	38	36	37	41	44
Other (net) [4]	-10	-10	-12	-8	-12	-10	-11	-13	-14	-15	-16
Private	120	120	118	99	129	104	136	107	110	111	112
Capital and financial account	311	515	502	488	418	883	444	1266	1265	660	730
Capital account [5]	109	1809	1709	1750	164	185	140	164	177	194	211
Of which: MDRI grant for debt due after 2006	...	1654	1556	1553	...	...	...	...	...	...	...
Financial account	183	-1294	-1207	-1188	254	698	304	1101	1088	466	519
Direct investment	58	60	61	150	87	543	110	866	821	207	236
Other	125	-1354	-1268	-1338	167	154	194	235	267	259	283
Government	120	-1349	-1258	-1286	167	202	194	227	238	249	258
Drawing	180	227	216	182	189	208	209	235	246	258	271
Project drawings	126	181	163	129	152	171	165	191	198	206	214
Budgetary support	54	45	52	52	37	37	44	44	47	52	57
Amortization [5]	-60	-1576	-1474	-1468	-22	-7	-15	-7	-7	-9	-13
Of which: IDA and AfDF loans	...	-1534	-1433	-1431	...	...	...	...	...	...	...
Private sector, net (including banks)	-3	-5	-10	-44	0	-44	0	8	29	10	25
Other (incl. errors and omissions)	20	0	0	-75	0	0	0	0	0	0	0
Overall balance	-60	121	131	159	15	55	4	79	61	51	47
Financing	60	-131	-138	-159	-31	-71	-28	-94	-69	-73	-71
Central bank (net; increase = –)	25	-149	-153	-174	-31	-71	-28	-94	-69	-73	-71
Use of IMF credit (net)	3	-137	-129	-129	0	8	0	0	0	-1	-2
Other assets, net (increase = –)	22	-11	-24	-44	-31	-79	-28	-94	-69	-71	-69
Debt relief and cancellation	34	18	15	14	0	0	0	0	0	0	0
Residual financing gap	0	9	8	0	16	16	23	16	8	22	24
Possible IMF financing	…	…	8	0	16	16	16	16	8	0	0
Memorandum items:											
Grants (percent of GDP)	4.5	5.3	5.3	6.5	4.8	4.6	3.8	3.3	3.2	3.1	3.0
Loans (percent of GDP)	3.5	-35.9	-33.9	-34.3	4.1	4.3	4.4	4.0	3.8	3.5	3.3
Direct investment (percent of GDP)	1.7	1.6	1.6	4.0	2.1	11.5	2.5	15.3	13.1	3.0	3.0
Current account (percent of GDP)											
Excluding net official transfers	-12.1	-11.6	-11.2	-10.0	-10.7	-18.2	-10.6	-21.3	-19.6	-9.0	-9.1
Including net official transfers	-10.9	-10.5	-10.0	-8.8	-9.9	-17.5	-10.0	-20.9	-19.2	-8.7	-8.7
Debt service (percent of exports of goods) [6]	8.0	2.7	2.6	2.6	3.7	2.8	3.6	2.8	2.9	1.3	1.3
Gross official reserves	337	349	361	382	392	460	420	555	624	695	764
Months of imports of goods and nonfactor services	2.9	2.9	2.9	3.0	3.0	2.7	3.0	2.7	2.9	3.5	3.5
Months of imports, excl. large mining projects	...	...	...	...	...	3.3	...	3.6	3.7	3.9	3.9
Exchange rate (ariary/SDR, period average)	2959	3135	3167	3146	3350	2904	...	...	...	...	...

Sources: Central Bank of Madagascar, Ministry of Finance, IMF Finance Dept., and IMF staff estimates and projections.

[1] IMF Country Report No. 06/306, Republic of Madagascar: Request for a Three-Year Arrangement Under the Poverty Growth Facility and Activation of the Trade Integration Mechanism.

[2] IMF Country Report No. 07/7, Republic of Madgascar: First Review under the Three-Year Arrangement under the PRGF.

[3] After MDRI debt relief from 2006 onward.

[4] Other official grants less payments due to scholarships and contributions to international organizations.

[5] Includes impact of HIPC completion point in 2004 and MDRI in 2006.

[6] After HIPC and MDRI debt reliefs .

Table 6. Madagascar: Monetary Survey, 2005–2009
(Billions of ariary, unless otherwise specified)

	2005	2006			2007								2008		2009
		Dec.			March		June		Sept.		Dec.				
		Prog.[1]	Proj.[2]	Est.	Prog.[2]	Proj.	Prog.[2]	Proj.	Prog.[2]	Proj.	Prog.[2]	Proj.	Proj.[2]	Rev. Proj.	Proj.
Net foreign assets	933.4	1,429.6	1,460.3	1,584.0	1,408.6	1,635.7	1,480.9	1,702.4	1,563.6	1,756.9	1,595.8	1,777.2	1,740.8	2,051.2	2,204.4
Net foreign assets (BCM)	526.5	1,000.7	1,011.0	1,050.6	933.4	1,101.2	1,005.7	1,143.4	1,088.4	1,159.5	1,120.6	1,149.0	1,243.4	1,349.4	1,563.6
Net foreign assets (domestic money banks)	406.9	428.9	449.2	533.4	475.2	534.5	475.2	558.9	475.2	597.4	475.2	628.3	497.4	701.8	640.8
Net domestic assets	1,243.9	1,086.7	1,086.8	1,151.1	1,218.8	1,270.2	1,195.8	1,312.4	1,186.9	1,435.2	1,345.0	1,687.2	1,591.2	2,249.1	2,931.7
Domestic credit	1,409.2	1,288.6	1,286.1	1,293.8	1,502.9	1,350.4	1,458.0	1,426.0	1,404.4	1,516.2	1,576.1	1,717.5	1,864.0	2,329.7	3,005.1
Net credit to government (budget)	294.1	-71.1	-71.9	-60.8	-19.9	-93.0	-76.5	26.5	-113.2	7.1	-59.8	59.7	-64.8	54.7	49.7
Other claims on public sector	104.7	104.7	107.0	138.5	107.0	138.5	107.0	138.5	107.0	138.5	107.0	138.5	107.0	138.5	138.5
Credit to the economy	1,010.4	1,255.0	1,250.9	1,216.1	1,415.7	1,333.7	1,427.5	1,356.5	1,410.5	1,455.7	1,528.9	1,565.8	1,821.8	2,136.6	2,816.9
Credit to public enterprises	13.3	13.3	42.8	24.8	42.8	24.7	42.8	24.7	42.8	24.7	42.8	24.7	42.8	24.7	24.7
Credit to private sector	997.1	1,241.7	1,208.1	1,191.3	1,372.9	1,309.0	1,384.7	1,331.8	1,367.7	1,431.0	1,486.1	1,541.1	1,779.0	2,111.9	2,792.2
Other items (net; asset = +)	-165.3	-201.8	-199.2	-142.8	-284.1	-80.2	-262.2	-113.7	-217.5	-81.0	-231.2	-30.2	-272.8	-80.7	-73.3
M3	2,177.0	2,516.3	2,547.1	2,735.0	2,627.4	2,906.0	2,676.7	3,014.7	2,750.5	3,192.1	2,940.7	3,464.5	3,331.4	4,299.9	5,135.7
Foreign currency deposits	334.3	339.5	403.2	443.5	446.6	445.4	426.5	467.6	443.2	493.8	465.5	518.1	527.3	643.1	768.1
M2	1,842.7	2,176.9	2,143.9	2,291.6	2,180.8	2,460.6	2,250.3	2,547.1	2,307.3	2,698.3	2,475.3	2,946.4	2,804.1	3,656.8	4,367.6
Currency in circulation	599.1	692.5	692.1	711.8	666.0	701.5	678.7	755.7	697.5	805.0	787.3	874.6	878.5	1,042.1	1,207.3
Deposits in local currency	1,214.5	1,455.3	1,421.9	1,548.6	1,484.8	1,727.4	1,541.6	1,759.9	1,579.8	1,861.7	1,658.0	2,040.2	1,895.6	2,583.1	3,128.7
Short-term obligations of commercial banks	29.1	29.1	30.0	31.1	30.0	31.6	30.0	31.6	30.0	31.6	30.0	31.6	30.0	31.6	31.6
Memorandum items:	(12-month percentage change unless otherwise indicated)														
M3	3.1	15.6	17.0	25.6	15.8	28.1	11.9	26.2	15.5	29.0	15.5	26.7	13.3	24.1	19.4
M2	4.6	18.1	16.3	24.4	15.8	30.6	14.0	29.2	16.8	30.7	15.5	28.6	13.3	24.1	19.4
Domestic credit	5.5	-8.6	-8.7	-8.2	30.8	17.6	24.6	22.1	24.8	37.9	22.6	32.7	18.3	35.6	29.0
Credit to the economy	21.1	24.5	21.2	20.4	32.2	24.8	28.7	23.4	21.1	24.1	23.0	28.8	19.7	36.5	31.8
Net credit to government (NCG)	-27.5	-124.2	-124.4	-120.7	-31.5	220.5	30.4	-145.2	-37.5	-103.8	-16.8	-198.1	8.4	-8.4	-9.1
Nominal change in NCG since beginning of year	-111.6	-365.2	-366.0	-354.9	52.0	-32.2	-4.6	87.3	-41.3	67.9	12.1	120.5	-5.0	-5.0	-5.0
Reserve money	11.7	12.2	12.2	13.0	12.7	20.7	9.6	18.6	17.7	18.8	13.6	21.8	11.9	19.3	17.1
Money multiplier (M3/reserves)	2.3	2.4	2.4	2.6	2.7	2.7	2.6	2.7	2.5	2.7	2.5	2.7	2.5	2.8	2.8
Velocity of money (GDP/end-of-period M3)	4.6	4.7	4.6	4.3	...	...	...	...	...	...	4.6	4.0	4.6	3.6	3.5
Exchange rate (ariary per SDR; end of period) [3]	3,087	3,135	3,167	3,027	3,350	2,953	3,350	2,933	3,350	2,867	3,350	2,802	3,507	2,761	2,843

Sources: Central Bank of Madagascar (BCM) and IMF staff estimates and projections.

[1] IMF Country Report No. 06/306, Republic of Madagascar: Request for a Three-Year Arrangement Under the Poverty Reduction and Growth Facility and Activation of the Trade Integration Mechanism . December 2006 program targets are unchanged.

[2] IMF Country Report No. 07/7, Republic of Madgascar: First Review under the Three-Year Arrangement under the PRGF.

[3] Future exchange rate for monetary programming purposes.

Table 7. Madagascar: Balance Sheet of the Central Bank, 2005–2009
(Billions of ariary)

	2005	2006			2007								2008		2009
		Dec.			March		June		Sept.		Dec.				
		Prog.[1]	Proj.[2]	Est.	Prog.[2]	Est.	Prog.[2]	Proj.	Prog.[2]	Proj.	Prog.[2]	Proj.	Proj.[2]	Rev. Proj.	Proj.
Net foreign assets	526.5	1,000.7	1,011.0	1,050.6	933.4	1,101.2	1,005.7	1,143.4	1,088.4	1,159.5	1,120.6	1,149.0	1,243.4	1,349.4	1,563.6
Gross foreign assets	1,041.3	1,093.1	1,143.0	1,155.1	1,073.0	1,226.1	1,171.7	1,267.5	1,254.3	1,303.3	1,312.9	1,289.8	1,472.1	1,531.5	1,773.5
Gross foreign liabilities	514.8	35.6	132.0	104.6	139.6	124.9	165.9	124.1	165.9	143.8	192.2	140.8	228.8	182.1	209.9
Net domestic assets	411.3	51.3	40.9	9.2	56.6	-40.9	34.3	-17.6	1.6	8.6	74.1	141.8	93.8	191.0	240.2
Credit to government (net)	325.3	-14.6	-30.4	-82.0	44.3	-193.6	19.9	-70.1	-17.5	-74.2	53.8	68.5	119.3	110.5	174.5
Of which : IMF MDRI debt relief [3]	0.0	-325.5	-325.5	-325.5	-316.5	-325.5	-307.5	-307.5	-298.4	-298.4	-289.4	-289.4	-253.2	-253.2	-217.0
Claims on public enterprises	4.5	4.5	4.5	4.6	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Liquidity operations (+ = injection)	1.1	1.1	-10.4	-49.5	-10.4	-33.2	-10.4	-99.9	-10.4	-89.6	-10.4	-50.9	-10.4	-18.4	-19.5
Other items (net; asset +)	80.5	60.4	77.2	136.1	18.3	152.7	20.3	52.5	25.0	82.8	26.3	119.8	-19.5	94.5	80.7
Reserve money	937.8	1,051.9	1,051.9	1,059.8	990.0	1,060.3	1,040.0	1,125.8	1,090.0	1,168.1	1,194.7	1,290.8	1,337.2	1,540.4	1,803.8
Currency outside banks	599.1	692.5	692.1	711.8	666.0	701.5	678.7	755.7	697.5	805.0	787.3	874.6	878.5	1,042.1	1,207.3
Bank reserves	338.4	359.4	359.5	345.3	323.6	358.3	360.8	369.7	392.0	362.7	407.0	415.7	458.1	497.9	596.0
Currency in banks	40.2	44.7	49.8	51.1	41.7	45.4	46.8	49.0	41.6	52.2	56.4	56.8	60.7	67.1	77.1
Deposits	298.2	314.7	309.7	294.2	281.9	312.9	314.1	320.7	350.4	310.4	350.6	359.0	397.4	430.8	518.9
Memorandum items:															
Cumulative annual flow															
Net foreign assets	6.4	474.2	484.5	524.1	-77.7	50.6	-5.3	92.9	77.4	108.9	109.6	98.4	122.7	200.4	214.2
Excluding MDRI	…	77.5	87.9	127.4	…	…	…	…	…	…	…	…	…	…	…
In SDRs	-9.0	19.9	19.9	47.7	-40.6	25.8	-19.0	42.9	5.7	57.3	15.3	63.0	20.1	78.7	61.2
Net domestic assets	91.7	-359.7	-370.5	-402.1	15.8	-50.1	-6.6	-26.8	-39.3	-0.6	33.3	132.6	19.7	49.2	49.2
Excluding MDRI	…	36.9	26.2	-5.4	…	…	…	…	…	…	…	…	…	…	…
Credit to government (net) [4]	60.5	-365.2	-366.0	-407.2	2.0	-82.8	5.4	107.3	8.7	92.9	12.1	150.5	12.1	42.0	64.0
Reserve money	98.1	114.4	114.1	122.0	-61.9	0.5	-11.9	66.1	38.1	108.3	142.8	231.0	285.3	249.6	263.4

Sources: Central Bank of Madagascar (BCM) and IMF staff estimates and projections.

[1] IMF Country Report No. 06/306, Republic of Madagascar: Request for a Three-Year Arrangement Under the Poverty Reduction and Growth Facility and Activation of the Trade Integration Mechanism. December 2006 program targets are unchanged.

