INTERNATIONAL MONETARY FUND

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REPUBLIC OF MADAGASCAR

August 2016

REQUEST FOR AN ARRANGEMENT UNDER THE EXTENDED CREDIT FACILITY; FIRST REVIEW UNDER THE STAFF MONITORED PROGRAM—PRESS RELEASE; STAFF REPORT; AND STATEMENT BY THE EXECUTIVE DIRECTOR FOR REPUBLIC OF MADAGASCAR

In the context of the Request for an Arrangement Under the Extended Credit Facility: First Review Under the Staff Monitored Program, the following documents have been released and are included in this package:

- A **Press Release** including a statement by the Chair of the Executive Board.
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on July 27, following discussions that ended on June 8, with the officials of Republic of Madagascar on economic developments and policies underpinning the IMF arrangement under the Extended Credit Facility. Based on information available at the time of these discussions, the staff report was completed on July 12.
- An **Informational Annex** prepared by the IMF staff.
- A **Debt Sustainability Analysis** prepared by the staffs of the IMF and the International Development Association.
- A **Staff Statement** updating information on recent developments.
- A **Statement by the Executive Director** for Republic of Madagascar.

The documents listed below will be separately released.

Letter of Intent sent to the IMF by the authorities of Republic of Madagascar*
Memorandum of Economic and Financial Policies by the authorities of Republic of Madagascar*
Technical Memorandum of Understanding*

The IMF's transparency policy allows for the deletion of market-sensitive information and premature disclosure of the authorities' policy intentions in published staff reports and other documents.

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July 28, 2016

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IMF Executive Board Approves US$304.7 million Extended Credit Facility Arrangement for Madagascar

On July 27, 2016 the Executive Board of the International Monetary Fund (IMF) approved the equivalent of SDR 220 million (about US$304.7 million, or 180 percent of current quota) under a 40-month Extended Credit Facility (ECF) arrangement for Madagascar, to help reinforce macroeconomic stability and boost sustainable and inclusive growth.

Following the Board's decision, SDR 31.428 million (about US$43.5 million) is available for immediate disbursement; the remaining amount will be available in phases over the duration of the program, subject to semi-annual reviews.

The Executive Board was also informed about the Managing Director's approval of the first and final review under the six-month Staff-Monitored Program (SMP) covering the period from September 2015 up to the end of March 2016. During this time, the country built a satisfactory track record of sustained reforms, with progress in most areas.

Following the Board discussion, Mr. Mitsuhiro Furusawa, Deputy Managing Director and Acting Chair, made the following statement:

"The new arrangement for Madagascar under the Extended Credit Facility aims to reinforce macroeconomic stability and promote sustainable and inclusive growth. Weak revenue collections, substantial low-priority spending, and the need for strengthened economic governance all pose challenges to medium-term economic development. Against this background, rigorous and sustained reform implementation will be crucial.

"Rapid growth and sustained poverty reduction will require more investment in infrastructure and broader access to education and health care, in addition to structural reforms. It will be essential to increase tax revenue and to contain and then reduce lower-priority spending, including transfers to state-owned enterprises, such as the utility company JIRAMA. While substantial external borrowing is appropriate to finance development, debt sustainability must be preserved and the authorities should rely as much as possible on external grants and concessional financing.

"Reforms to strengthen governance are also central to the success of the economic program. Key actions include strengthening public financial management and procurement practices, increasing budget transparency, carefully managing the fiscal implications of Public Private Partnerships, and reinforcing the institutions and legal framework for combatting corruption.

"Creating a solid foundation for further financial deepening will be crucial for reinforcing economic growth and stability. This will require more frequent and deeper supervision of banks and nonbanks, establishment of a legal and operational framework for institutions in difficulty, and promotion of modern payment methods.

"The central bank has been strengthened by increased legal independence and growing international reserves. The authorities should remain vigilant about maintaining price stability, and continue to improve the operational framework for monetary policy implementation, including by establishing a well-functioning money market."

Recent Economic Developments

Hampered by fragile institutions, Madagascar is striving to recover from an extended political crisis and international isolation from 2009 to 2013. During this period, key social and developmental indicators deteriorated.

The recovery that began in 2014 has so far failed to gain much momentum due to key commodity prices falling, weather-related shocks, and deep-rooted structural weaknesses. GDP growth is now estimated at 3.1 percent in 2015, which is slightly lower than in 2014 and barely higher than population growth. Inflation fell back to 6.3 percent at end-May 2016 from 7.6 percent at end-December 2015, led by lower food and fuel prices.

Budget execution was challenging in 2015. Priority spending was squeezed by underperforming revenue collections, financing difficulties, and unexpected needs for transfers to state-owned enterprises and pensions. The fiscal deficit increased to 3.3 percent of GDP. Despite international headwinds, economic conditions are expected to improve in 2016 supported by country specific factors.

Performance Under the Staff-Monitored Program (SMP)

Macroeconomic performance was broadly satisfactory under the SMP, which ran from September 2015 to end-March 2016. Macroeconomic targets were met through end-March 2016, with the exception of the ceilings on net credit to government and new external payment arrears, due to technical difficulties in making payments. Tax revenue began to improve gradually, thanks to additional measures under the program, and priority social spending targets were met. A robust accumulation of foreign exchange reserves boosted external buffers.

Progress was also achieved on the structural front, including strengthened audits and controls for revenue collections; an automatic fuel pricing mechanism to avoid any fuel subsidies; the submission to Cabinet of a revised Central Bank Act, advancing a key institutional objective for macroeconomic stability; the Cabinet approval of a National Social Protection Policy; better transparency and functioning of the foreign exchange market; and a new database to enhance debt management capacity and transparency.

Program Summary

The government program, supported by the ECF, aims at reinforcing macroeconomic stability and promoting sustainable and inclusive growth. The program focuses on:

- **boosting prospects for inclusive growth** through improved access to education, health care, and social protection combined with enhanced infrastructure and private sector development;
- **creating fiscal space** through improved revenue generation and spending prioritization
- **reinforcing economic governance by strengthening public financial management** and intensifying anti-corruption measures; and
- **strengthening macroeconomic stability by bolstering central bank operations** and financial supervision. Reform implementation will benefit from a targeted program of capacity building and technical assistance.

Additional Background

The Republic of Madagascar, which became a member of the IMF on September 25, 1963, has an IMF quota of SDR 122.2 million.