[2] IMF Country Report No. 07/7, Republic of Madgascar: First Review under the Three-Year Arrangement under the PRGF.

[3] Total amount of MDRI debt relief from the IMF, excluding already received HIPC support (MGA 396.7 billion or SDR128.7 million). Of this amount, MGA 36 billion was repaid to the BCM to cover prior onlending to the government of an IMF disbursement, leaving a balance of MGA 361.7 billion.

[4] Excludes treasury bills used for monetary policy purposes.

Table 8. Madagascar: Selected Economic and Financial Indicators, 2005–2011

	2005	2006	2007	2008	2009	2010	2011
		Est.			Proj.		
		(Percentage change, unless otherwise indicated)					
National income and prices							
Nominal GDP growth	23.8	16.7	16.5	14.2	13.5	15.2	14.5
Real GDP growth	4.6	4.9	6.5	7.3	7.5	9.8	9.0
GDP deflator	18.4	11.3	9.5	6.4	5.6	4.9	5.0
Consumer price index (period average)	18.4	10.8	9.8	7.1	5.5	5.0	5.0
Consumer price index (end of period)	11.4	10.9	7.9	6.0	5.0	5.0	5.0
External sector							
Export of goods volume	16.5	7.8	3.0	3.2	6.8	147.6	17.1
Import of goods volume	-13.0	-6.1	33.9	16.4	-0.2	-6.5	11.8
Terms of trade (deterioration = –)	-36.4	-5.5	3.0	-0.6	0.8	0.4	-0.5
Money and credit [1]							
Reserve money [2]	11.7	13.0	21.8	19.3	17.1	16.9	16.2
Broad money	3.1	25.6	26.7	24.1	19.4	16.9	16.2
Net foreign assets	1.9	29.9	7.1	7.9	3.6	4.5	3.2
Net domestic assets	1.2	-4.3	19.6	16.2	15.9	12.5	13.0
Credit to government	-5.3	-16.3	4.4	-0.1	-0.1	-0.1	-0.1
Credit to the private sector [2]	22.4	19.5	29.4	37.0	32.2	21.5	22.3
Velocity of money (M3; average)	4.6	4.3	4.0	3.6	3.5	3.4	3.4
			(Percent of GDP)				
Public finance							
Total revenue (excluding grants)	10.9	11.2	11.1	11.6	12.1	12.6	13.0
Of which: tax revenue	10.1	10.7	10.9	11.4	11.9	12.4	12.8
Grants [3]	5.7	48.0	5.0	3.5	3.4	3.3	3.2
Total expenditure	21.2	21.4	21.7	19.4	19.6	19.7	19.8
Current expenditure	11.0	11.1	11.8	10.2	10.4	10.9	11.2
Capital expenditure	10.3	10.3	9.9	9.2	9.2	8.8	8.6
Domestic balance	-2.2	-2.0	-2.7	-1.3	-1.3	-1.2	-1.2
Overall balance (cash basis, incl. grants)	-4.3	37.5	-5.8	-4.3	-4.1	-3.8	-3.6
Overall balance (cash basis, excl. grants)	-10.1	-10.5	-10.7	-7.8	-7.5	-7.2	-6.8
Domestic financing	0.5	-2.5	1.5	0.3	0.3	0.3	0.3
Savings and investment							
Investment	22.5	24.8	29.2	33.9	31.7	23.8	24.5
Government	10.3	10.3	9.9	9.2	9.2	8.8	8.6
Nongovernment	12.3	14.5	19.3	24.7	22.5	14.9	15.9
Gross domestic savings	8.4	13.6	9.9	11.8	11.7	26.4	28.5
Gross national savings	11.7	16.0	11.7	13.0	12.5	15.1	15.8
External sector and public debt							
Exports of goods, f.o.b.	17.0	17.7	14.5	12.8	12.4	27.3	28.4
Imports of goods, c.i.f.	33.9	32.5	33.7	33.6	30.2	25.1	25.0
Current account balance (excl. grants)	-12.1	-10.0	-18.2	-21.3	-19.6	-9.0	-9.1
Current account balance (incl. grants)	-10.9	-8.8	-17.5	-20.9	-19.2	-8.7	-8.7
Public debt	80.3	38.6	36.4	34.8	35.4	35.0	34.7
External	69.9	28.8	26.8	26.2	27.5	28.0	28.2
Domestic	10.4	9.8	9.6	8.6	7.8	7.1	6.4
Net present value (NPV) of external debt							
NPV of debt-to-exports ratio	134.3	38.7	46.2	54.1	60.9	37.7	38.5
NPV of debt-to-fiscal revenue ratio	215.0	64.2	71.2	78.1	83.3	85.5	87.8
			(Units as indicated)				
Gross official reserves (SDR millions)	337.4	381.6	460.3	554.7	623.8	695.3	764.4
Months of imports of goods and services	2.9	3.0	2.7	2.7	2.9	3.5	3.5
Months of imports, excl. large mining projects	...	...	3.3	3.6	3.7	3.9	3.9
Residual financing gap (SDR millions)	0.0	0.0	15.7	15.7	7.9	21.9	24.3
Ariary per SDR (period average)	2,958	3,146	2,904	...	...	...	...
Real effective exchange rate (period average, percent change)	6.1	0.8	16.1	10.0	0.0	0.0	0.0
GDP per capita (U.S. dollars)	282	299	374	439	473	519	568
Nominal GDP (billions of ariary)	10,095	11,781	13,729	15,677	17,788	20,488	23,458

Sources: Malagasy authorities and IMF staff estimates and projections.

[1] Growth in percent of beginning of period money stock (M3).

[2] Year-on-year growth.

[3] Includes MDRI capital transfers in 2006.

Table 9. Madagascar: Bank Soundness Indicators, 2002–2006 (end-of-period)

	2002	2003	2004	2005	2006 Prelim.
Capital adequacy			(Ratio; percent)		
Regulatory capital to risk-weighted assets					
Lowest ratio	11.4	10.7	7.2	8.8	9.6
Average	15.3	14.4	12.0	12.0	12.7
Asset quality					
Nonperforming loans to total gross loans	19.6	16.7	11.5	9.5	8.7
Risk concentration (highest)	...	...	54.5	41.3	62.9
Earnings and profitability					
Return on assets	0.8	2.4	3.0	3.7	3.2
Return on equity	13.4	37.9	49.1	61.2	43.2
Interest margin to gross income	…	…	59.3	64.8	68.4
Noninterest expenses to gross income	52.2	46.9	44.8	42.4	45.8
Personnel expenses to noninterest expenses	38.3	38.9	35.4	36.4	35.2
Liquidity					
Liquid assets to total assets	52.1	50.5	47.4	43.4	44.0
Liquid assets to short-term liabilities	77.8	73.2	67.6	61.3	64.7
			(Billions of ariary; unless otherwise specified)		
Memorandum items:					
Total assets	1,393.0	1,537.2	2,006.6	2,208.8	2729.5
Total profits before tax	15.9	49.9	80.2	111.4	112.9
Foreign exchange exposure (highest ratio)	19.6	58.3	127.2	16.8	9.4

Sources: Banking and Financial Supervision Commission, Central Bank of Madagascar (BCM).

Table 10. Madagascar: Millennium Development Goals

	1994	1997	2000	2003	2005	2015 Target
Goal 1. Eradicate extreme poverty and hunger.						
1. Population below US$1 a day (percent)	46.0	49.0	...	...	...	...
2. Poverty gap ratio at US$1 a day (percent)	18.0	...	18.0	...	...	...
3. Share of income or consumption held by poorest 20 percent (percent)	...	5.0	...	...	...	...
4. Prevalence of child malnutrition (percent of children under 5)	45.0	40.0	...	33.0	42.0	20.5
5. Population below minimum level of dietary energy consumption (percent)	...	40.0	...	38.0	...	17.5
Goal 2. Achieve universal primary education.						
6. Net primary enrollment ratio (percent of relevant age group)	...	...	65.0	77.0	89.0	...
7. Percentage of cohort reaching grade 5	...	...	51.0	57.0	...	...
8. Youth literacy rate (percent age 15-24)	...	...	...	...	70.0	...
Goal 3. Promote gender equality and empower women.						
9. Ratio of girls to boys in primary and secondary education (percent)	...	...	96.7	...	...	100.0
10. Ratio of young literate females to males (percent ages 15-24)	...	...	...	...	93.9	...
11. Share of women employed in the nonagricultural sector (percent)	...	...	...	...	...	...
12. Proportion of seats held by women in the national parliament (percent)	...	4.0	8.0	4.0	6.9	...
Goal 4. Reduce child mortality.						
13. Under-5 mortality rate (per 1,000)	...	...	137.0	...	123.0	56.0
14. Infant mortality rate (per 1,000 live births)	...	...	84.0	...	76.0	...
15. Immunization against measles (percent of children 12-23 months)	63.0	46.0	56.0	59.0	59.0	...
Goal 5. Improve maternal health.						
16. Maternal mortality ratio (modeled estimate, per 100,000 live births)	...	...	550.0	...	...	123.0
17. Proportion of births attended by skilled health personnel	...	47.3	46.2	...	51.3	...
Goal 6. Combat HIV/AIDS, malaria, and other diseases.						
19. Contraceptive prevalence rate (percent of women ages 15-49)	...	19.0	19.0	17.0	27.0	...
20. Number of children orphaned by HIV/AIDS	...	...	...	8,200	13,000	...
21. Prevalence of death associated with malaria	...	...	...	...	...	...
22. Share of population in malaria risk areas with effective prevention and treatment	...	...	...	...	...	...
23. Incidence of tuberculosis (per 100,000 people)	...	...	...	...	217.9	...
24. Tuberculosis cases detected under DOTS (percent)	...	64.8	...	76.2	73.7	...
Goal 7. Ensure environmental sustainability.						
25. Forest area (percent of total land area)	...	...	22.0	...	22.0	...
26. Nationally protected areas (percent total land area)	...	...	...	4.3	4.3	...
27. GDP per unit of energy use (PPP, $ per kg oil equivalent)	...	...	...	...	...	...
28. CO2 emissions (metric tons per capita)	0.1	0.1	0.1	0.1	...	...
29. Proportion of population using solid fuels	...	...	...	...	...	...
30. Access to improved water source (percent of population)	...	...	...	...	46.0	72.0
31. Access to improved sanitation (percent of population)	...	...	...	...	32.0	...
32. Access to secure tenure (percent of population)	...	...	...	...	...	...
Goal 8. Develop a Global Partnership for Development. [1]						
45. Unemployment rate of population ages 15-24 (total)	...	...	...	...	...	...
Female	...	...	...	...	...	...
Male	...	...	...	...	...	...
46. Proportion of population with access to affordable essential drugs	...	...	...	...	...	...
47. Fixed line and mobile telephones (per 1,000 people)	2.5	3.2	7.3	19.5	...	...
48. Personal computers (per 1,000 people)	...	1.4	2.2	4.5	5.0	...

Sources: World Bank.

[1] Indicators 33-44 are excluded because they cannot be measured on a country-specific basis. They are related to official development assistance, market access, and the HIPC initiative.

Table 11. Madagascar: Quantitative Performance Criteria and Indicative Targets for the PRGF Arrangement, 2006 [1]
(Billions of ariary, cumulative from the beginning of the year, unless otherwise indicated)

	July 31 Performance Criteria				September 30 Indicative Targets				December 31 Performance Criteria			
	Program [2]	Adjusted Program	Actual	Status	Program [2]	Adjusted Program	Actual	Status	Program [2]	Revised Program [3]	Actual Adjusted	Status
I. Quantitative performance criteria												
External												
(a) Ceiling on accumulation of new external arrears (millions of SDRs) [4]	0.0	…	0.0	Met	0.0	…	0.0	Met	0.0	0.0	0.0	Met
(b) Ceiling on contracting or guaranteeing of new external debt on nonconcessional terms [4]	0.0	…	0.0	Met	0.0	…	0.0	Met	0.0	0.0	0.0	Met
Central Bank												
(c) Floor on net foreign assets (NFA) of the BCM [5,6]	-24.1	-18.2	31.9	Met	62.7	61.6	148.1	Met	77.5	77.5	198.0	Met
(d) Ceiling on net domestic assets (NDA) of the BCM [5]	16.8	8.7	-47.5	Met	-35.6	-36.7	-102.4	Met	36.9	36.9	-79.1	Met
Fiscal												
(e) Ceiling on domestic financing of the central government [5]	133.9	133.9	-8.2	Met	62.1	66.4	-62.6	Met	-55.7	-55.7	-1.3	Not Met
(f) Floor on tax revenue	695.1	…	722.0	Met	907.8	…	906.5	Not Met	1,295.8	1,259.3	1,260.8	Met
(g) Ceiling on accumulation of new domestic arrears [4]	0.0	…	0.0	Met	0.0	…	0.0	Met	0.0	0.0	0.0	Met
II. Memorandum items:												
Floor on net foreign assets (NFA) of the BCM NFA (SDR millions) [5,6]	-7.7	-7.7	10.1		20.0	20.0	47.0		19.9	19.9	62.5	Met
Net external budget (program) support (SDR millions)	-1.1	…	-7.7		30.4	…	46.4		46.5	59.0	44.2	
Budget support grants and loans (SDR millions)	16.6	…	15.2		48.6	…	69.4		73.6	84.0	79.2	
External cash debt service (SDR millions)	17.7	…	22.9		18.2	…	22.9		27.1	25.0	35.0	
Exchange rate (MGA/SDR)	3,134.7	…	3,172.1		3,134.7	…	3,153.3		3,134.7	3,167.3	3,027.3	

Sources: Malagasy authorities and IMF staff estimates and projections.

[1] See Technical Memorandum of Understanding (TMU) in IMF Country Report No. 07/7 for full description of variables and adjustments.
[2] IMF Country Report No. 06/306, Republic of Madagascar: Request for a Three-Year Arrangement Under the Poverty Reduction and Growth Facility and Activation of the Trade Integration Mechanism.
[3] IMF Country Report No. 07/7, Republic of Madgascar: First Review under the Three-Year Arrangement under the PRGF.
[4] To be observed on a continuous basis.
[5] Excluding capital transfer flowing from MDRI assistance from IMF via central bank.
[6] For December 2006, the revised floor on NFA is set in SDR terms.

Table 12. Madagascar: Structural Performance Criteria and Benchmarks for the PRGF Arrangement, 2006

	Timing	Status
Performance Criteria		
▪ No waivers of the requirement to present pre- and post-customs inspection reports for the import and clearance of goods (*Rapport d'inspection recevabilit*é [RIR] and *Rapport d'inspection enlèvemen*t [RIE], or on the use of the pre- and post inspection company SGS valuation of goods.	Continuous	Not met
▪ No granting of ad hoc tax or tariff exemptions outside those specified in the Customs Code and international treaties or conventions.	Continuous	Met
▪ Finalization of an audit of the VAT arrears owed by the government on capital expenditure.	September 30, 2006	Met
▪ No transactions carried out between the government and the central bank that are contrary to the provisions of the Central Bank Charter.	Continuous	Met
▪ Issuance of monthly commitment ceilings for the last quarter of 2006 by the Ministry of Finance to all ministries on the basis of the latest cash flow plan prepared by the Treasury.	September 30, 2006	Not met Implemented with delay on October 24, 2006
Benchmarks		
▪ Extension of the new ASYCUDA++ software to the five largest customs bureaus.	September 30, 2006	Not met Implemented with delay in December 2006
▪ Inclusion of a recapitalization plan for the BCM in the 2007 Budget Law.	October 31, 2006	Met
▪ Development of a comprehensive time-bound action plan translating the 2003 and 2006 IMF FAD tax administration recommendations in operational terms.	December 31, 2006	Met
▪ Install the expenditure tracking information system SIGFP in 13 ministries.	December 31, 2006	Met
▪ Completion of the verification of at least 80 percent of outstanding VAT credits at end-June 2006.	December 31, 2006	Not met Implemented with delay on March 20, 2007

Table 13. Structural Performance Criteria and Benchmarks for the PRGF Arrangement, 2007

	Timing	Status
Performance criteria		
• No granting of ad hoc tax or tariff exemptions outside those specified in the Customs Code and international treaties or conventions.	Continuous	Met
• No waivers of the requirement to present pre- and post-customs inspection reports for the import and clearance of goods (*Rapport d'inspection recevabilit*é [RIR] and *Rapport d'inspection enlèvemen*t [RIE] or on the use of the pre- and post-inspection company SGS valuation of goods for custom offices that are not linked with the information system Tradenet.	Continuous	Not met
• No waiver of the requirement to generate a cargo tracking slip (BSC) in advance of all imports.	Continuous	Met
• Implementation a recapitalization plan for the BCM which would include at a minimum the issuance of a government bond to recapitalize the BCM and a written agreement between the Treasury and the BCM to pay market-related rates of interest on the Treasury's debt to the BCM.	March 31, 2007	Not Met Implemented with delay on May 30, 2007
• Production of a report on commitments, payment orders, and payments by major spending lines during the first quarter of 2007, in at least 13 ministries where the budget information system, SIGFP, is operational.	April 30, 2007	Met
• Issuance of quarterly commitment ceilings by the Ministry of Finance and Budget to all ministries taking into account the most recent outlook for external and internal resources.	June 30, 2007	
Structural benchmarks		
• Provide the BCM with new instruments (securities) through the securitization of government debt to help it better manage liquidity.	January 31, 2007	Met
• Complete a study on the opportunity of a single nonzero customs tariff, its budgetary and economic impact, and other possible options within the framework of regional integration.	June 30, 2007	
• Inclusion in the 2008 Finance Law of articles streamlining the Tax and Customs Codes, while meeting the 2008 fiscal revenue objective of the program.	October 31, 2007	
• Adopt a streamlined budget classification in the 2008 Finance Law to establish a clear link between each ministry and its programs to ensure accountability and clearly identify poverty reducing expenditure in the budget.	October 31, 2007	Delayed to October 31, 2008
• Establish a computerized communication network between the Tax Directorate, the Customs Directorate, and the Treasury to closely monitor tax collection and broaden the tax base.	December 31, 2007	Delayed to June 30, 2008
• Implement a comprehensive time-bound action plan to modernize tax administration in line with the Fund's Fiscal Affairs Department recommendations of June 2006.	December 31, 2007	
• Issue an international tender for the transfer of JIRAMA's management to a private operator under a lease (*affermage*).	December 31, 2007	Delayed to December 31, 2008

APPENDIX I: MADAGASCAR—JOINT BANK-FUND DEBT SUSTAINABILITY ANALYSIS

Madagascar's risk of debt distress is low. The upgrading of Madagascar's risk of debt distress rating compared to the previous debt sustainability analysis (DSA) is on account of the improved growth and export prospects linked to the big mining projects under construction. Madagascar's external debt burden indicators under the baseline scenario remain below the relevant policy-dependent indicative thresholds. The stress tests do not result in indicators breaching the thresholds although they reveal that external debt sustainability is sensitive to export shocks, which are likely given the concentration of Madagascar exports. The inclusion in the analysis of the small domestic debt does not change the assessment of country's risk of debt distress.

A. Introduction

1. **This DSA has been prepared jointly by IMF and World Bank staff.** It is based on the framework for low-income countries approved by the respective Executive Boards. The framework takes into account indicative thresholds for debt burden indicators determined by the quality of the country's policies and institutions.[1] It comprises of a baseline scenario (which assumes, among others, full delivery of Heavily Indebted Poor Countries (HIPC) Initiative debt relief by external creditors) [2] and a set of alternative scenarios.

B. Recent Developments and Current Debt Situation

2. **Madagascar reached its completion point under the Enhanced HIPC Initiative in October 2004.** The resulting debt relief, including additional bilateral debt relief from most Paris Club creditors, reduced the end-2003 NPV of debt-to-exports ratio to an estimated 137 percent.[3] [4]At that time, the ratio was projected to increase to 154 percent in 2004 and decline thereafter.

[1] According to the World Bank Country and Policy Institutional Assessment (CPIA) Index, Madagascar is rated as a medium performer. This rating is the same using either the latest index or the three-year average. The indicative sustainability thresholds for external debt applicable for that category of countries are: (i) 150 percent for NPV of debt-to-exports ratio; (ii) 40 percent for the NPV of debt-to-GDP ratio; (iii) 250 percent for the NPV of debt to fiscal revenues ratio; (iv) 20 percent for the debt service to exports ratio; and (v) 30 percent for the debt service to revenue ratio.

[2] As of end-2006, Madagascar has estimated US$595 million in arrears towards non-Paris Club and private creditors that are not delivering HIPC debt relief (Algeria, Libya, and Iraq are the largest accounting for 92 percent of the total). Madagascar continues to make efforts to contact these creditors, regularize the payments, and obtain full debt relief under the HIPC Initiative.

[3] Total debt relief to Madagascar under the Initiative amounts to US$836 million in NPV terms.

[4] Most Paris Club creditors have written-off their outstanding claims after full delivery of HIPC debt relief, reducing claims on Madagascar by further US$466 million in NPV terms. In 2006, Sweden and Israel canceled 100 percent of the Malagasy debt. In addition an agreement was finalized with Japan and an agreement is under discussion with the Federation of Russia. Regarding non-Paris Club creditors, cancellation agreements should be finalized soon with Abu Dhabi and the People's Republic of China.

Madagascar : External Debt Outstanding 2006

Creditor	Amounts (millions of $US)	In percent of GDP	Share (in percent)
Total external debt	1,584.4	28.8	100
Bilateral Creditors	724.5	13.1	46
Paris Club	111.6	2.0	7
Other countries	612.9	11.1	39
Private creditors	14.3	0.3	1
Multilateral	845.6	15.3	53

Source: Madagascar authorities and Fund Staff estimates

3. **Madagascar's external public debt declined significantly from US$3.5 billion at end 2005 (including arrears) to US$1.6 billion at end 2006 on the account of the debt relief under the Multilateral Debt Relief Initiative (MDRI).** The IMF's debt relief under the MDRI became effective in January 2006 and amounts to US$197 million.[5] MDRI debt relief from IDA was implemented starting in July 2006 through the 100 percent reduction of the debt disbursed as of end-2003 that was still outstanding at the implementation date. Total MDRI debt service relief from IDA is estimated at SDR1.2 billion (equivalent to about US$1,780.1 million).[6] As for the ADF, the delivery of debt relief under the MDRI though a write-off of the outstanding obligations as of end-December 2004 became effective in September 2006 (with retroactive application to January 2006). Estimated MDRI debt relief from the ADF amounts to US$393 million. This has been partly offset by new borrowings as well as exchange rate developments[7], and the actual outstanding stock of debt has declined by 55 percent in 2006.

[5] See www.imf.org for details on the implementation of the MDRI by the IMF. The amount of relief includes undisbursed HIPC assistance from the Fund, previously expected to be delivered over time, and MDRI assistance. Excluding the HIPC share, the MDRI debt relief amounts to US$186 million.

[6] For details on the implementation of the MDRI by IDA, see IDA/SecM2005 and IDA/SecM2006-0131.

[7] This refers to the increase on the US$ value of the debt due to the depreciation of the US$ vis-à-vis other currencies in which Madagascar's debt is denominated.

4. **The MDRI debt relief has triggered a drastic change in the creditor composition.** The share of multilateral creditors has decreased from more than 75 percent at end-2005 to 53 percent at end-2006. Conversely, bilateral and commercial creditors represented 47 percent of total outstanding obligations (with Paris Club creditors accounting for 7 percent), compared to about 23 percent by end-2005. The bilateral Paris Club debt that remains is mainly to Russia. The current creditor composition is broadly similar to the one prevailing at end-2003, i.e., prior to the debt write-offs granted by most Paris Club and the MDRI debt relief.

C. Baseline Medium- and Long-Term Scenario

5. **The baseline scenario is substantially different to the one described in the previous DSA due to the impact of two large mining projects.** Construction of a US$650 million (12 percent of GDP) ilmenite mine began in mid-2006 and a US$2.5 billion (45 percent of GDP) nickel and cobalt mine and processing facility commenced in 2007 and will be completed over the next three years. Such a large inflow of capital is leading to an appreciation of the currency and the project will result in higher growth and starting in 2009/10 in higher exports (Box 1) than in the previous DSA.

6. **The baseline scenario is built on a number of key macroeconomic assumptions, the implementation of sound macroeconomic and structural policies and external financing that is through grants and highly concessional loans.** Key macroeconomic assumptions are indicated in Box 1. With respect to external financing, new borrowing is projected to remain largely at highly concessional terms. External assistance as a share of GDP, which had climbed very rapidly to close to 14 percent in 2004 due to large inflows of external aid and borrowing to finance recovery after the 2002 political crisis, will remain relatively high in the short term (increasing from 8 percent of GDP in 2005 to 11 percent of GDP in 2006, in part due to external financing of the presidential election, and 9 percent in 2007 based on recent information from donors) and gradually decrease to about 6 percent of GDP by the end of the projection period. The borrowing is largely for financing infrastructure projects aimed at lowering costs and enhancing competitiveness, and to help Madagascar attain the objectives of the Madagascar Action Plan (MAP) and the Millennium Development Goals (MDGs).

7. **Under the baseline scenario, Madagascar's external debt indicators remain well below the thresholds throughout the projection period** (Figure 1a and Table 1a). The debt indicators dropped sharply in 2006 as a result of the MDRI (Table 1a). The NPV of debt-to-GDP ratio which was at about 36 percent in 2005[8] (a level already below the threshold for medium performers) dropped to below 12 percent in 2006 (Figure 1a and Table 1a); it increases subsequently to peak at 16 percent in 2017 and drops after to about 13 percent in

[8] See IMF Country Report No. 06/306, Republic of Madagascar: Request for a Three-Year Arrangement Under the Poverty Reduction and Growth Facility and Activation of the Trade Integration Mechanism.

the outer years. The NPV of debt-to-revenue ratios (Tables 2a) exhibit a similar profile. The increase in these ratios in the initial years (from the low post-MDRI levels) reflects relatively high new borrowing albeit at concessional terms to finance needed investment expenditures. The NPV of debt-to-exports is driven by the impact of the big mining projects. Before they start their exports, these projects are expected to lead to an appreciation of the exchange rate that will negatively impact competitiveness of exports. This in conjunction with the weak performance of agricultural prices of key exports, such as vanilla, leads to a deterioration of debt indicators based on exports up to 2009. The mining projects are expected to start exporting in end-2009 or in 2010. The value of these exports is so large that the NPV of debt-to-export ratio is projected to drop from 61 percent in 2009 to 38 percent in 2010 and grow through the projected period (but remaining well below the threshold) due to new borrowing. The debt service-to-exports ratio exhibits a similar pattern. Moreover, given the highly concessional nature of the existing debt and new borrowing, the debt service ratios are well below the indicative thresholds throughout the projection period but show a rising trend due to the accumulation of new debt.

8. **Madagascar's total public debt ratios, including domestic debt, also stay well below the external debt sustainability thresholds under the base case scenario** (Figure 2a and Table 2a). The domestic debt is projected to remain under 10 percent of GDP through the projection period, as total expenditure is assumed to be broadly kept in check with available financing from tax revenue and external assistance, and the fiscal deficit is projected to remain predominantly financed by external assistance on concessional terms.

D. Sensitivity Analysis

External public debt indicators

9. **The sensitivity analysis suggests that the external debt indicators are low but could deteriorate with inappropriate policies, and/or if confronted by adverse shocks. They would however remain below the threshold.**[9]

- The debt indicators in the **historical scenario** (Scenario A1 in Figure 1A and Table 1b based on the average of the years 1999–2006) follow a lower trajectory than under the baseline. It should be noted, however, that the years leading up to 2006 include years of political turmoil, large terms of trade shocks, cyclones, and natural disasters. During that period, although real growth averaged only about 3.5 percent, the current account deficit was also low as the Export Processing Zone sector (put in place in 1989) was growing at very

[9] The stress tests performed under the sensitivity scenario assumed permanent modifications of key baseline assumptions ("alternative scenarios") as well as temporary deviations ("bound tests"). The "alternative scenarios" include a "historical scenario", under which the main variables that determine the debt dynamics are assumed to remain at their historical average, and a "financing scenario" that depicts the impact of lower concessionality in new borrowing. The "bound tests" are designed to examine the impact on debt and debt service indicators of shocks, based on the country's historical volatility, to key variables.

high rates. This factor explains the relatively benign trajectory of the debt indicators under the historic scenario. If the years of the political crisis (GDP decline of 12.7 percent in 2002) and the recovery from this (growth of 9.8 percent in 2003) are excluded, the average growth is significantly higher at 5 percent, which remains below the baseline scenario but close to it if the impact of the big mining projects is excluded.