For additional background information on the IMF and the Republic of Madagascar, see: www.imf.org/Madagascar

Madagascar: Selected Economic and Financial Indicators, 2013-19

	2013	2014	2015	2016	2017	2018	2019
	Actuals		Prel. Est.	Projections			
	(Percent change; unless otherwise indicated)						
National account and prices							
GDP at constant prices	2.3	3.3	3.1	4.1	4.5	4.8	5.0
GDP deflator	5.1	6.6	7.6	6.7	6.9	6.4	6.1
Consumer prices (end of period)	6.3	6.0	7.6	7.1	7.1	6.3	5.9
Money and credit							
Reserve money	-6.1	14.1	9.6	16.0	12.7	11.9	11.9
Broad money (M3)	5.3	11.1	14.6	17.9	12.7	12.5	12.3
	(Growth in percent of beginning of period money stock (M3))						
Net foreign assets	-13.5	5.4	6.9	7.5	3.3	2.6	2.5
Net domestic assets	18.7	5.7	7.7	10.4	9.4	9.9	9.8
of which: Credit to the private sector	6.9	8.6	8.2	4.6	6.6	7.8	7.7
	(Percent of GDP)						
Public finance							
Total revenue (excluding grants)	9.6	10.1	10.4	11.0	11.2	11.7	12.2
of which: Tax revenue	9.3	9.9	10.1	10.8	11.0	11.5	12.0
Grants	1.3	2.3	1.5	2.0	2.7	1.5	1.3
Total expenditures	14.9	14.7	15.1	16.2	18.3	17.6	18.0
Current expenditure	11.8	10.8	11.7	11.0	10.3	10.0	9.9
Capital expenditure	3.1	3.9	3.5	5.3	8.0	7.6	8.1
Overall balance (commitment basis)	-4.0	-2.3	-3.3	-3.2	-4.4	-4.4	-4.4
Float (variation of accounts payable, + = increase)	-0.2	0.6	0.1	0.0	0.0	0.0	0.0
Variation of domestic arrears (+ = increase)	2.2	-0.7	-0.5	-1.2	-0.7	-0.5	-0.3
Overall balance (cash basis)	-2.0	-2.4	-3.7	-4.5	-5.1	-5.0	-4.7
Primary balance excl. foreign-financed investment[2]	…	…	-1.3	-0.6	0.1	0.2	0.3
Savings and investment							
Investment	15.9	15.6	13.1	15.3	18.2	18.2	18.6
Gross national savings	10.0	15.3	11.1	13.0	14.5	14.0	14.4
External sector							
Exports of goods, f.o.b.	18.1	20.6	21.0	21.5	20.8	20.7	20.9
Imports of goods, c.i.f.	30.7	30.2	28.7	30.2	31.2	31.5	31.6
Current account balance (exc. grants)	-6.5	-1.5	-3.4	-4.3	-6.4	-5.6	-5.5
Current account balance (inc. grants)	-5.9	-0.3	-1.9	-2.3	-3.7	-4.2	-4.2
Public debt	33.9	35.8	41.0	41.7	42.8	43.6	44.5
External	22.8	24.4	28.4	30.4	32.6	34.5	35.8
Domestic	11.1	11.4	12.6	11.3	10.2	9.1	8.6
	(Units as indicated)						
Gross official reserves (millions of SDRs)	502	535	600	701	782	859	945
Months of imports of goods and services	2.2	2.5	2.9	3.3	3.4	3.5	3.6
Terms of trade (percent change, deterioration -)	0.0	0.8	6.6	6.6	-4.6	-2.1	-1.9
GDP per capita (U.S. dollars)	462	453	402	391	405	419	437
Nominal GDP at market prices (billions of ariary)	23,397	25,775	28,585	31,773	35,507	39,609	44,103

Source: Malagasy authorities; and IMF staff estimates and projections.

INTERNATIONAL MONETARY FUND

REPUBLIC OF MADAGASCAR

July 12, 2016

REQUEST FOR AN ARRANGEMENT UNDER THE EXTENDED CREDIT FACILITY; FIRST REVIEW UNDER THE STAFF MONITORED PROGRAM

EXECUTIVE SUMMARY

Context. Madagascar is a fragile country striving to recover from an extended political crisis and international isolation from 2009 to 2013, during which key social and developmental indicators deteriorated. Low revenue collection, substantial low-priority public spending, and governance problems are holding back recovery. Nevertheless, broadly satisfactory performance under the six-month staff monitored program that ended in March 2016 is a sign of improving implementation capacity.

Extended Credit Facility Arrangement (ECF). The Malagasy authorities have requested an arrangement under the ECF in an amount of SDR 220 million (180 percent of quota) in support of their medium-term economic reform program.

Program Framework. The authorities' ECF-supported program, anchored on their National Development Plan (NDP), aims at reinforcing macroeconomic stability and promoting sustainable and inclusive growth. It focuses on:

- Promoting robust and inclusive growth, combining improved access to education, health care, and social protection with infrastructure and private sector development.
- Expanding the fiscal space for investment and social spending through superior revenue generation and spending prioritization.
- Improving governance by strengthening public financial management and intensifying anti-corruption measures.
- Building the capacity to support macroeconomic policy implementation and financial sector development by strengthening the central bank and financial supervision.

Risks. Risks to the program include political uncertainty, lack of progress against corruption, increased need for low-priority public spending (e.g., loss-making SOEs), and weak growth in advanced and emerging economies reducing FDI, tourism, and commodity prices.

Staff supports the authorities' request for an ECF. Forceful and sustained program implementation will be essential to make the planned reforms effective.

Approved By
David Robinson and Rupa Duttagupta

Discussions on the authorities' economic and financial program took place in Washington DC during April 13-15, 2016 and in Antananarivo during May 25-June 8, 2016. The IMF staff team included Messrs. Mills (head), Engstrom, and Matz (all AFR), Ms. Baum (FAD), and Mr. Eugster (SPR). The mission was assisted by Mr. Imam (Resident Representative), and Ms. Rasoamanana (local economist). Mr. Hardy (MCM) joined during June 2-8, 2016 to present the FSAP conclusions. Mr. Ismael (OED) participated in the discussions. The IMF team met with President Rajaonarimampianina, Prime Minister Solonandrasana, Minister of Finance and Budget Rakotoarimanana, Minister of Economy and Planning Raveloharison, Minister of Energy and Hydrocarbons Ramanantsoa, Central Bank of Madagascar Governor Rasolofondraibe, the Economic Advisor to the President, Mr. Rajaobelina, and other senior officials, as well as private sector representatives and development partners.