- The **financing scenario** (Scenario A2) reveals that Madagascar's external debt indicators are sensitive to the terms of new borrowing. Under this scenario, the NPV of debt-to-GDP remains below the threshold but would more than double in the next decade (from 11 percent in 2007 to 23 percent in 2017), and remains at about that level through 2021 before decreasing slightly. The NPV of debt-to-exports ratio would increase steadily from 46 percent in 2007 to 101 percent in 2027. This increase is substantial although the ratio would remain below the threshold. The projected path of these two ratios, together with the rising trend of the debt service ratio from 2 to 6 percent during the projection period, points to risks from new borrowing at less favorable terms than assumed in the baseline scenario.[10]

- **The bound tests do not reveal major underlying vulnerabilities.** The most extreme stress tests shows the impact of the combined FDI and growth shock on the NPV of debt-to-GDP ratio (Scenario B5), and exports shock (Scenario B2) on the NPV of debt-to exports ratio do not result in indicators significantly breaching thresholds. These scenarios show that debt sustainability is most vulnerable to changes in the inflows of FDI and to the impact of these projects on growth and exports. The NPV of debt-to-GDP increases significantly (to 26 percent in 2027) but remains comfortably below the threshold level. On the other hand, the export based indicator-the NPV of debt to exports, crosses the threshold in 2009 only but falls back below the threshold as soon as the exports of the two big mining projects materialize. The shock to exports is somewhat extreme (the standard deviation is about 33 percent) as it is influenced by the rapid increase in exports in the historical period from textiles exports, and the large decline in exports that took place during the political crises and the subsequent rapid recovery. The implications of export concentration for vulnerability are nevertheless to be noted, as they illustrate the impact of shocks to certain export commodities (such as textiles), which have become large as a share of total exports in Madagascar (about 40 percent in 2005 and 2006), as well as the exports of only two mining projects that are expected to account for over 50 percent of exports of goods and services over 2011–17. However, the vulnerabilities associated with the big mining projects appear limited: even if the exports of the big mining projects are only 1/3 of their baseline level (due either to a lower volume and/or to lower export prices) the NPV of debt-to-exports would remain below the threshold (scenario B7) peaking at 71 percent in 2022 (61 percent in the baseline).

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[10] This scenario is similar to a sharp decline in grant financing, compared to the baseline, compensated by loans.

Total public debt indicators

10. **Total public debt indicators are most sensitive to economic growth shocks.** A temporary or permanent deviation from the baseline real GDP growth path would bring the total public debt beyond the external debt sustainability thresholds beginning in 2015, if spending plans were kept unchanged, which is unlikely in view of past experience (Table 2b, Scenarios A3 and B1).

E. Debt Distress Classification and Conclusions

11. **Madagascar's risk of debt distress is low following the debt relief under the HIPC Initiative and the MDRI and due to the impact on exports and GDP of big mining projects.** In the baseline scenario Madagascar's debt indicators are below the thresholds. The debt situation does not appear to be significantly vulnerable to shocks. Debt sustainability appears somewhat vulnerable if large export shocks materialize. This is a risk in the medium term given the high concentration in exports in textiles in the short run and two mining products whose prices are volatile.

12. **In conclusion, the debt situation seems under control and not subject to major risks.** Sensitivity analysis nonetheless points to the need not only for implementing the policies underpinning the baseline scenario, but also for careful monitoring of borrowing policies and, more importantly, export performance. The latter is critical given the concentration of exports in textiles and clothing in the short run and in two mining projects starting in 2010. Borrowing at non-concessional terms as well new borrowing beyond the levels assumed under the baseline could also raise Madagascar's risk of debt distress.

Box 1. Baseline Macroeconomic Assumptions

Real GDP growth is projected at 7 percent over 2007-2027. This growth rate is higher than the historical average (5 percent over 1999–2006 if the impact of the political turmoil of 2002 is excluded) due to the impact of two large mining projects that started at the end of 2006. Without these projects, the real growth rates would have been a little under 6 percent on average i.e. higher but close to the historical rate.

Inflation as measured by the GDP deflator in dollar terms is projected to average about 3.7 percent, with higher rates of 20 percent in 2007 and decelerating to 2 percent subsequently. However, reflecting the impact of the large inflows of FDI on the **exchange rate**, which in turn will depend crucially of the monetary policy undertaken, the increase in the GDP deflator in local currency is expected to decelerate from 9.5 percent in 2007 to 5 percent beginning in 2010.

Export volumes grow at 11 percent on average and support GDP growth. The growth rates are relatively modest in the initial years reflecting the impact of the exchange rate appreciation on some vulnerable export industries such as textiles and shrimp but will jump as soon as the exports of the big mining projects start.

Import volumes average about 7 percent for the period. Import volumes are expected to grow significantly due to the high import content (estimated at about 80 percent) of the mining projects during their construction phase and will then slow down to about 6.5 percent i.e., at about the pace of real GDP growth.

The current account deficit is projected to increase significantly during the initial years of the projections due to the large increase in imports related to the big mining projects. However as exports of these projects start, the current account deficit would gradually shrink from about 20 percent of GDP in 2008 to 9 percent by 2010 and 5 percent by the end of the projection period.

Tax revenues are projected to increase from 10.7 percent of GDP in 2006 to about 15.5 percent of GDP in 2027, owing to the termination of ad hoc tax and import duty exemptions, tax policy reforms aimed at simplifying the corporate and personal income tax regimes, and steadfast improvements in tax and custom administration.

Total expenditures are broadly kept in check with available financing from tax revenue and external assistance, resulting in a roughly constant share of GDP over the projection period.

External assistance progressively unwinds from the exceptionally high level of about 11 percent of GDP reached during the period 2004 to 2006 (financing of recovery after the 2002 political crisis and of the 2006 presidential elections) to over 7 percent of GDP over 2007–11 (which is slightly higher than the 6 percent of GDP observed during the late 1990s because of donor financing of the MAP) and to 5 percent of GDP in outer years. The share of grants gradually increases from half in the initial years to more than half in the later years.

Table 1a. Madagascar: External Debt Sustainability Framework, Baseline Scenario, 2007-2027 [1]
(Percent of GDP, unless otherwise indicated)

	Actual			Historical Average [6]	Standard Deviation [6]	Projections									
	2004	2005	2006			2007	2008	2009	2010	2011	2012	2007-12 Average	2017	2027	2013-27 Average
External debt (nominal) [1]	79.9	69.7	28.8			26.8	26.2	27.5	28.0	28.2	29.0		29.6	23.2	
o/w public and publicly guaranteed (PPG)	79.9	69.7	28.8			26.8	26.2	27.5	28.0	28.2	29.0		29.6	23.2	
Change in external debt	-3.3	-10.2	-41.0			-2.0	-0.6	1.3	0.4	0.3	0.7		-0.2	-0.7	
Identified net debt-creating flows	25.0	-6.4	-4.8			0.6	1.1	1.5	0.6	0.8	1.3		-0.4	-2.4	
Non-interest current account deficit	7.9	10.1	8.5	5.5	2.9	17.3	20.7	19.0	8.4	8.5	8.5		6.7	4.3	6.0
Deficit in balance of goods and services	14.9	14.1	11.2			19.3	22.1	20.0	-2.6	-4.0	-3.0		-0.4	1.6	
Exports	32.6	26.9	29.7			24.7	21.8	21.2	36.1	37.0	35.4		29.2	20.8	
Imports	47.5	41.0	40.9			44.0	43.9	41.2	33.5	33.0	32.4		28.8	22.5	
Net current transfers (negative = inflow)	-7.6	-4.8	-3.9	-4.0	1.7	-2.9	-2.3	-2.1	-1.9	-1.8	-1.6		-1.4	-1.1	-1.3
Other current account flows (negative = net inflow)	0.6	0.8	1.2			0.9	0.9	1.2	13.0	14.3	13.1		8.5	3.8	
Net FDI (negative = inflow)	-5.2	-6.5	-7.7	-5.2	1.6	-15.4	-18.2	-15.9	-5.7	-5.7	-5.7		-5.5	-5.3	-5.3
Endogenous debt dynamics [2]	22.4	-10.0	-5.6			-1.2	-1.4	-1.5	-2.2	-2.0	-1.5		-1.6	-1.4	
Contribution from nominal interest rate	1.2	0.8	0.3			0.3	0.2	0.2	0.2	0.2	0.3		0.3	0.2	
Contribution from real GDP growth	-5.5	-3.2	-3.1			-1.4	-1.6	-1.8	-2.4	-2.3	-1.8		-1.9	-1.6	
Contribution from price and exchange rate changes	26.6	-7.7	-2.8			…	…	…	…	…	…		…	…	
Residual (3-4) [3]	-28.3	-3.8	-36.2			-2.6	-1.7	-0.2	-0.1	-0.5	-0.6		0.1	1.6	
o/w exceptional financing	-1.5	-1.0	-0.4			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
NPV of external debt [4]	...	...	11.5			11.4	11.8	12.9	13.6	14.3	14.9		16.2	12.7	
In percent of exports	...	...	38.7			46.3	54.1	61.0	37.7	38.5	42.3		55.5	60.8	
NPV of PPG external debt	...	...	11.5			11.4	11.8	12.9	13.6	14.2	14.9		16.2	12.7	
In percent of exports	...	...	38.7			46.2	54.1	60.9	37.7	38.5	42.2		55.5	60.7	
Debt service-to-exports ratio (percent)	107.0	8.3	3.5			1.6	1.7	1.7	0.9	0.9	1.2		2.2	2.7	
PPG debt service-to-exports ratio (percent)	107.0	8.3	3.5			1.6	1.7	1.7	0.9	0.9	1.2		2.2	2.7	
Total gross financing need (billions of U.S. dollars)	1639.4	294.5	102.9			158.3	245.5	320.8	326.4	374.8	421.2		387.4	-218.9	
Non-interest current account deficit that stabilizes debt ratio	11.2	20.3	49.5			19.2	21.2	17.7	8.0	8.2	7.7		7.0	5.1	
Key macroeconomic assumptions															
Real GDP growth (percent)	5.3	4.6	4.9	3.5	6.7	6.5	7.3	7.5	9.8	9.0	7.2	7.9	7.1	7.2	7.1
GDP deflator in US dollar terms (percent change)	-24.2	10.6	4.2	2.5	12.6	20.5	12.4	2.8	2.7	2.9	2.4	7.3	2.3	2.4	2.3
Effective interest rate (percent) [5]	1.2	1.2	0.4	1.1	0.3	1.1	1.0	1.0	0.9	0.8	1.3	1.0	1.2	0.9	1.1
Growth of exports of G&S (U.S. dollar terms, percent)	12.8	-4.7	20.8	14.0	32.9	6.7	6.3	7.4	92.2	15.0	4.9	22.1	5.6	6.5	5.8
Growth of imports of G&S (U.S. dollar terms, percent)	18.1	-0.1	9.1	12.4	28.3	38.0	20.2	3.6	-8.3	10.7	7.7	12.0	6.8	5.7	7.0
Grant element of new public sector borrowing (percent)	...	...	...	...	...	43.8	44.2	44.2	44.2	44.2	44.2	44.1	44.2	44.2	44.2
Memorandum item:															
Nominal GDP (millions of U.S. dollars)	4357.7	5041.9	5509.8			7067.4	8518.7	9412.9	10615.1	11912.8	13074.5		20676.6	51853.2	

Source: Staff simulations.

[1] Includes both public and private sector external debt.
[2] Derived as [r - g - r(1+g)]/(1+g+r+gr) times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate, and r = growth rate of GDP deflator in U.S. dollar terms.
[3] Includes exceptional financing (i.e., changes in arrears and debt relief); changes in gross foreign assets; and valuation adjustments. For projections also includes contribution from price and exchange rate changes.
[4] Assumes that NPV of private sector debt is equivalent to its face value.
[5] Current-year interest payments devided by previous period debt stock.
[6] Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability.

Table 1b. Madagascar: Sensitivity Analyses for Key Indicators of Public and Publicly Guaranteed External Debt, 2007-27
(Percent)

	Projections							
	2007	2008	2009	2010	2011	2012	2017	2027
NPV of debt-to-GDP ratio								
Baseline	11	12	13	14	14	15	16	13
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2007-26 [1]	11	12	12	12	11	11	10	13
A2. New public sector loans on less favorable terms in 2007-26 [2]	11	13	15	16	18	19	23	21
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2007-08	11	13	16	17	18	18	20	16
B2. Export value growth at historical average minus one standard deviation in 2007-08 [3]	11	15	21	21	21	21	21	14
B3. US dollar GDP deflator at historical average minus one standard deviation in 2007-08	11	15	18	19	20	21	23	18
B4. Net non-debt creating flows at historical average minus one standard deviation in 2007-08 [4]	11	20	27	27	26	27	24	15
B5. Combination of B1-B4 using one-half standard deviation shocks	11	16	22	23	24	25	26	19
B6. One-time 30 percent nominal depreciation relative to the baseline in 2007 [5]	11	16	18	19	19	20	22	17
NPV of debt-to-exports ratio								
Baseline	46	54	61	38	38	42	55	61
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2007-26 [1]	46	54	55	32	31	31	34	61
A2. New public sector loans on less favorable terms in 2007-26 [2]	46	59	70	45	48	54	78	101
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2007-08	46	54	61	38	38	42	55	61
B2. Export value growth at historical average minus one standard deviation in 2007-08 [3]	46	89	171	101	99	105	124	117
B3. US dollar GDP deflator at historical average minus one standard deviation in 2007-08	46	54	61	38	38	42	55	61
B4. Net non-debt creating flows at historical average minus one standard deviation in 2007-08 [4]	46	91	128	74	71	75	84	73
B5. Combination of B1-B4 using one-half standard deviation shocks	46	63	88	53	53	58	73	76
B6. One-time 30 percent nominal depreciation relative to the baseline in 2007 [5]	46	54	61	38	38	42	55	61
Debt service ratio								
Baseline	2	2	2	1	1	1	2	3
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2007-26 [1]	2	2	3	1	1	2	3	5
A2. New public sector loans on less favorable terms in 2007-26 [2]	2	2	2	2	1	2	3	6
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2007-08	2	2	2	1	1	2	3	4
B2. Export value growth at historical average minus one standard deviation in 2007-08 [3]	2	3	4	3	3	3	7	8
B3. US dollar GDP deflator at historical average minus one standard deviation in 2007-08	2	2	2	1	1	2	3	4
B4. Net non-debt creating flows at historical average minus one standard deviation in 2007-08 [4]	2	2	3	2	2	2	5	5
B5. Combination of B1-B4 using one-half standard deviation shocks	2	2	3	2	1	2	4	5
B6. One-time 30 percent nominal depreciation relative to the baseline in 2007 [5]	2	2	2	1	1	2	3	4
Memorandum item:								
Grant element assumed on residual financing (i.e., financing required above baseline) [6]	42	42	42	42	42	42	42	42

Source: Staff projections and simulations.

[1] Variables include real GDP growth, growth of GDP deflator (in U.S. dollar terms), non-interest current account in percent of GDP, and non-debt creating flows.

[2] Assumes that the interest rate on new borrowing is by 2 percentage points higher than in the baseline, while grace and maturity periods are the same as in the baseline.

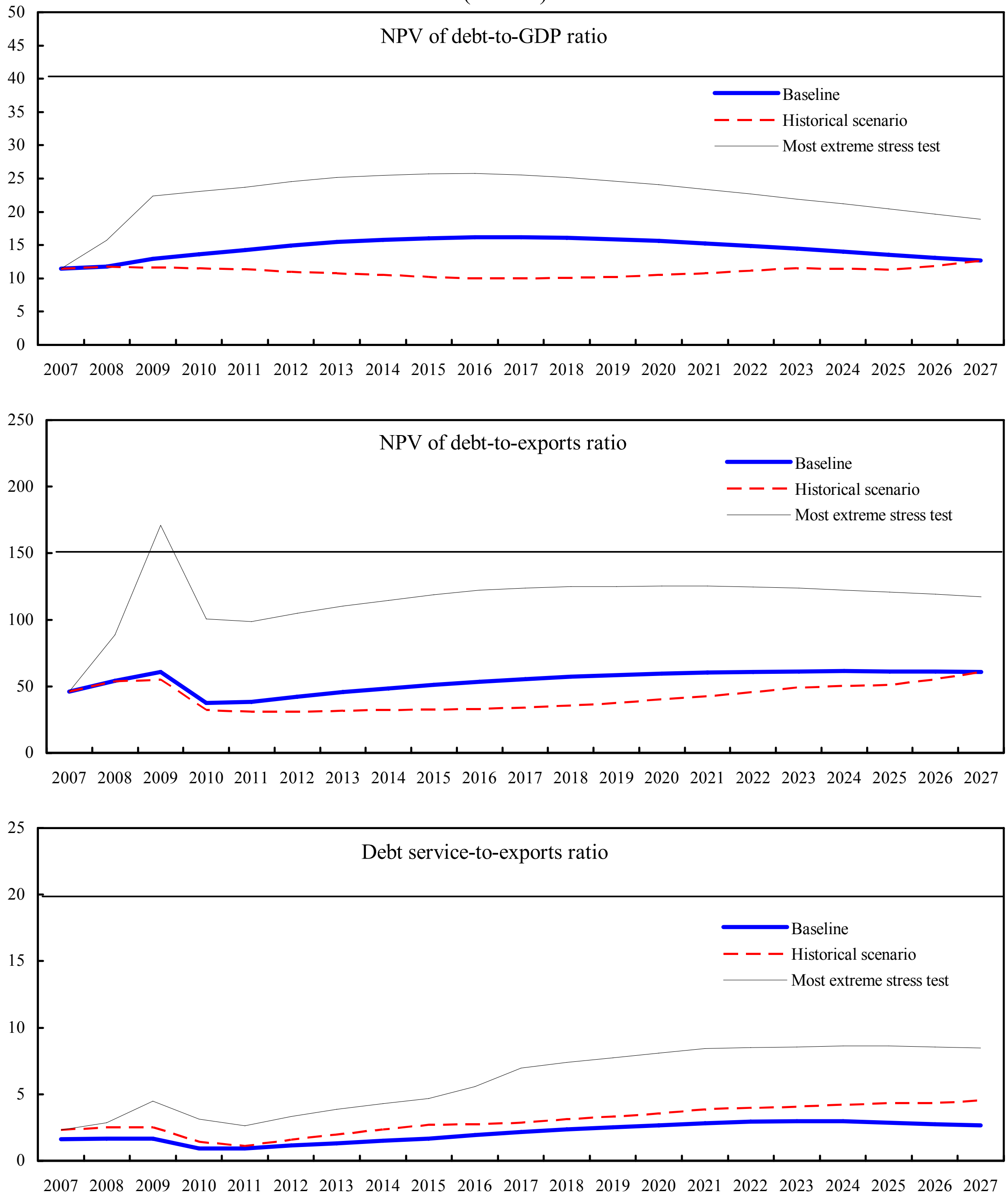
[3] Exports values are assumed to remain permanently at the lower level, but the current account as a share of GDP is assumed to return to its baseline level after the shock (implicitly assuming an offsetting adjustment in import levels).

[4] Includes official and private transfers and FDI.

[5] Depreciation is defined as percentage decline in dollar/local currency rate, such that it never exceeds 100 percent.

[6] Applies to all stress scenarios except for A2 (less favorable financing) in which the terms on all new financing are as specified in footnote 2.

Figure 1a. Madagascar: Indicators of Public and Publicly Guaranteed External Debt Under Alternative Scenarios, 2007-2027
(Percent)



Source: Staff projections and simulations.

Table 2a.Madagascar: Public Sector Debt Sustainability Framework, Baseline Scenario, 2004-2027
(Percent of GDP, unless otherwise indicated)

	Actual			Historical Average [5]	Standard Deviation [5]	Estimate	Projections								
	2004	2005	2006			2007	2008	2009	2010	2011	2012	2007-12 Average	2017	2027	2013-27 Average
Public sector debt [1]	92.4	80.3	38.6			36.4	34.8	35.4	35.0	34.7	35.3		36.6	33.7	
o/w foreign-currency denominated	79.9	69.9	28.8			26.8	26.2	27.5	28.0	28.2	29.0		29.6	23.2	
Change in public sector debt	-6.8	-12.1	-41.7			-2.3	-1.5	0.5	-0.3	-0.4	0.6		0.2	-0.7	
Identified debt-creating flows	10.9	-4.6	-53.7			-2.1	0.8	-0.5	-0.4	-0.5	0.6		0.2	-0.6	
Primary deficit	2.0	2.0	1.1	1.7	1.3	3.8	2.8	2.8	2.8	2.7	2.9	3.0	2.6	1.5	2.3
Revenue and grants	20.3	16.7	18.0			16.1	15.1	15.5	15.9	16.2	16.4		17.2	18.0	
of which : grants	8.2	5.7	6.7			5.0	3.5	3.4	3.3	3.2	3.2		2.9	2.5	
Primary (noninterest) expenditure	22.2	18.7	19.1			19.8	17.9	18.3	18.7	18.9	19.3		19.8	19.6	
Automatic debt dynamics	11.3	-4.9	-12.8			-5.7	-2.0	-3.3	-3.1	-3.1	-2.3		-2.5	-2.2	
Contribution from interest rate/growth differential	-5.8	-5.0	-3.6			-1.8	-2.0	-2.1	-2.9	-2.3	-1.7		-1.8	-1.8	
of which : contribution from average real interest rate	-0.8	-0.9	0.1			0.5	0.4	0.3	0.2	0.6	0.6		0.6	0.5	
of which : contribution from real GDP growth	-5.0	-4.1	-3.7			-2.3	-2.5	-2.4	-3.1	-2.9	-2.3		-2.4	-2.3	
Contribution from real exchange rate depreciation	17.1	0.1	-9.2			-3.9	0.0	-1.2	-0.2	-0.7	-0.6		...	...	
Other identified debt-creating flows	-2.4	-1.7	-42.0			-0.2	-0.1	-0.1	-0.1	-0.1	0.0		0.0	0.0	
Privatization receipts (negative)	-0.4	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recognition of implicit or contingent liabilities	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Debt relief (HIPC and other)	-2.0	-1.7	-41.9			-0.1	-0.1	-0.1	-0.1	-0.1	0.0		0.0	0.0	
Other (specify, e.g. bank recapitalization)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Residual, including asset changes	-17.7	-7.5	12.0			-0.2	-2.3	1.1	0.1	0.1	0.0		0.0	0.0	
NPV of public sector debt	...	...	21.4			21.0	20.4	20.7	20.7	20.7	21.3		23.1	23.1	
o/w foreign-currency denominated	...	...	11.5			11.4	11.8	12.9	13.6	14.2	14.9		16.2	12.7	
o/w external	...	...	11.5			11.4	11.8	12.9	13.6	14.2	14.9		16.2	12.7	
NPV of contingent liabilities (not included in public sector debt)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Gross financing need [2]	20.5	16.5	13.4			14.2	12.8	11.7	10.7	9.9	9.6		9.6	12.3	
NPV of public sector debt-to-revenue ratio (in percent) [3]	...	...	118.9			130.7	134.9	133.7	129.8	127.4	129.3		134.4	128.4	
o/w external	...	...	64.2			71.2	78.1	83.3	85.5	87.8	90.9		94.1	70.2	
Debt service-to-revenue ratio (in percent) [3, 4]	25.9	26.4	18.9			12.3	10.6	8.8	7.3	6.4	6.1		7.0	8.0	
Primary deficit that stabilizes the debt-to-GDP ratio	8.7	14.1	42.8			6.1	4.4	2.3	3.1	3.0	2.3		2.5	2.2	
Key macroeconomic and fiscal assumptions															
Real GDP growth (in percent)	5.3	4.6	4.9	3.5	5.9	6.5	7.3	7.5	9.8	9.0	7.2	7.9	7.1	7.2	7.1
Average nominal interest rate on forex debt (in percent)	2.0	1.5	0.8	1.7	0.8	1.0	1.0	1.0	0.9	0.8	1.4	1.0	1.2	0.9	1.1
Average real interest rate on domestic currency debt (in percent)	-2.3	-1.5	9.5	0.7	5.6	8.5	7.8	7.3	6.5	5.5	4.7	6.7	4.6	4.5	4.5
Real exchange rate depreciation (in percent, + indicates depreciation)	21.7	0.1	-14.0	1.4	11.4	-14.6	...	...	...	...	...	...	...	...	...
Inflation rate (GDP deflator, in percent)	14.3	18.4	11.3	10.2	4.7	9.5	6.4	5.6	4.9	5.0	4.9	6.1	4.8	4.9	4.9
Growth of real primary spending (deflated by GDP deflator, in percent)	34.7	-12.1	7.0	9.2	21.2	10.7	-3.0	9.8	12.1	10.2	9.6	8.2	7.5	6.6	7.2
Grant element of new external borrowing (in percent)	0.0	43.2	44.2	8.7	18.4	44.2	44.2	44.2	44.2	44.2	44.2	44.2	44.2	45.2	...

Sources: Malagasy authorities; and Fund staff estimates and projections.

[1] Central government. Gross public debt.

[2] Gross financing need is defined as the primary deficit plus debt service plus the stock of short-term debt at the end of the last period.

[3] Revenues including grants.

[4] Debt service is defined as the sum of interest and amortization of medium and long-term debt.

[5] Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability.

Table 2b.Madagascar: Sensitivity Analysis for Key Indicators of Public Debt 2007-2027

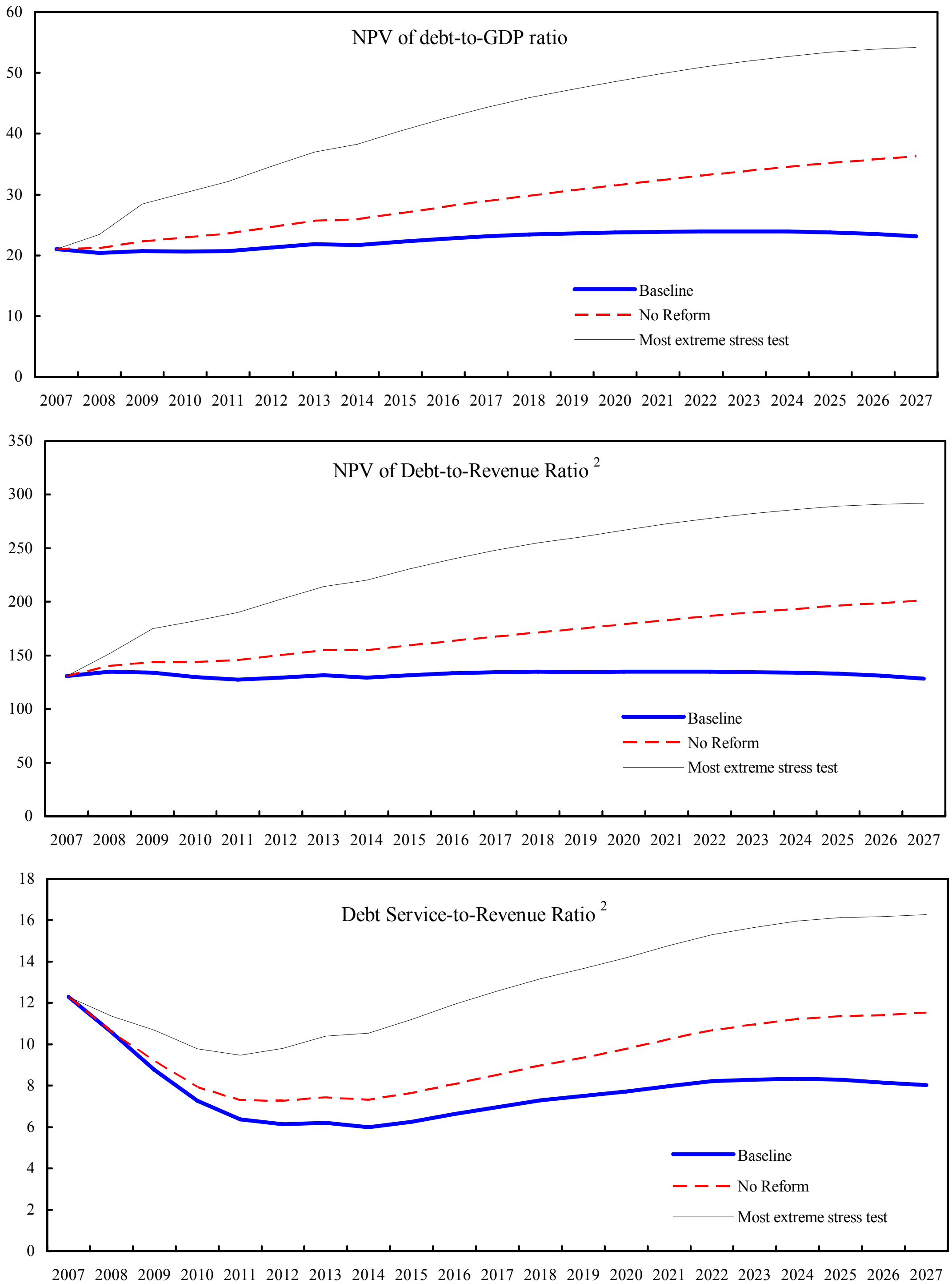
	Projections							
	2007	2008	2009	2010	2011	2012	2017	2027
NPV of Debt-to-GDP Ratio								
Baseline	21	20	21	21	21	21	23	23
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	21	20	20	20	20	20	21	27
A2. Primary balance is unchanged from 2007	21	21	22	23	24	25	29	36
A3. Permanently lower GDP growth [1]	21	21	22	22	23	25	33	54
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2008-2009	21	23	28	30	32	35	44	54
B2. Primary balance is at historical average minus one standard deviations in 2008-2009	21	20	21	21	21	21	23	23
B3. Combination of B1-B2 using one half standard deviation shocks	21	21	22	22	21	21	22	20
B4. One-time 30 percent real depreciation in 2008	21	25	24	23	22	23	23	23
B5. 10 percent of GDP increase in other debt-creating flows in 2008	21	29	29	28	27	27	27	25
NPV of Debt-to-Revenue Ratio [2]								
Baseline	131	135	134	130	127	129	134	128
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	131	131	127	123	120	119	115	130
A2. Primary balance is unchanged from 2007	131	140	144	144	146	150	168	201
A3. Permanently lower GDP growth 1/	131	137	139	138	140	147	188	288
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2008-2009	131	152	175	182	190	202	248	292
B2. Primary balance is at historical average minus one standard deviations in 2008-2009	131	136	135	131	128	130	135	129
B3. Combination of B1-B2 using one half standard deviation shocks	131	138	139	132	126	126	122	111
B4. One-time 30 percent real depreciation in 2008	131	167	155	145	138	137	134	126
B5. 10 percent of GDP increase in other debt-creating flows in 2008	131	195	185	173	165	163	156	138
Debt Service-to-Revenue Ratio [2]								
Baseline	12	11	9	7	6	6	7	8
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	12	11	9	7	6	6	6	10
A2. Primary balance is unchanged from 2007	12	11	9	8	7	7	9	12
A3. Permanently lower GDP growth [1]	12	11	9	8	7	7	10	16
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2008-2009	12	11	11	10	9	10	13	16
B2. Primary balance is at historical average minus one standard deviations in 2008-2009	12	11	9	7	6	6	7	8
B3. Combination of B1-B2 using one half standard deviation shocks	12	11	9	7	6	6	6	7
B4. One-time 30 percent real depreciation in 2008	12	11	9	8	7	7	8	9
B5. 10 percent of GDP increase in other debt-creating flows in 2008	12	11	13	10	9	8	8	9

Sources: Country authorities; and Fund staff estimates and projections.