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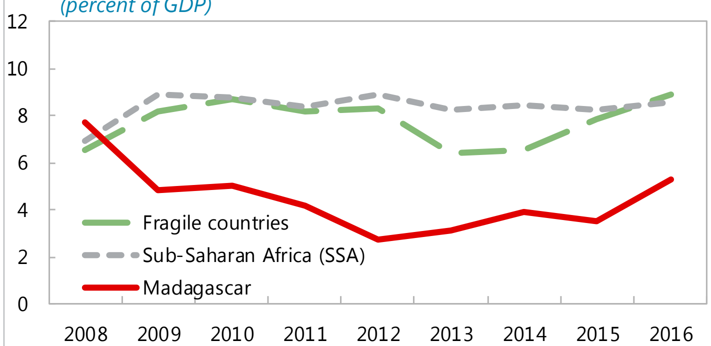
CONTEXT, RECENT DEVELOPMENTS, AND PROGRAM PERFORMANCE

A. Context

1. **Madagascar is a fragile country striving to recover from an extended political crisis and international isolation during 2009-13.** However, the combination of political uncertainty, weak governance, and underinvestment in physical and human capital (Text Figure 1) has contributed both to persistent poverty (with some social indicators deteriorating) (Figure 1), and to holding back economic revival. The country has been unable to capitalize on its significant potential in agriculture, mining, tourism, and manufacturing. The authorities' National Development Plan (NDP), adopted in 2014, aims to boost spending significantly on infrastructure and social development needs to support strong, pro-poor growth, giving rise to a protracted balance of payments need.

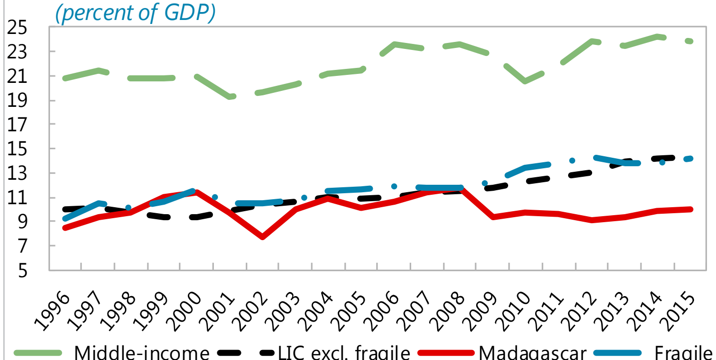
Text Figure 1. Madagascar: Domestic Capital Expenditure
(percent of GDP)



Source: Malagasy Authorities; and IMF staff estimtes and projections.

2. **Weaknesses in revenue mobilization, the prioritization of spending, and economic governance have hampered the implementation of the medium-term economic program embodied in the NDP.** Fiscal revenues remain significantly below the average of fragile countries in Sub-Saharan Africa (Text Figure 2), and low-priority spending, including transfers to key state-owned enterprises (SOEs) and pension funds, continues to crowd out high-priority spending. Governance indicators have similarly deteriorated (Text Figure 3). The public electricity utility JIRAMA illustrates these impediments, as its operational and financial difficulties, linked to goverance weaknesses, hold back economic growth and disrupt budget execution.

Text Figure 2. Sub-Saharan Africa: Tax and Customs Collections
(percent of GDP)

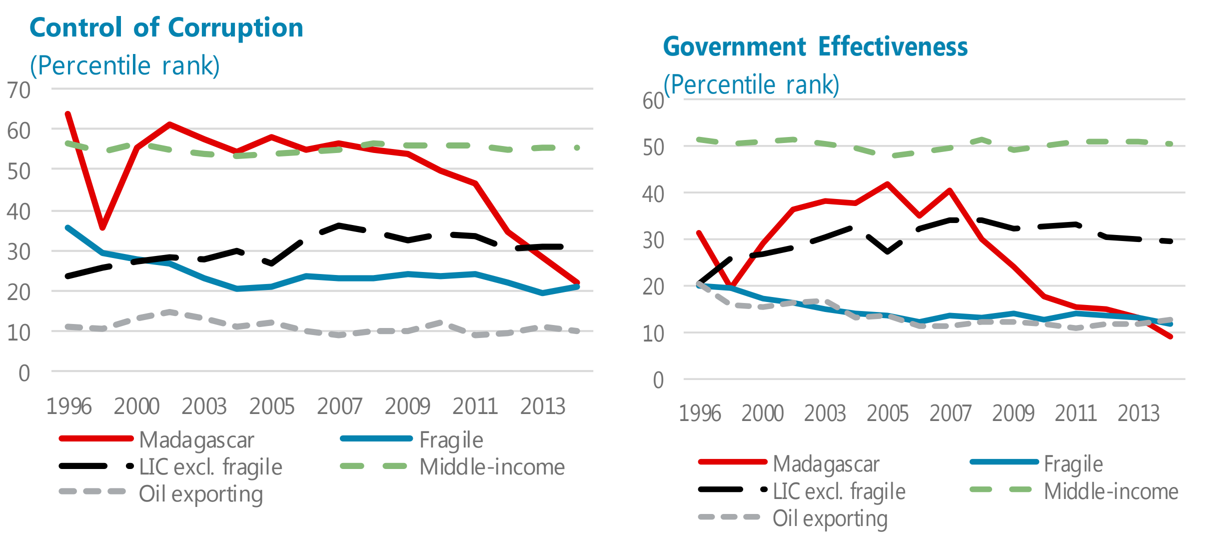


Source: World Economic Outlook.

3. **In light of these challenges, the Malagasy authorities have been seeking increased external support, including an arrangement under the Extended Credit Facility (ECF).** Since re-

engagement with the international community in 2014, the Malagasy authorities have expressed interest in an ECF arrangement to help provide a strong macroeconomic framework, meet protracted balance of payments needs, and catalyze additional donor support—both financial and technical. However, slow progress and uncertainty on several fronts—notably revenue, low-priority spending, and governance—highlighted weaknesses in the authorities' implementation capacity. To support efforts to reinforce stability and ease balance of payments needs, Madagascar received two RCF disbursements—the first in June 2014 and the second in November 2015. The authorities also agreed on a six-month Staff Monitored Program (SMP) covering September 2015 to end-March 2016 to support stability and help build a track record of implementation. Since re-engagement, the IMF and others have provided intensive technical assistance in macro-critical areas such as public financial management, public enterprise reform, revenue generation, the quality of public spending, and financial sector development (including under the Financial Sector Assessment Program (FSAP), see below).

Text Figure 3. Sub-Saharan Africa: Governance Indicators



Source: World Bank, *Governance Indicators.*

B. Recent Developments

4. **Growth was constrained by unfavorable domestic and international events in 2015** (Figures 2-4 and Tables 1-7). The recovery in tourism suffered from disruptions from an extended strike at Air Madagascar; agriculture was held back by unfavorable weather conditions in early 2015; and earnings from mining exports declined as a result of falling world market prices. GDP growth in 2015 is now estimated at 3.1 percent, which is slightly slower than 2014 and barely higher than population growth of 2.8 percent. Inflation fell back to 6.3 percent at end-May 2016 from 7.6 percent at end-December 2015, led by lower food and fuel prices.

5. **Budget execution was challenging in the second half of 2015.** Compared to the initial 2015 Budget, priority spending was squeezed by underperforming revenue collections, tight financing constraints, and transfer needs at SOEs and pensions surpassing budgeted amounts.[1] An expected external commercial loan for budget financing (about 0.8 percent of GDP) was delayed and domestic financing conditions tightened more than expected in the second half of the year. In response, the authorities reduced current and capital spending (including by delaying staff recruitment and investment), took measures to shore up revenue collection, and relied on higher than expected central bank financing. With these measures—contained in the SMP—execution of the revised budget managed to minimize negative effects on public finances and macroeconomic stability, with a significantly lower deficit than initially projected. To address tight bank liquidity, the central bank reduced the regulatory reserve requirement and the reference interest rate in October 2015 (followed by a further rate cut in May 2016), easing domestic financing constraints (Figure 5). The improved budget execution continued in the first quarter of 2016, with gradually improving revenue performance. In addition, the government reached agreements with creditors to clear a higher than expected amount of domestic arrears, partly through cash payments and partly through the issuance of special Treasury bonds. The 2016 Supplementary Budget with additional fiscal measures was submitted to Parliament in June 2016 (prior action) and passed in late June.

Text Table 1. Fiscal Operations of the Central Government, 2015 and March 2016
(Percent of GDP)

	2015			2016	
	December			March	
	Budget	SMP	Prel. Est.	SMP	Prel. Est.
Total revenue and grants	13.6	12.4	11.8	2.5	2.7
Tax revenue	11.6	9.9	10.1	2.3	2.3
Total expenditure and lending minus repayments	15.9	16.9	15.1	2.7	2.7
Current expenditure	11.4	12.1	11.7	2.1	2.1
Wages and salaries	6.2	5.8	5.5	1.4	1.2
Interest payments	1.2	0.9	0.8	0.2	0.2
Other	3.9	4.1	3.9	0.4	0.5
Transfers and subsidies	2.9	3.5	3.4	0.3	0.4
Treasury operations (net)	0.1	1.3	1.4	0.2	0.3
Capital expenditure	4.5	4.8	3.5	0.5	0.6
Domestic financed	1.5	0.6	1.0	0.1	0.1
Foreign financed	3.0	4.2	2.5	0.5	0.5
Overall balance (commitment basis)	-2.3	-4.5	-3.3	-0.2	0.0
Float (variation of accounts payable, + = increase)	0.0	0.0	0.1	0.0	-0.1
Variation of domestic arrears (+ = increase)	-0.4	-0.8	-0.5	-0.2	-0.4
Overall balance (including grants, cash basis)	-2.7	-5.3	-3.7	-0.4	-0.5
Total financing	2.7	5.3	3.7	0.4	0.5
External borrowing	1.4	4.0	2.2	0.1	0.1
Domestic borrowing	1.3	1.3	1.5	0.3	0.4

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

6. **Balance of payments pressures lessened in the last third of 2015.** In connection with the SMP, the central bank discontinued buyback operations in the foreign exchange market in September, which had maintained the published official rate at a more appreciated level than the market rate. The official exchange rate depreciated about 7 percent against the US Dollar to converge with the market rate. The Ariary has subsequently remained relatively stable, aided by falling world oil prices and a boost in confidence. At the same time, the central bank purchased

[1] The authorities also recognized central bank claims on the government (1.2 percent of GDP) reported under Treasury operations (net). While this recognition increased the domestic financing of the budget, it had no monetary effects because the claims were already reported as other assets of the central bank.

foreign exchange of over US$150 million (net) in the market through end-May 2016. While rising, international reserves (projected at about 3.3 months of import coverage at end-2016) remain below the optimal level (see Annex I).

C. Performance Under the Staff-Monitored Program

7. **Macroeconomic performance under the SMP was broadly satisfactory.** All quantitative targets were met through end-March (Table 11), except the ceilings on net credit to government and new external payment arrears.[2] In particular, tax revenue benefitted from additional measures under the SMP and priority social spending targets were met. The missed targets on net credit resulted from the shortfall in external financing, larger than projected clearance of domestic arrears (in early 2016), and difficulties in forecasting and adjusting spending on a quarterly basis. The net reduction in domestic arrears represented important progress in a problem affecting both public finances and the private sector. The floor on net foreign assets was exceeded by over US$10 million at end-December 2015 and almost US$50 million at end-March 2016.

8. **All structural benchmarks under the SMP were also implemented, although some with minor delays** (Table 12). Progress was achieved on several macro-critical structural fronts before and during the SMP:

- The central bank strengthened the functioning of the foreign exchange market by discontinuing buyback operations that had artificially set the official exchange rate at an appreciated level relative to the market rate.
- Administrative and legislative measures strengthened audits and controls for revenue collections, reversing a deterioration.
- The reliability of VAT refunds—a major source of arrears in the past—benefitted from the creation of an escrow account.
- The automatic fuel pricing mechanism—operational since February—has avoided any fuel subsidies, which previously led to substantial and unpredictable budget costs.[3]
- The submission of the revised Central Bank Act to Cabinet for approval advanced a key institutional objective for macroeconomic stability.
- The Cabinet approved a National Social Protection Policy.
- A new database system enhanced debt management capacity and transparency.
- The robust accumulation of foreign exchange reserves boosted external buffers.

[2] External payment arrears resulted from technical difficulties in making debt service payments to Iraq and Libya, and the Malagasy authorities are in discussions with these creditors. A missed payment to Russia in early 2016 also constituted arrears and was paid in July.

[3] The adjustment was delayed a few days in May, while the authorities renegotiated the margins with private sector distributors.

POLICIES UNDER THE ECF ARRANGEMENT

A. Program Objectives and Macroeconomic Framework

9. **The program aims at both reinforcing macroeconomic stability and promoting sustainable and inclusive growth over the medium-term** (Box 1).

Box 1. Medium-term Objectives Under the ECF-Supported Program (2016-2019)

Macroeconomic objectives for stronger stability and sustainability:

- Accelerate economic growth to 5 percent a year.
- Maintain inflation in single digits with a downward trend toward 5-6 percent.
- Improve international reserves coverage gradually to at least 3½ months of imports.
- Raise fiscal revenue gradually to 12 percent of GDP.
- Boost public capital expenditure substantially to 8 percent of GDP.
- Achieve a modest surplus in the fiscal anchor (primary balance excluding foreign-financed investment).

Structural reform objectives for sustainable and inclusive growth:

- Promote inclusive growth, *inter alia* by shifting public spending significantly in favor of infrastructure investment, education, and health and improving the business climate.
- Create fiscal space, *inter alia* by mobilizing domestic revenue and sharply reducing the need for transfers to SOEs and pension funds.
- Enhance economic governance and fight corruption, *inter alia* by limiting the use of restricted tenders in procurement, devoting more resources to anti-corruption agencies and reinforcing the legal framework.
- Strengthen stability and financial sector development, *inter alia* through enhanced central bank independence, reinforced financial sector supervision, and better liquidity management.