[1] Assumes that real GDP growth is at baseline minus one standard deviation divided by the square root of 20 (i.e., the length of the projection period).

[2] Revenues are defined inclusive of grants.

Figure 2a. Madagascar: Indicators of Public Debt Under Alternative Scenarios, 2007-2027 [1]



Source: Staff projections and simulations.

[1] Most extreme stress test is that which yields the highest ratio in 2017.

[2] Revenue including grants.

INTERNATIONAL MONETARY FUND

REPUBLIC OF MADAGASCAR

Staff Report for the 2007 Article IV Consultation—Informational Annex

Prepared by the African Department
(In collaboration with other departments)

Approved by Thomas Krueger and Anthony Boote

June 6, 2007

- **Relations with the Fund.** Describes financial and technical assistance by the IMF and provides information on the safeguards assessment and exchange system. At end-March 2007, outstanding PRGF loans amounted to SDR 27.1 million.
- **Relations with the World Bank**. Describes the World Bank Group's strategy and portfolio and identifies Bank and Fund areas of responsibility.
- **Statistical Issues.** Assesses the quality of statistical data. Weaknesses in several categories of economic statistics are hampering analyses of economic developments.

Contents Page

I. MADAGASCAR: RELATIONS WITH THE FUND

(As of April 30, 2007)

I. Membership Status: Joined: September 25, 1963; Accepted the obligations of Article VIII, Sections 2, 3 and 4: September 18, 1996.

II. General Resources Account:	**SDR Million**	**% Quota**
Quota	122.20	100.00
Fund holdings of currency	122.17	99.98
Reserve position in Fund	0.03	0.02

III. SDR Department:	**SDR Million**	**% Allocation**
Net cumulative allocation	19.27	100.00
Holdings	0.25	1.29

IV. Outstanding Purchases and Loans:	**SDR Million**	**% Quota**
PRGF Arrangements	27.06	22.14

V. Latest Financial Arrangements:

Type	Approval Date	Expiration Date	Amount Approved (SDR Million)	Amount Drawn (SDR Million)
PRGF	Jul 21,2006	Jul 20, 2009	54.99	15.71
PRGF	Mar 01,2001	Mar 01, 2005	91.65	91.65
PRGF	Nov 27,1996	Nov 30, 2000	81.36	78.68

VI. Projected Payments to Fund (after HIPC and MDRI assistance)
(SDR million; based on existing use of resources and present holdings of SDRs):

			Forthcoming		
	2007	2008	2009	2010	2011
Principal				1.13	2.27
Charge/interest	0.74	0.94	0.94	0.94	0.93
Total	0.74	0.94	0.94	2.07	3.20

VII. Implementation of HIPC Initiative:

Commitment of HIPC Initiative assistance	Enhanced Framework
Decision point date	Dec. 2000
Assistance committed (NPV terms)	
Total assistance (US$ million)[1]	835.75
Of which: Fund assistance (US$ million)	19.17
(SDR equivalent in millions)	14.73
Completion point date	Oct. 2004
Disbursement of IMF assistance (SDR million)	
Assistance disbursed to the member	14.73
Interim assistance	5.62
Completion point balance	9.11
Additional disbursement of interest income[2]	1.69
Total disbursements	16.42

VIII. Implementation of MDRI Assistance:

I. MDRI-eligible debt (SDR million)[3]	137.29
Financed by: MDRI Trust	128.50
Remaining HIPC resources	8.79
II. Debt Relief by Facility (SDR million)	

Eligible Debt

Delivery Date	**GRA**	**PRGF**	**Total**
January 2006	N/A	137.29	137.29

[1] Because assistance committed under the original framework is expressed in net present value (NPV) terms at the completion point, and assistance committed under the enhanced framework is expressed in NPV terms at the decision point, these two amounts can not be added.

[2] Under the enhanced framework, an additional disbursement is made at the completion point corresponding to interest earned on the amount committed at the decision point but not disbursed in the interim period.

[3] The Multilateral Debt Relief Initiative (MDRI) provides 100 percent debt relief to eligible member countries. The debt relief covers all debt owed to the Fund as of end-2004 that remains outstanding at the time the member qualifies for such debt relief. The MDRI is financed by bilateral contributions, the Fund's own resources, and resources already disbursed to the member under the HIPC Initiative (see Section VII above).

IX. Safeguards Assessments:

A safeguards assessment of the Central Bank of Madagascar (BCM) was completed on March 17, 2006; a previous assessment was completed in November 2001. The 2006 assessment identified continued weaknesses in BCM internal controls, financial reporting, and legal framework, and made recommendations to address the observed vulnerabilities. The recommendations included: (i) an annual external audit report on the BCM's transactions with the government and their compliance with the central bank law; (ii) quarterly reviews by the BCM's internal audit function of monetary program data reported to the Fund; (iii) adoption of International Financial Reporting Standards (IFRS) for BCM accounting; and (iv) measures to strengthen the quality of the BCM's external audit, e.g., appointment of an international audit firm with experience in IFRS and international auditing standards.

X. Exchange System and Exchange Rate Arrangements:

After April 1982, when the peg to the French franc was discontinued, the exchange rate was managed with reference to a basket of 10 currencies. By the end of 1991, the authorities stopped the practice of adjusting the exchange rate to offset inflation differentials with key trading partners. Since July, 2004, the Malagasy franc has been determined through a continuous interbank foreign exchange market system, and on January 1, 2005, the Ariary (AR) replaced the Malagasy franc as the country's official unit of account, at the rate of AR 1=FMG 5. The exchange rate in terms of the SDR at end-April 2007 was AR 2,799 = SDR 1. The exchange rate regime is classified as a managed float with no predetermined path.

Madagascar accepted the obligations of Article VIII, Sections 2, 3, and 4 on September 18, 1996 and maintains no restrictions on the making of payments and transfers for current international transactions. Staff is currently working with the authorities as they put in place a new foreign exchange law and implementing regulations, to ensure that the new regime remains consistent with Madagascar's obligations under the Articles of Agreement. Staff is also currently working with the authorities to determine if Madagascar has imposed any exchange restrictions solely for the preservation of national or international security, and to ensure that any such restrictions are notified promptly to the Fund in accordance with the procedures set out in Decision No. 144-(52/51) (August 14, 1952).

XI. Last Article IV Consultation:

The 2005 Article IV consultation staff report was discussed by the Executive Board on June 1, 2005 (Country Report No. 05/350, September 27, 2005).

XII. Technical Assistance:

Department	Dates	Purposes	Results of Missions
FAD	January–February 2003	Examine and assess tax and customs administration.	Comprehensive action plan and report on establishment of an oversight committee prepared.
FAD	July–August 2003	Examine and assess tax policy and assist in tax policy design.	Comprehensive action plan and report on next steps prepared.
FAD	May–June 2004	HIPC Assessment and Action Plan (AAP).	Comprehensive action plan established.
FAD	July 2005	Examine and assess the status of recent reforms in PEM.	Short and medium term strategy for continuation of reforms established.
FAD	March 2006	Examine and assess tax and customs administration.	Comprehensive recommendations proposed.
FAD	February 2007	Simplify Tax Code	Comprehensive recommendations proposed.
LEG	July 2005	Diagnostics for the drafting of a new foreign exchange code.	Factual aspects of the current FX regime were clarified and a number of issues identified that must be resolved. Discussions are ongoing.
MFD	September 2004	Review operations of the new interbank foreign exchange market.	Recommendations are being implemented.
MFD	November–December 2004	Strengthen banking supervision.	Recommendations are being implemented.
MFD	February–March 2005	Review monetary and exchange operations, bank liquidity management, and	Recommendations are being implemented.

Department	Dates	Purposes	Results of Missions
		banking supervision.	
MFD	April–May and July 2005	Financial sector assessment program (FSAP) mission.	The report has been circulated to the Board.
MFD	September–October 2005	Strengthening the financial supervision of the central bank.	Recommendations have been made.
MFD	October 2005	FSAP follow-up.	Recommendations are being implemented.
MFD	November 2005	Assist the central bank in improving foreign reserve management.	Recommendations have been made.
MFD	February–April 2006	Assist the central bank in further strengthening its foreign exchange, monetary, and banking supervision areas.	Recommendations have been made.
MFD	September 2006	Assess the recapitalization of the Central Bank of Madagascar.	Consultants findings were incomplete–additional mission required.
MCM	December 2006	Assist the Central Bank of Madagascar to improve bank liquidity management.	Comprehensive recommendations proposed.
MCM	December 2006	Implement recapitalization of the Central Bank of Madagascar.	Recommendations provided.
MCM	March-April 2007	Enhance BCM's capacities in monetary and foreign exchange operations, bank liquidity management, and banking supervision.	Comprehensive recommendations proposed.
STA	February 2004	Multisector statistics mission.	Recommendations for data improvements accepted.

Department	Dates	Purposes	Results of Missions
STA	February 2006	Improve national account statistics.	Reviewed estimation of national income accounts and provided technical guidance to move base year to 2005.

XIII. Resident Representative:

Madagascar has had a Fund Resident Representative since September 1989. Mr. Pierre van den Boogied took up the post in February 2006.

II. Madagascar: Relations with the World Bank

(As of April 24, 2007)

Madagascar's Development Strategy

1. The government has put in place the Madagascar Action Plan (MAP), a bold development plan for 2007–12 that is the second-generation Poverty Reduction Strategy. The MAP envisages accelerated and better-coordinated reforms and outlines the "strategies and actions that will ignite rapid growth, lead to the reduction of poverty, and ensure that the country develops in response to the challenges of globalization and in accordance with the national vision—*Madagascar Naturally*—and the Millennium Development Goals."

2. The MAP was prepared in a participatory way and makes eight commitments: (1) responsible governance; (2) connected infrastructure; (3) educational transformation; (4) rural development and a green revolution; (5) better health, family planning, and the fight against HIV/AIDS; (6) a high-growth economy: (7) a cherished environment; and (8) national solidarity. For each commitment, the government identified challenges, goals and strategies, priority activities, and monitoring indicators. The MAP identifies six "breakthrough initiatives"—areas requiring immediate attention: (1) public finance reform; (2) significant increase in investment to promote high growth; (3) sowing the seeds of a green revolution; (4) transforming public security; (5) implementing bold new measures for health and family planning; (6) transforming the judiciary.

3. Programs for implementing MAP commitments are being elaborated in greater detail in sector strategies. Some of these strategies are already in place, among them the National Environmental Action Plan and strategies in rural development, health, primary education, rural water, transport, and HIV/AIDS. The government is finalizing a risk management and social protection strategy and is working on a financial sector strategy. Implementation of the MAP is guided by the budget, the *Politique Generale de l'État*, which represents annual agreements between the president and cabinet ministers

Bank Group Country Assistance Strategy (CAS) and Lending Operations

4. The World Bank's Country Assistance Strategy has been designed in parallel with the elaboration of the MAP in terms of timing, duration, and substance (it was discussed by the Bank's Board on April 3, 2007). The CAS covers almost the same time period as the MAP (2007–12) and supports attainment of the MAP goals. In doing so, the CAS supports the areas of the government program that have the highest priority; those where the Bank Group has a comparative advantage. The CAS will continue the Bank Group's focus on removing bottlenecks to sustainable and shared growth, anchored in good governance, with corresponding improvements in welfare indicators and thus MAP goals. The specific sets of results supported by the CAS are organized around two main pillars. The first concentrates on activities that will help remove constraints to investment and growth in rural and urban

areas. The second brings together activities geared toward improving the scope and quality of service delivery.

5. The CAS sets out a program of Bank support that encompasses budget support (PRSCs); sector-wide operations (SWAPs); investment projects; public-private partnerships; and analytical and advisory activities (AAA). Poverty Reduction Support Credits will continue to serve as a forum for policy dialogue with the government and as a platform for donor harmonization. The next series will further emphasize removing policy bottlenecks to achieving the MAP and CAS objectives. Given the breadth of the potential agenda, the Poverty Reduction Support Credits will seek to avoid dispersion and focus on a few critical issues (such as governance and public resource management). It will provide US$40–60 million a year to complement IDA MDRI debt relief of over US$30 million a year during the CAS period. In response to the lessons learned from previous Poverty Reduction Support Credits, the transition to budget support is occurring more gradually and budget support will only be scaled up gradually to encompass other sectors in tandem with improvements in the public finance system.

6. With respect to pillar one of the CAS, removing constraints to investment and growth, the Bank will continue to provide integrated assistance through the Growth Poles Project (FY06), the Watershed and Irrigation Adaptable Program Loan (FY07), and two on-going transport operations, followed by planned transport and growth operations. The Poverty Reduction Support Credits will complement, as needed, implementation of pro growth policies, help sort out priorities, address coordination issues, and provide budget support. Analytical work will supplement these efforts with a comprehensive infrastructure review to identify the main bottlenecks, draft a strategic vision, and evaluate the impact of investments.

7. The forthcoming Country Economic Memorandum on growth will enrich the current growth diagnostics and help fine-tune future World Bank Group interventions, specifically the future growth operations. The Bank Group will step up its assistance to better integrate the economy into global and regional markets and to profit from market opportunities at home. This will include continued technical assistance to build government capacity and to help producers adopt improved quality standards within the Trade Integrated Framework Program. The World Bank Group will also finance investments in irrigation infrastructure and support marketing and other services to increase agricultural productivity and diversification. The Bank Group will continue its programs aimed at lowering air transport and telecommunication costs and improving accessibility through an open sky policy and upgrades to the telecommunications sector, such as development of a national backbone connected to the regional communications network via the East Africa Submarine System (EASSy). This is being supported by a regional IDA project in which Madagascar is participating, that was approved by the Board in early March 2007.