Medium-term macroeconomic framework

10. **Scaled-up investment—in human as well as physical capital—and structural reforms are intended to accelerate growth and gradually improve social indicators.** In health and education, the government is combining increased resources with reforms by integrating sectoral spending plans into a medium-term budget framework. The public investment plan aims to boost spending to 8 percent of GDP, with priority given to the transportation and energy sectors, which have been bottlenecks. At the same time, reform efforts aim to increase efficiency of investment, notably through a Public Investment Management Assessment and restructuring key SOEs, particularly JIRAMA. The agriculture, construction, tourism, manufacturing and mining sectors are expected to benefit from both increased investment and productivity gains prompted by reforms. Improved land rights management and rural infrastructure development will spur growth in

agriculture, which employs about 80 percent of the population. A new legal framework under preparation will support investment in mining and petroleum. Inflation is expected to remain stable in 2016-17 and to fall gradually starting in 2018, as a result of a restrained monetary policy and limited international price pressures (Figure 6).

11. **Fiscal policy will support the NDP's goals of boosting investment and social spending, while safeguarding both stability and sustainability**. The projected fiscal position remains consistent with maintaining a moderate risk of debt distress (DSA, Supplement 2), while accommodating a scaling up of investment. The overall deficit (commitment basis) rises slightly to 4½ percent of GDP in 2017-19, while the program fiscal anchor—the primary balance excluding foreign financed investment—improves gradually to a modest surplus. The improvement in the fiscal anchor ensures that the authorities can cover essential spending needs, while allowing for flexibility concerning volatile foreign-financed investment. Taken together, these factors make room for rising public investment, which is expected to more than double to over 8 percent of GDP by 2019, with a reliance on external financing on concessional terms.

12. **With higher foreign-financed investment, the current account deficit is projected to increase modestly from 2 percent of GDP in 2015 to 4 percent of GDP in 2019**. Unfavorable price developments for key exports (nickel, vanilla) would further weigh on Madagascar's current account balance. The deficits are expected to be primarily financed by concessional public sector borrowing and FDI inflows, which would benefit from improvements in the business climate. As a result of sustained private sector investment (including FDI), production and export capacity should grow over the medium-term, and external sustainability remains comfortable. Financial inflows, together with IMF support, will help build reserve coverage without creating stress in the monetary sector; coverage is projected to reach 3.6 months of imports by 2019 (from 2.9 months at end-2015), within the estimated band for optimal reserve holdings (Annex I).

2016 macroeconomic framework

13. **While the authorities' macroeconomic framework for 2016 remains broadly appropriate, additional fiscal measures are needed to offset an expected revenue shortfall and avoid unplanned spending needs** (MEFP ¶24). Lower world fuel prices are still projected to reduce revenue from petroleum products by 0.3 percent of GDP in 2016. Even though over-performance on other taxes offset this loss through end-March, the authorities will need efforts to continue to offset the loss. They decided to raise excise taxes on spirits in the supplementary budget; enhance cooperation between customs and tax administrations; and continue improved customs controls (already yielding an additional 0.2 percent of GDP by end April). In addition, consolidation of current spending will reduce expenses by 0.2 percent of GDP, mainly through cuts in goods and services.[4] The cost of exceptional events like the summit of the Francophonie in November need to be carefully controlled to remain within budgeted amounts. Further cuts in discretionary spending would require reductions in high priority spending. The overall deficit (cash

[4] At the same time, spending on domestic investment increases slightly because of higher tax payments on foreign financed investment.

basis, including significant arrears clearance) is projected at 4.5 percent of GDP in 2016, which will be financed two-thirds by external borrowing and one-third by domestic borrowing. Considering that full fiscal financing is essential to internal and external stability, that the fiscal deficit is appropriate, and that other financing is not available, the central bank plans to on-lend up to SDR 24.7 million of the first ECF disbursement (MEFP ¶29). While the significant reserves accumulation this year boosts buffers, it has contributed to money growth and created tensions in domestic financing.

B. Promoting Inclusive Growth

14. **Rapid and sustained poverty reduction requires robust growth with broadly distributed benefits.** Investment in public infrastructure and broader access to education and health care can help boost productivity across the population, thereby raising living standards:

- Due to past underinvestment, Madagascar now needs substantial investment in roads, railways, seaports, airports, and energy. To implement the NDP, the government has recently developed a priority investment program (PIP), which will be presented to development partners later in 2016 (MEFP ¶19).
- The authorities will integrate health and education sectoral spending plans into a medium-term budget framework by end-June 2017 (structural benchmark, MEFP ¶12). Medium-term plans for mutual health insurance programs and a national solidarity health fund will create the foundation for universal health coverage. In education, priorities include the construction of new schoolrooms, recruitment of teachers (including contributing to community-paid teachers), more textbooks, increased teacher training, and school food programs in underserved districts (MEFP ¶14).
- To implement the national social protection policy adopted in 2015, the government plans to (i) establish an inter-ministerial framework by 2017, and (ii) introduce conditional transfers to vulnerable households (MEFP ¶13).
- The government is aiming for a steady growth in spending on social sectors. Domestic social spending[5] (excluding salaries) has been volatile (0.5-1.1 percent of GDP over 2013-16), and the authorities and staff are examining the feasibility of increasing non-wage social spending from 0.8 percent of GDP to 1.3 percent over 2016-19. External support for social investment spending has increased steadily since 2014, reaching 0.8 percent of GDP in 2016 (commitments). To fully achieve the authorities' social objectives, significant external resources will remain necessary over the medium term. Social sector ministries will also benefit from capacity building (with support from development partners) and less back-loaded budget execution, facilitating program implementation and reducing the risks of budget cuts late in the year.

[5] Social spending is defined here and for the program's indicative target (floor) as the sum of the budget allocations to the Ministries of Health, Education, Population and Water, excluding salaries and externally financed investment.

15. **Boosting public investment as planned will require substantial external financing, which needs to be carefully managed to ensure debt sustainability** (MEFP ¶21-22). The framework assumes public investment of about 8 percent of GDP a year starting in 2017. While this level is more than double that of 2015, full PIP implementation would require even higher investment. However, considering debt sustainability and limited implementation capacity, projects must be prioritized based on a thorough cost-benefit analysis. The authorities are emphasizing investment capacity, drawing on a Public Investment Management Assessment underway with IMF and World Bank support. The authorities intend to rely as much as possible on concessional borrowing and have established program ceilings on non- and semi-concessional borrowing in 2016 and 2017.

16. **Public-private partnerships (PPPs) are expected to play an important role in addressing the infrastructure gaps, although fiscal risks merit careful monitoring** (MEFP ¶20). While PPPs can be helpful for mobilizing resources and managerial expertise, the authorities also recognize the importance of managing associated fiscal risks.[6] To this end, a new PPP law was enacted in February 2016, and the application decrees will be published in September 2016. In this framework, new contracts are to be attributed through open and transparent tenders, except under specific limited conditions, and the terms and conditions will be published within one month of the date of signature (continuous structural benchmark). While the Presidency will coordinate PPPs, the Ministry of Finance and Budget will maintain the right to reject projects in the event of disproportionate fiscal implications.

17. **A favorable business climate is essential for private sector-led growth** (MEFP ¶17-18). The government is pursuing efforts to identify and reduce burdensome regulations with support from the World Bank, including: (i) accepting on-line registration of businesses; (ii) establishing a centralized database for land registries; (iii) creating a legal framework for credit reference bureaus; and (iv) reducing transaction costs for construction permits and electricity connections.[7] The institutional and legal frameworks for mining, petroleum, and special economic zones for exports are also being revised. The first two aim to reflect international best practices, including higher royalty rates that are more differentiated by type of mineral, simplification of the corporate income tax regimes, and reduced length of fiscal stability clauses.[8] The special economic zones will benefit from specific tax and customs provisions, labor and immigration regulations, land tenure, and corporate law.

[6] IMF's Fiscal Transparency Code recommends that countries include fiscal risk statements in their annual budget documentation.

[7] According to the World Bank's Doing Business Indicators, Madagascar ranks second to the last in the world for access to electricity.

[8] The new mining and petroleum codes will not apply to existing investments and permits, which will have the option to enter the new legal framework. Existing large investments will continue to be covered by their respective legal frameworks.

C. Creating Fiscal Space

18. **Fiscal policy will focus on creating room for higher priority spending on infrastructure and social areas over the medium term.** Key actions include boosting revenue performance and shifting spending away from less productive areas, particularly transfers to SOEs and pension funds. Other priorities include clearing existing arrears, avoiding new ones, and ensuring a cost-efficient civil service.

19. **Tax revenues are targeted to increase by ½ percent of GDP a year over the medium term, reaching 12 percent of GDP by 2019** (MEFP ¶30)**.** While the potential for increased revenue is clear, concrete measures are needed to realize it, especially as customs collections will come under increasing pressure from international trade treaties, such as the Economic Partnership Agreement with the European Union and the tripartite free trade agreement between the Southern African Development Community, Common Market for Eastern and Southern Africa, and the East African Community.[9] Drawing on technical assistance (TA) from the IMF, World Bank and others, the tax administration will focus on (i) monitoring and recovering tax arrears (structural benchmark); (ii) auditing tax credits granted for investment (structural benchmark); (iii) auditing taxpayers who report inconsistent data to the tax and customs authorities; and (iv) fully enforcing the withholding tax on suppliers without tax identification numbers. Customs will step up post-clearance audits and continue stricter control of consolidated cargoes and claimed exemptions, which has shown large potential.[10] Over the medium term, additional means for deterring fraud are needed, such as more randomized controls, stronger sanctions (for both evaders and complicit tax officials), and improved transparency on tax crime prosecutions.

20. **Strict control of less productive expenditures will increase the room for priority spending** (MEFP ¶32, ¶36). While spending is projected to remain around 18 percent of GDP over the medium term, its composition will improve through (i) strict wage bill controls; (ii) reduced non-priority transfers; and (iii) increased social priority spending (monitored through an indicative program target). The authorities intend to reduce the wage bill gradually to around 5 percent of

Text Table 2: Fiscal Spending Estimates 2016-19
(In percent of GDP)

	2015	2016	2017	2018	2019
Spending	**15.1**	**16.2**	**18.3**	**17.6**	**18.0**
Current (non-interest) spending	**10.8**	**10.0**	**9.3**	**9.0**	**8.9**
Salaries	5.5	5.7	5.6	5.3	5.1
Goods and services	0.5	0.7	0.8	1.1	1.2
Priority transfers	1.6	1.3	1.3	1.5	1.6
Transfers to SOEs and pensions	1.8	1.9	1.4	1.0	0.8
Other current spending	1.4	0.5	0.2	0.2	0.2
Investment Spending	**3.5**	**5.3**	**8.0**	**7.6**	**8.1**
Domestically financed	1.0	1.5	1.9	2.4	3.0
Externally financed	2.5	3.7	6.1	5.2	5.1
Memorandum Item					
Social Priority Spending[1]	0.7	0.8	0.9	1.1	1.3

Sources: Malagasy authorities; and IMF staff estimates and projections.
[1] Social Priority Spending is the sum of budget allocations to the Ministries of Health, Education, Population, and Water, excluding salaries and externally financed investment.

[9] Customs revenues stand at 5.3 percent of GDP, far above the LIDC average of 3.5 percent (EU 2014 "Tax Revenue Mobilisation in Developing Countries: Issues and Challenges").

[10] The physical inspection of all claimed imports of tax exempted rice reduced their value by nearly 50 percent in the first half of 2016, while the import of other food products increased by a similar amount.

GDP in the next three years through ongoing payroll audits and strict limits on creating new positions. Staff welcomed these efforts while noting the importance of a cost-efficient civil service that meets the social needs of a growing population, which might warrant some rise in the wage bill over the medium-term. The authorities are also targeting reductions in non-priority transfers to the pension funds and JIRAMA (by about 0.15 percent of GDP each annually), while priority transfers and spending on goods and services are projected to increase (Text Table 2). Continued automatic adjustment of fuel prices will avoid any budget costs (continuous structural benchmark). Investment will be scaled up to support the large infrastructure needs, financed largely by external borrowing (although with a growing contribution from domestic resources).

21. **Reducing the need for transfers to key SOEs will require forceful action to improve their management and control** (MEFP ¶33-35, ¶39). Contingent liabilities of SOEs could also pose significant fiscal risks in the event of severe financial difficulties at a large SOE. The authorities have begun to reform the two SOEs with the largest transfers, Air Madagascar and JIRAMA, with support from development partners:

- After a strike prompted financial difficulties in 2015, **Air Madagascar** underwent a deep operational and financial restructuring. A new board and management oversaw a reduction in routes and costs. The plan is to restore operational profitability and secure a strategic investment partner by end-2016; the recent removal of restrictions on flying to Europe for safety reasons will help.
- Reform of the operations and management of **JIRAMA** poses larger challenges. Its needs for transfers to maintain operations were growing in 2016, exceeding budgeted amounts and jeopardizing the full financing of the budget. Drawing in part on TA from the World Bank, the authorities decided on forceful measures to contain its needs for transfers by raising revenue and cutting costs, including: (i) raising electricity tariffs (previously at 2009 levels in nominal terms) by 15 percent in 2016 (prior action); (ii) auditing energy supply contracts; (iii) drafting new legislation criminalizing theft of electricity and water; and (iv) converting from diesel-based generation to less expensive heavy fuel oil. With World Bank support, JIRAMA is developing a new business plan and enhancing governance, including an investment plan for low-cost production and hiring senior staff via a competitive recruitment process. Pending completion of the investment plan, the Board of JIRAMA has decided to strictly limit any non-competitive procurement for energy supply to clearly justified exceptions, which will be communicated to Fund and World bank staff (structural benchmark).