8. The Bank will increase its support to the financial sector, making sure that all segments of demand, from microfinance to large enterprises, are adequately covered. IDA will provide technical assistance to improve supervision and regulation, payment and credit information systems, and the institutional capacity of the sector. IDA and the IFC will continue to cooperate on facilitating access to credit and other financial services, including such emerging areas as guarantees and leasing. Building on the FSAP recommendations and successful implementation of the microfinance pilot project, the Bank Group will also continue to help the government to draw up strategy, framework, and programs for scaling up and expanding coverage of financial sector interventions by using a sector-wide approach with other donors. A supplemental IDA credit for the microfinance project has been recently approved (on April 10, 2007) to provide bridge financing until multi-donor sector wide support is in place and other sources of financing become available.

9. The Bank Group will continue its efforts to improve the energy sector. The IFC and IDA will work together with the government on a concession arrangement (*Affermage*) for the power company JIRAMA and on attracting private companies to generate and sell electricity. The main instruments are the Energy and Water Adaptable Program Loan 1&2 (FY07/09) and an IFC–IDA Partial Risk Guarantee for public-private partnership investments in hydropower (FY08). IDA will continue to assist the government in improving its business climate and bring in more foreign direct investment. This will include (i) continued assistance to the Economic Development Board and other agencies to improve regulation; (ii) increase transparency in issuing licenses and concessions (especially in mining, fishing, tourism, and forestry); and (iii) improve the quality of governance in extractive industries; Madagascar's membership in the Extractive Industries Transparency Initiative (EITI) will be supported through the current Mining Project and through additional financing for this project that will be presented for Board approval on May 22, 2007. A supplemental credit (FY08) and a follow-on IDA project (FY09) in the environment sector are also planned.

10. The World Bank Group will complement growth-generating activities under the first CAS pillar with activities aimed at facilitating access to services. Helping to improve all aspects of public finances will be a high priority for the CAS. Working jointly with other partners, such as the IMF and France, IDA will continue to help the authorities work to mobilize increased internal resources. Work on taxation and customs will seek to streamline the rules, create a level playing field for all taxpayers by reducing tax exemptions, and facilitate compliance with tax laws. IDA, working jointly with other donors, will continue to help the government better align allocation of resources with MAP priorities, improve budget execution, implement new procurement legislation, and measure the impact of public resource use. Periodic Public Expenditure and Financial Accountability (PEFA) assessments will monitor progress. IDA instruments will include Poverty Reduction Support Credits, current and new Governance and Institutional Development Program projects, and complementary analytical and advisory work, such as the programmatic Public Expenditure

Review, the Country Financial Accountability Assessment, a social accountability program, and continued close portfolio management.

11. IDA, jointly with other donors, will continue to assist the government in its efforts to achieve universal enrollment in primary education, increase completion rates, and improve the quality of education at all levels to better prepare the workforce for a more advanced economy. The primary avenue for assistance will be the Education for All Fast-Track Initiative with Africa Catalytic Fund resources. IDA assistance will also include advice and investments in post primary education and review of the labor market. In health, it will help the government make further progress on reducing child and maternal mortality by offering access to reproductive services, reducing child malnutrition, improving the availability of clean water and sanitation services, and keeping HIV/AIDS and sexually transmitted disease rates under control. This will be achieved through current operations in health and HIV/AIDS and a new series of health operations using a sector-wide approach. IDA will continue to work with the government on institutionalizing the nutrition program and extending nutrition support sites nationwide initially through the nutrition project and then through general budget support.

12. IDA will help the authorities decentralize the provision of basic services. The assistance will focus on support to the fine-tuning and implementation of the decentralization strategy, including assigning revenues and expenditure responsibility across different levels of government. IDA, the European Union, and other donors will provide financial support for the Local Development Fund (FY08) which is a new mechanism for financing local infrastructure that builds on the experience of the Community Development Project. Technical assistance will be provided through the Governance and Institutional Development Project, Community Development Project, and sector dialogue. Poverty Reduction Support Credits will provide budget support to key sectors and help identify priorities and monitor the implementation agenda.

13. As of April 24 2007 the Bank's portfolio consists of 16 IDA projects, one regional telecommunications project and one GEF project; total commitments are US$1,009 million. Of that, US$385 million is not yet disbursed. Projects scheduled for up-coming approval include the Health sector wide project ($10 million, May 2007), additional financing to three on-going projects (Transport, Governance and Mining, May 2007, for a total of $28.6 million) and PRSC IV (July 2007, $40 million).

IMF-World Bank Collaboration in Specific Areas

Areas where the Bank takes the lead

14. The World Bank takes the lead in advising in sectors where the Bank has active lending operations (especially in the social sectors, infrastructure, agriculture, and environment) and through a number of analytical studies. Together with the government and

other donors, the Bank supports aid coordination, which includes mobilizing donor support for the MAP and the Education for All initiative.

Areas where the IMF takes the lead

15. The Fund takes the lead in policy advice and reforms related to (i) macroeconomic policies and targets; (ii) tax policy and administration; (iii) budgetary accounting; (iv) treasury procedures; (v) public sector wage policy; and (vi) monetary management and exchange rate policy. The Bank team actively participates in discussions between the Fund and the government in all these areas, especially with respect to tax policy and the setting of macroeconomic targets.

Areas of joint responsibility

16. IMF and World Bank staff work closely together on (i) support to the MAP; (ii) analysis and reforms in public financial management; (iii) other governance reforms, including customs; and (iv) financial sector assessment. Joint policy advice is given on budgetary procedures, including expenditure execution, and the functioning of internal and external budget controls. The Bank and the Fund are working particularly closely on helping the authorities to mobilize more internal resources. Work on taxation and customs will seek to streamline the rules, create a level playing field for all taxpayers by reducing tax exemptions, and facilitate compliance with tax laws. In addition, IDA and the IMF will continue to help the government better align the allocation of resources with MAP priorities, improve budget execution, implement new procurement legislation, and measure the impact of public resource use. Periodic PEFA assessments will monitor progress.

17. The Bank and the Fund are supporting implementation of the recommendations of the 2005 FSAP. The dialogue focuses on supporting the financial sector strategy framework and helping scale up and expand support to the financial sector by preparing a sector-wide approach with other donors.

III. MADAGASCAR: STATISTICAL ISSUES

1. Data are adequate for surveillance purposes, but need to be improved. The database remains weak, particularly in the areas of real sector, government finances, the balance of payments, and social statistics. The authorities are aware of these deficiencies and are working, with technical assistance from the international community, including the Fund, to ameliorate them. Since May 2004, Madagascar participates in the General Data Dissemination System (GDDS), which provides a framework for evaluating needs for data improvements and setting priorities. However, the metadata and plans for data improvement that are posted on the Data Dissemination Bulletin Board (DSBB) need to be updated. Since 2000, Madagascar has benefited from STA technical assistance missions in the following areas: balance of payments (June 2001); monetary and financial statistics (July 2001); multisector statistics (February 2004); and national accounts (February 2006, January-February 2007).

Real sector

2. Production of complete national accounts (based on benchmark data) is infrequent and depends on irregularly collected source data. The last complete sets of benchmark data are for 2001. The reliability of national accounts estimates remains weak due to gaps in the source data and methodological shortcomings. In particular, the estimates of agricultural activities are poor because there is no suitable information about the size and the evolution of this sector. Moreover, service activities are not properly covered and little information is available on the magnitude of the informal sector. The recent national accounts missions helped the authorities complete a comprehensive exercise for 2001 GDP following the *1993 SNA*. INSTAT is completing the details of the 2001 national accounts exercise and using it to transit to a new base year, 2005. Preparation of provisional estimates for the period 2002-2005 is underway.

3. INSTAT currently produces two industrial production indices, one for the export processing zone (IPI-ZF) and the other for enterprises outside the export processing zone (IPI-RC). These two indices have different survey frameworks and base years (2000 for the IPI-ZF and 2001 for IPI-RC). Both are quarterly but are released irregularly, sometimes with a lag of up to one year.

4. The current consumer price index (CPI) covers the four principal cities, has a base year of 2000, and expenditure weights based on the 1999 household survey. The CPI is generally reported to Fund staff on a timely basis. INSTAT plans to update the base year to 2005 and to derive new weights from the 2005 household expenditure survey in the near future. Data on producer prices and nationwide employment are not available. Various considerations underlie current work on revising the wholesale price index (WPI). The key

issue is the relative importance of commercial activities. However, the utility of the WPI is constrained by the limited coverage of manufacturing products and lack of timeliness.

Government finance

5. The 2004 multisector mission found significant gaps in the coverage of government financial statistics (GFS) and recommended that it be broadened to include public agencies that are part of the central government. Also, the mission made recommendations on the classification and recording of transactions, as well as the calculation of domestic arrears.

6. Data on central government financial operations are disseminated only annually, and data on public debt are not disseminated at all. The mission recommended monthly dissemination of central government data, and quarterly dissemination of the public debt data, but monthly reporting of both types of data to STA for publication in *IFS*. The latest data reported to STA and published in the *GFS Yearbook* relate to the consolidated central government for 2004. However, they do not cover all extra budgetary units within the central government and classification problems remain, which require extensive use of adjustment entries to current expenditure. Moreover, since 1996, detailed breakdowns of data on budgetary and nonbudgetary transactions and central government debt have not been provided. Madagascar does not report sub-annual data for publication in *International Finance Statistics* (*IFS*).

Balance of payments

7. The Central Bank of Madagascar (BCM) implemented in 1997 the fifth edition of the *Balance of Payments Manual (BPM5)*. However, the current compilation system is flawed, external trade data are derived from customs data that suffer from inadequate coverage and deficient recording procedures. Moreover, the significant amount of smuggling, particularly in the mining sector, further reduces the reliability of the trade data. Because the customs processing system has experienced numerous technical disruptions since 1998, trade data require many manual corrections. The implementation of the ASYCUDA (Automated System for Customs Data, Version 2.7) was largely completed by mid-2002, with the system installed in most customs offices. The five largest customs offices have been upgraded to the most recent version of ASYCUDA at end-2006.

8. The 2004 multisector technical assistance mission reviewed progress in the transition to *BPM5* and found that the authorities had implemented foreign direct investment enterprise surveys and are using an upgraded international transactions reporting system (ITRS). The mission noted that the compilation system is still hampered by such recurring issues as excessive processing lags due to partial automation of customs reports and inadequate coverage of, for example, transactions for the private sector, NGOs, and foreign embassies.

Also, debt relief obtained from multilateral financial institutions is still misclassified as a current transfer rather than as a capital transfer.

9. The EPZs that process goods and reexport them to a third economy are not properly identified within other business services (merchanting and other trade related services).

10. Although ASYCUDA and port authorities can provide separate data for freight, insurance and other categories, the current 12 percent c.i.f./f.o.b. correction for balance of payments statistics is entirely attributed to freight. Data for the services and income accounts rely excessively on the ITRS reports, and their accuracy is not routinely assessed against other readily available data.

11. As noted by previous STA missions, INSTAT and the BCM continue to use different techniques to adjust customs data and publish two distinct series of trade statistics, bringing into question the reliability of the balance of payments statistics.

12. The compilation of external debt statistics is generally satisfactory, and the United Nations Conference on Trade and Development (UNCTAD) is installing the latest version of the Debt Management and Financial Analysis System (DMFAS). This system is not yet fully operational; some data entry is still to be done, and certain DMFAS modules have yet to be installed.

Monetary and financial statistics

13. The 2004 multisector mission found that prior TA advice had not been implemented, most notably: i) improvement of the staff and computer resources of the unit in charge of compiling monetary statistics; (ii) electronic transmission of monthly call report forms by the commercial banks to the BCM; and (iii) expansion of the broad money survey to include the microfinance institutions that issue liabilities that meet the national definition of broad money. It recommended further improvements to the source data and the compilation of monetary statistics in accordance with the Fund's *Monetary and Financial Statistics Manual (MFSM)* methodology.

14. Since August 2001, the BCM has reported monetary data to STA for publication in *IFS*. Data for the monetary authorities and deposit money banks through February 2007 have been published in the May 2007 *IFS* release.

Madagascar: Table of Common Indicators Required for Surveillance
As of May 10, 2007

	Date of Latest Observation	Date Received	Frequency of Data[6]	Frequency of Reporting[6]	Frequency of Publication[6]
Exchange Rates	Mar. 2007	Apr. 2007	M	M	M
International Reserve Assets and Reserve Liabilities of the Monetary Authorities[1]	Sept. 2006	Nov. 2006	M	M	M
Reserve/Base Money	Mar. 2007	May 2007	M	M	M
Broad Money	Feb. 2007	May 2007	M	M	M
Central Bank Balance Sheet	Mar. 2007	May 2007	M	M	M
Consolidated Balance Sheet of the Banking System	Feb. 2007	May 2007	M	M	M
Interest Rates[2]	Mar. 2007	Apr. 2007	Q and M	Q and M	Q and M
Consumer Price Index	Mar. 2007	Apr. 2007	M	M	M
Revenue, Expenditure, Balance and Composition of Financing[3] – General Government[4]	Feb. 2006	May 2007	M	M	M
Revenue, Expenditure, Balance and Composition of Financing[3]– Central Government	Feb. 2006	May 2007	M	M	M
Stocks of Central Government and Central Government-Guaranteed Debt[5]	Dec. 2006	Mar. 2007	A	A	A
External Current Account Balance	Dec. 2006	Mar. 2007	Q	Q	Q
Exports and Imports of Goods and Services	Dec. 2006	Mar. 2007	M	Q	Q
GDP/GNP	2006	Mar. 2007	A	A	A
Gross External Debt	Dec. 2006	Mar. 2007	A	A	A

[1] Includes reserve assets pledged or otherwise encumbered as well as net derivative positions.
[2] Both market-based and officially-determined, including discount rates, money market rates, rates on treasury bills, notes and bonds.
[3] Foreign, domestic bank, and domestic nonbank financing.
[4] The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state and local governments.
[5] Including currency and maturity composition.
[6] Daily (D), Weekly (W), Monthly (M), Quarterly (Q), Annually (A); Irregular (I); and Not Available (NA).

Statement by the IMF Staff Representative
June 25, 2007

1. This statement summarizes economic developments since the issuance of the Article IV consultation staff report. These developments do not alter the thrust of the staff appraisal.

2. Overall inflation declined to 11.6 percent (year-on-year) in May after having peaked at 14.5 percent in March owing to the impact on food prices of the cyclones and floods that occurred earlier in the year. Non-food inflation continued on its downward trend, falling to 8.1 percent.

3. The nominal exchange rate (in SDRs) appreciated by a further 6 percent in April, and the central bank intervened in the interbank foreign exchange market in order to avoid a possible overshooting of the exchange rate. Reserve money rose by 19.2 percent (year-on-year) in April and broad money by 22.3 percent on account of the central bank interventions. Gross official foreign exchange reserves rose to about 3.3 months of imports at end-April. Since early May, the exchange rate has remained broadly stable.