D. Enhancing Economic Governance

22. **Weak governance in Madagascar is holding back economic stability, growth, and development.** Madagascar suffers from systemic corruption, even compared to other fragile states (Text Figure 3), which hamstrings the conduct of regulatory and budgetary policies, ultimately hurting inclusive growth. To enhance governance, the authorities are addressing existing weaknesses in public financial management (PFM), supported by TA from the Fund and others, and intensifying efforts against corruption.

23. **Improvements in the PFM system, particularly procurement, are essential for good governance** (MEFP ¶37-39). Following an interim action plan for 2014-2015, a new PFM reform strategy for 2016-2019 is being developed with support from the AfDB, IMF and others, and Cabinet approval is expected in December 2016. The strategy will focus on arrears clearance, revenue management, public investment management, and the framework for public-private partnerships (PPPs). A centralized information system to be introduced at the Ministry of Finance will enhance transparency and reduce discretion by harmonizing data for all departments (including tax and customs), procurement, and social security. An immediate priority for both PFM and governance is strengthening procurement practices. The authorities are reinforcing the role of the independent review authority (*Autorité de Régulation des Marchés Publics)* with measures that limit the use of restricted tenders, expand its coverage to include SOEs' procurement (including JIRAMA), and increase transparency, notably through timely publication of all tender offers and the terms and conditions of contracts (including PPPs, continuous structural benchmark), as well as an annual independent audit of the review process (structural benchmark). Transparency of SOEs' finances will also be strengthened, with ten large SOEs publishing and submitting their 2015 financial statements to the Court of Auditors by end-December 2016 (structural benchmark).

24. **The authorities are intensifying the implementation of the anti-corruption strategy** (MEFP ¶41-42). The strategy, adopted in 2015, includes: (i) strengthening of anti-corruption legislation; (ii) increasing the independence and resources of the public anti-corruption agency (BIANCO); (iii) developing an information system to track all legal anti-corruption cases; (iv) establishing a commission to improve the integrity of the judicial system; and (v) making the Council of Budget and Financial Discipline (CDBF) fully operational (structural benchmark). Two new laws on declaration of assets and the formation of judicial anti-corruption centers were submitted to the Parliament in June (prior action) and a third new law on asset recovery is planned to be submitted to the Parliament in October (structural benchmark). To advance judicial reform, the authorities are also aiming to: reduce the currently excessive delays in trying of court cases; make all decisions available online; establish new guidelines for the random assignment of court cases; and improve the functioning of the Supreme Judicial Council (*Conseil Supérieur de la Magistrature*).

25. **To build confidence in Madagascar's financial system, the authorities are determined to stem money laundering and the financing of terrorism** (MEFP ¶43). An action plan will be developed following a national risk assessment that is expected to be completed in cooperation with the World Bank by end-2016. Madagascar is also in the process of joining the Egmont group and the Eastern and Southern Africa Anti-Money Laundering Group.

E. Strengthening Macroeconomic Stability and Financial Sector Development

26. **The authorities have taken decisive actions to enhance the independence and operations of the central bank:**

- In addition to securitization of government liabilities to the central bank, a new modern Central Bank Act, developed with IMF TA, was submitted to the Parliament in June 2016 and has been passed (MEFP ¶44-45). The new Act strengthens central bank independence by (i) gradually reducing central bank advances to the government; (ii) automatically transferring central bank losses and profits to the government; (iii) establishing an Audit Committee; and (iv) establishing an Executive Committee that will propose policies to the Board of Directors.

- The central bank has also reinforced its audit oversight and control environment. The central bank accounts will begin to be presented in accordance with International Financial Reporting Standards (IFRS) starting with the 2018 financial statements (MEFP ¶46).

- The central bank is improving the operational framework for monetary policy implementation, which is hampered by weak liquidity management and an inactive interbank market. In addition, these factors have periodically contributed to the government experiencing domestic financing difficulties; while the level of domestic savings is the fundamental constraint on domestic financing, credit from the few banks with excess liquidity is often constrained by risk limits on their exposure to the government and other banks in Madagascar. Key actions to deal with these challenges include: (i) publishing quarterly calendars of Treasury bill auctions on a rolling basis starting in September 2016; (ii) improving the operations of the interbank foreign exchange market, including through more efficient central bank interventions, increasing transparency, and updating the legal framework regulating the market by end-June 2017; and (iii) establishing a legal framework for repo transactions by mid-2018. The central bank is also planning to create an interest rate corridor for the interbank market, set explicit liquidity targets, and allow the reference rate to fluctuate more (MEFP ¶47).

27. **The FSAP identified challenges in developing the financial system while preserving financial stability.** Thanks to a conservative approach, the financial sector has survived the economic and political turmoil of the last decade relatively well, albeit with little progress in financial deepening or inclusion (Figure 7). Certain vulnerabilities could become acute especially if financial sector development were to accelerate.

- Broad money (M3) has remained roughly constant relative to GDP for over ten years.
- The banking sector (assets of 25 percent of GDP) is highly profitable and dominated by four banks with majority foreign ownership (Table 10). The levels of deposit taking and lending remain far below those of comparable countries. Nevertheless, stress testing quantified how a volatile macro-economy and weak institutional environment could give rise to significant credit risk.
- The microfinance sector (assets of 1½ percent of GDP) seems not to pose a large risk to stability, although governance and profitability are weak.
- Government is the dominant owner of nonbank financial institutions (NBFIs) (assets of 6½ percent of GDP), controlling the two main insurance companies, the postal service, the Savings Fund (*Caisse d'Epargne de Madagascar*, CEM), and to a large extent the National Insurance and Social Security Fund (CNAPS), which is the only pension fund with significant assets. These institutions are operationally weak, and their assets are probably over-valued.

28. **The FSAP found that prudential regulation and supervision is hampered by regulatory gaps and is severely under-resourced** (MEFP ¶48 and ¶50) (Box 2). On-site inspections have been very limited, especially of the larger banks. The assessment of compliance with the Basel Core Principles found widespread challenges, including a lack of mechanisms for early and effective intervention and many NBFIs not subject to prudential supervision.