4. Despite the continued appreciation, the trade balance was stronger than projected in the first quarter owing to better-than-expected export performance by textile export processing zone companies. Domestic tax revenue performance at end-April was on track, but custom receipts in local currency terms were lower than expected due to the appreciation of the ariary and low non-mining project related imports. Net domestic financing of the budget at end-March 2007 was some MGA 20 billion (0.1 percent of GDP) lower than projected in the staff report as execution of domestically financed capital expenditure was slow.

5. The average yield on treasury bills fell to 8.2 percent in early June from 18.2 percent at the end of March, on account of excess liquidity, slow execution of the budget, and net repayment of treasury bills with statutory central bank advances. Treasury bill real rates are expected to return to positive levels in the coming months as budget implementation accelerates and the central bank mops up the excess liquidity with its new open market operation instrument.

6. Progress in structural reforms has been mixed. As expected, the authorities approved increases in electricity prices and in government transfers to finance rehabilitation related investment in the national public utility company (JIRAMA). However, they submitted to Parliament a draft law that expands tax incentives for Export Processing Zone (EPZ) companies and makes the reintegration of EPZ companies into a simplified common corporate income tax regime more difficult to accomplish. Staff are seeking further clarification.

7. The authorities have communicated their consent to the Fund’s publication of the Staff Report for the 2007 Article IV Consultation.

INTERNATIONAL MONETARY FUND
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EXTERNAL RELATIONS DEPARTMENT

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Washington, D. C. 20431 USA

IMF Executive Board Concludes Article IV Consultation with the Republic of Madagascar

On June, 25, 2007, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation with Madagascar.[1]

Background

Madagascar is one of the poorest countries in sub-Saharan Africa (SSA). The country has suffered for decades from macroeconomic instability arising from political crises, vulnerability to exogenous shocks, and poor macroeconomic management. Beginning in 2002, the government embarked upon political and economic reforms aimed at stabilizing the economy. While there has been some progress in the reduction of inflation, it remains in double digits. Tax revenue (as a share of GDP) remains among the lowest in SSA. Under the Multilateral Debt Relief Initiative (MDRI), Madagascar received about US$2.3 billion (about 42 percent of GDP) in debt relief from the IMF, the World Bank, and the African Development Bank, including flow relief of about US$31 million in 2006 which have been used mainly to finance additional poverty-reducing expenditures.

In 2006, economic growth has rebounded moderately, while inflation has declined. Growth was stimulated by the startup of construction of a large mining project, sizeable investments in public infrastructure, and strong performance in the telecommunication and financial sectors. Inflation continued on its downward path in 2006 aided by tight monetary policy, low rice prices, a decline in world oil prices during the second half of the year, and the recent appreciation of the nominal exchange rate. In spite of some expenditure overruns owing to higher-than-projected

[1] Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board. At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities. This PIN summarizes the views of the Executive Board as expressed during the June 25, 2007 Executive Board discussion based on the staff report.

obligatory expenditures, the fiscal deficit was reduced in 2006 because of some improvement in domestic revenue mobilization, an increase in grants, and tight control on discretionary expenditure. The overall balance of payments shifted to a surplus owing to large foreign direct investment inflows, strong export performance, and MDRI debt relief.

Executive Board Assessment

Directors welcomed the increase in economic growth and the lowering of inflation in recent years, reflecting the important progress being made in macroeconomic policy implementation and structural reform. At the same time, Madagascar remains vulnerable to exogenous shocks, institutional capacity constraints, and uncertainty regarding donor assistance. The recent large foreign direct investment inflows into the mining sector indicate an important shift in the structure of the economy that, if not appropriately managed, could affect competitiveness and pose a macroeconomic challenge.

Against this background, Directors agreed that, in the period ahead, emphasis should be placed on increasing tax revenues to provide resources for social and development needs, strengthening public financial management, and improving transparency and the business environment, to enhance the prospects for sustained growth and achieving the Millennium Development Goals. They supported the authorities' new poverty reduction strategy, the Madagascar Action Plan (MAP), which presents a framework for addressing the remaining obstacles to growth and poverty reduction.

Directors called on the authorities to maintain a prudent fiscal stance and improve public expenditure management and budget execution and control. They underscored the necessity of keeping domestic financing of the budget low so as not to crowd out credit to the private sector and place pressure on domestic interest rates. Efforts to increase domestic revenues should be intensified, including by broadening the tax base and implementing the tax policy and revenue administration reforms. Future budget submissions should include contingency plans for spending reduction to address possible revenue shortfalls. They also saw the need for a timely civil service pension reform.

Directors welcomed the recent recapitalization of the central bank. They called for further efforts to reduce the central bank's operating costs and improve its internal controls and financial reporting. They encouraged the authorities to continue pursuing a monetary policy aimed at increasing foreign reserves and achieving single-digit inflation. The recent creation of a new monetary policy instrument for open market operations should help improve liquidity management. Directors welcomed the authorities' intention to develop and implement a financial sector strategy, including expansion of microfinance institutions, with a view to increasing the sector's contribution to economic development.

Directors agreed that the existing exchange rate regime of a managed float with no predetermined path for the exchange rate remains appropriate, as it has allowed the exchange rate to move in line with macroeconomic fundamentals. At the same time, they saw some scope for central bank intervention in the interbank foreign exchange market, if needed to avoid an overshooting of the exchange rate. They recommended that capital account liberalization be sequenced carefully with efforts to strengthen banking supervision and prudential regulations.

Directors considered that the recent trend of exchange rate appreciation underscores the need for structural reforms and improved governance to maintain competitiveness and promote private sector development. High priority should be given to reforming the electricity sector and alleviating the financial problems of the national public utility company, in order to ensure the reliable provision of electricity. Trade liberalization on a most-favored-nation basis should continue to be pursued. Directors supported the authorities' intention to adhere to the principles of the Extractive Industries Transparency Initiative.

Directors observed that debt relief under the Heavily Indebted Poor Countries Initiative and Multilateral Debt Reduction Initiative has set Madagascar's external debt on a broadly sustainable basis. To preserve this progress, future borrowing should be limited to concessional terms, and the authorities should choose large investment projects carefully. Directors also recommended that the authorities scale their spending plans in the context of the MAP to conservative assumptions about the availability of donor assistance, until the timing of donor disbursements comes clearly into view.

Directors welcomed the authorities' initiative to publish the statistical appendix on the government's official website. They encouraged them to continue to work to improve the quality and timeliness of data for surveillance.

Public Information Notices (PINs) form part of the IMF's efforts to promote transparency of the IMF's views and analysis of economic developments and policies. With the consent of the country (or countries) concerned, PINs are issued after Executive Board discussions of Article IV consultations with member countries, of its surveillance of developments at the regional level, of post-program monitoring, and of ex post assessments of member countries with longer-term program engagements. PINs are also issued after Executive Board discussions of general policy matters, unless otherwise decided by the Executive Board in a particular case.

Madagascar: Selected Economic Indicators, 2003-07
(Annual percent change, unless otherwise indicated)

	2003	2004	2005	2006 Est.	2007 Proj.
National accounts and prices					
Real GDP	9.8	5.3	4.6	4.9	6.5
CPI (end of period)	-0.8	27.3	11.4	10.9	7.9
Money and credit					
Broad money	8.2	23.8	3.1	25.6	26.7
External sector (in terms of SDRs)					
Exports of goods, f.o.b.	79.4	0.1	-13.9	14.2	3.8
Imports of goods, c.i.f.	73.7	20.1	1.1	5.3	31.0
Current account balance (percent of GDP)					
Including official transfers	-4.9	-9.1	-10.9	-8.8	-17.5
Excluding official transfers	-7.5	-12.9	-12.1	-10.0	-18.2
Gross official reserves (millions of SDRs)	284.4	330.4	337.4	381.6	460.3
Months of imports	2.7	2.8	2.9	3.0	2.7
Months of imports, excluding large mining projects	...	...	...	...	3.3
Public finance (percent of GDP)					
Overall government balance					
Including grants	-4.8	-5.7	-4.3	-3.8 [1]	-5.8
Excluding grants	-9.9	-13.9	-10.1	-10.5	-10.7
Tax revenue	10.0	10.9	10.1	10.7	10.9
Poverty					
Overall national poverty rate (percent of population) [2]	...	72.1	68.7	...	...

Source: Malagasy authorities and IMF staff estimates.

[1] Excluding capital account transfers linked to the Multilateral Debt Relief Initiative (MDRI)

[2] Poverty threshold defined as income required to purchase minimum daily calorie intake.

Statement by Laurean W. Rutayisire, Executive Director
for Republic of Madagascar
June 25, 2007

1. My authorities would like thank staff for the fruitful discussions and constructive policy advice during the recent Article IV consultation mission and for the continuous support.

2. Madagascar's growth momentum is picking up while inflation is steadily declining. The authorities are making progress in their efforts to stabilizing the economy and reaching higher and more sustainable levels of growth to address widespread poverty and raise the population's living standards. They remain focused on the implementation of their poverty reduction strategy, the Madagascar Action Plan (MAP), and the reforms schedules under the PRGF-supported program.

3. My authorities are grateful to the international community's financial support and for the debt relief provided under the MDRI that will enable them to continue to allocate important resources to the fight against poverty. They welcome the findings of the recent debt sustainability analysis that indicates that "even under the most extreme stress cases, the [NPV of debt-to-exports] ratio would remain far below the 150 percent threshold from 2010 onward". They would like to reiterate their commitment to a prudent borrowing strategy.

4. However, substantial additional resources both internal –through a much-needed increase in fiscal revenues mobilization–, and external –through higher foreign aid– will be needed to accelerate progress towards meeting the MDGs and to reach their ambitious development objectives set out in the MAP. Nonetheless, until the resources needed have been identified and secured they will keep a cautious and gradual approach in implementing their development strategy. In particular, they will continue to implement prudent fiscal and monetary policies and a sound management of the economy overall within the current PRGF-supported program. They will also continue to improve the business climate and further develop their infrastructures notably in the electricity sector to address potential growth bottlenecks. Efforts to broaden the exports base and to open up new regional markets through trade integration will help them address other major challenges, including the vulnerability to weather-related shocks that have recently severely affected agricultural output and food prices in a country where the primary sector represents one third of GDP and employs 80 percent of the population.

I. Recent Economic Developments and the Medium-Term Outlook

5. In 2006, the economy grew strongly reaching nearly 5 percent, driven by large infrastructure projects undertaken by the government and, more importantly, by new

foreign direct investments in the mining sector. Inflation continued to decrease to slightly less than 11 percent as a result in part of a tight monetary policy and the appreciation of the ariary. The foreign exchange inflows associated with these large FDIs have also contributed to an increase in the money supply, partly mopped up by the central bank to meet the monetary targets under the program. These inflows have, in addition, led to a substantial surplus of the overall balance of payments despite a large current account deficit.

6. Large FDI-related foreign exchange inflows could, in the short-term, have an adverse effect on the exchange rate and widen the current account deficit due the high import content of these foreign direct investments. However, in the longer term, the momentary impact of the large foreign exchange inflows are likely to be offset by the improvement in the current account deficit once exports of the commodities start. Overall, the net impact on competitiveness should be limited. Moreover, my authorities believe that their prudent macroeconomic policies and their far-reaching structural reforms underway along with the important investments in infrastructure will enhance the productivity of the economy. This should help further alleviate the impact of a rise in the ariary on the exports sector. Furthermore, they will continue to modernize and liberalize the foreign exchange market to alleviate the pressure on the exchange rate. They also remain committed to the current floating exchange rate regime and to restricting their interventions in the foreign exchange market to only smoothing daily fluctuations.

II. Policies and Reforms

7. ***Fiscal Policy.*** Despite the recent revision of the 2007 budget due to measures that include the recapitalization of the central bank following a recommendation of an MCM mission, my authorities concurred with staff that these revisions will not alter their current prudent fiscal stance. In particular, the increases in expenditures included in the revision will be partly offset by reductions in initially programmed nonprioritary spending. Progress has also been made in strengthening public expenditure management, especially in the areas of budget preparation and execution with the implementation of the budget information system (SIGFP). However, weaknesses remain in budget execution and the application of the Procurement Code that the authorities will continue to address.

8. Raising fiscal revenues continues to be one of the main objectives of my authorities. To this end, they have embarked on strengthening their capacity in fiscal and customs administration. In particular, they are committed to the reform, as scheduled, of the Tax and Customs Codes as part of the 2008 Finance Law, and addressing tax exonerations and exemptions while broadening the tax base.

9. ***Monetary Policy.*** Average inflation reached 10.8 percent in 2006 down from 18.4 in 2005 due in part to the authorities' monetary policy tightening. Despite a highly volatile

consumer price index resulting from weather-related supply shocks in the agricultural sector, the authorities are determined to bring inflation down to single-digits by the end of this year. To that end, they will continue to monitor closely the money supply and domestic spending component of the FDI inflows in the mining sector. In monitoring price stability, the authorities will also increasingly shift their focus from headline inflation to core inflation in accordance with staff recommendation. This will be made easier by the securitization of the government's debt held by the central bank that will enable the monetary authorities to conduct open market operations.

10. ***External Sector.*** Exports have been affected in the past couple of years by increased competition from other low cost producing countries in products such as textiles with the termination of the textiles quota in 2005 and a decline in the international prices of certain agricultural commodities such as vanilla. However, exports are also becoming more diversified and have increased as a share of GDP. In particular, the mining sector, where large investments are being undertaken by foreign companies, is booming. My authorities are determined to make further progress in improving the business climate and will continue to diversify the exports base and attract investments in other sectors with strong potential such as tourism and fishing.

11. ***Financial Sector.*** The soundness of the financial sector is improving as NPLs continue to decline and capital adequacy ratios are strengthening. Furthermore, microfinance institutions are expanding rapidly. The authorities view the financial sector as a crucial vehicle for economic development and will continue to promote the key role it plays in the expansion of the private sector. Despite the still limited financial intermediation – Madagascar's performance in this area also lags behind its Sub-Saharan African peers–, the authorities are making progress in improving access to credit and enhancing competition including with the recent granting of a new banking license. The authorities are also making efforts to increase the monetization of the economy and reduce its still high reliance on cash operations.

12. ***Regional Integration and Trade-Related Issues.*** Trade liberalization, both at the regional and multilateral levels, is one of the cornerstone of the authorities' policy agenda. Although they are aware that the phasing out of tariffs on imports would in the short-term adversely affect their already low fiscal revenue levels, they are convinced that in the longer-term they would benefit largely from the opening of new markets and from cheaper sources of imports, especially from South Africa within SADC.

13. ***Other Structural Reforms.*** Promoting the development of the private sector and improving the country's business climate will require the restructuring of the power utility company JIRAMA, as recurrent electricity outages continue to hamper economic activity. The authorities' medium-term intention is to transfer the management of the company to a private operator once JIRAMA becomes profitable. But prior to that, they

intend to phase in electricity tariffs and adopt an automatic pricing index formula in order to address operational losses and their impact on the government's budget.