29. **Financial inclusion is very low, in part due to institutional weaknesses** (MEFP ¶49). Intermediation is discouraged by poor information on credit risks, deficiencies in accounting and audit practices in nonfinancial enterprises, and impediments to the registration and use of assets as securities. Rapid progress in payment infrastructure and credit reporting seems feasible (Box 2).

Box 2. Summary FSAP Action Plan

Key recommendations	**Actions**
Perform more frequent and penetrating supervision of banks and nonbanks to reduce the risks to stability. Regulators need to be better resourced and more independent and certain regulatory gaps need to be filled (for example, with regard to related-party lending).	Financial supervision to receive more resources and stronger powers, with a risk-based approach (including more on-site inspections). New regulatory framework with prudential requirements at international norms, planned by end-2017. Approval of new law on supervision expected by end-2018.
Step up anti-money laundering and combating the financing of terrorism efforts, especially more vigorous follow-up to suspicious transaction reports, to support confidence in the financial system and complement other efforts to reduce corruption.	Building on a national risk assessment following World Bank TA, an action plan to be developed by end-2016.
Establish a legal and operational framework to intervene in and eventually resolve problem institutions to help contain moral hazard, limit the government's contingent liabilities, and protect savers.	Approval of new law on resolution of banks and micro-financial institutions expected by end-2018.
Each government-owned NBFI needs to undergo a detailed operational and financial audit. These NBFIs should be covered by independent prudential oversight, and according to international best practices, many should eventually be privatized.	Independent financial audits of the CEM and the postal financial services planned by end-2017. Responsibility for insurance supervision to be fully transferred to the banking supervision authority (CSBF) by end-2019.
Promote modern payment methods—particularly forms of electronic money—to help reduce transaction costs and facilitate financial inclusion.	A law on electronic money to be submitted to the Cabinet by end-2016 and a law regulating the national payment system planned to be approved by end-2017.
Improve credit risk management and thus expand the supply of financing to viable projects, the two credit reporting systems need to be merged, and mechanisms for registering property to be used as security need to be modernized and made more cost effective.	A law regulating the credit reporting system is expected to be approved by end-2018.

CAPACITY BUILDING AND PROGRAM RISKS

30. **Capacity building and technical assistance (TA) will continue to go hand-in-hand with policy discussions and program design**. Future TA will focus on: (i) customs and tax revenue administration; (ii) PFM (medium-term budget framework, public investment management, arrears management); (iii) central bank monetary policy operations; (iv) financial sector supervision and bank resolution; and (v) strengthening statistics. The World Bank, EU, and AfDB are also providing significant TA (Informational Annex for a summary of World Bank-IMF collaboration in TA).

31. **Given Madagascar's vulnerabilities and fragility, the economic program and projections are subject to significant uncertainty and risks** (Box 3. Risk Assessment Matrix). If any of the major risks were to materialize, economic recovery would slow, priority spending on investment and social development could be crowded out, and additional domestic arrears might accumulate.

PROGRAM MODALITIES AND FINANCING ASSURANCES

32. **The new 40-month program includes quantitative indicators to ensure strengthening macroeconomic stability and structural measures to address major policy weaknesses.** Program monitoring will be based on semi-annual reviews, with performance criteria (PCs) for the end of the second and fourth quarters, as well as indicative targets for the end of the first and third quarters (the program runs for three years and four months to allow time for completion of the final review). The program foresees quantitative PCs relative to: (i) the primary balance excluding foreign financed investment; (ii) non-concessional external borrowing (ceilings); (iii) net foreign assets (floor) of the central bank; (iv) net domestic assets (ceiling) of the central bank; and (v) external payment arrears (zero ceiling). Indicative targets relate to social spending and tax revenue collection (MEFP Table 1). Additionally, reform progress will be evaluated based on structural benchmarks in the areas of: (i) promoting inclusive growth; (ii) mobilizing fiscal revenue; (iii) improving the composition and quality of fiscal spending; (iv) enhancing economic governance; and (v) improving the quality of statistics (MEFP Table 2). Staff will monitor the implementation of Madagascar's poverty reduction strategy, and the NDP (covering 2014-19) will be issued as an Economic Development Document, together with a World Bank assessment letter, at the time of the first review.

33. **Financing needs are expected to be covered by a combination of donor and Fund support** (Table 8):

- **US$2.7 billion of donor support is expected to be disbursed over 2016-19.** The authorities have actively engaged with key donors, emphasizing their reform agenda, embodied in the NDP and PIP, and a donor conference is planned for later this year.

- **Financing assurances are in place for the first year of the program (up to end-June 2017)** (Table 9). External budget support will be needed in the second half of 2017.
- **Access is proposed at a level equivalent to 180 percent of quota (SDR 220 million) for the new ECF arrangement** (Table 13).[11] The case for access at the norm is based on the large and protracted BOP needs and the strength of policy adjustments.

34. **Madagascar's capacity to repay the Fund remains strong** (Table 14). The debt sustainability analysis (DSA) indicates that Madagascar is at moderate risk of debt distress (Supplement 2). Debt sustainability indicators have improved recently (compared with October 2015 DSA) thanks to debt forgiveness (e.g. full from Algeria, partial from China) and a stronger than expected exchange rate. Indicators are projected to deteriorate very modestly over the program period as a result of a scaling up of foreign financed investment. The main risks to debt sustainability relate to weak revenue generation, possible exchange rate shocks, and contingent liabilities associated with state-owned enterprises.

35. **Progress has been made in strengthening the safeguards framework at the BCM since the 2015 assessment**. Governance arrangements and central bank autonomy are expected to be strengthened through the new Central Bank Act. The central bank has also reinforced its audit oversight and control environment, and is committed to undertake the necessary steps to implement International Financial Reporting Standards (IFRS) (MEFP ¶46). However, the timeliness of audit completion and publication of audited financial statements needs further improvement. An update safeguards assessment will be conducted before the first review.

STAFF APPRAISAL

36. **The Malagasy authorities' economic program contains forceful measures needed for a successful recovery.** While political and institutional constraints limit the scale and pace of some measures, action is necessary to reverse harmful trends, as the authorities recognize. Low revenue collection, substantial low-priority spending, and weak economic governance all jeopardize the success of a medium-term development program. Staff notes the significance of the macroeconomic and structural progress achieved during the SMP and welcomes the authorities' continuing commitment to address the key impediments to achieving inclusive growth and poverty reduction. Staff stresses that the planned reforms will only be effective if they are implemented in a rigorous and sustained manner.

37. **More rapid growth and sustained poverty reduction requires more fiscal space for investment in infrastructure and broader access to education and health care.** The government's target of gradually increasing tax revenue by ½ percent of GDP a year is essential to achieving the authorities' development objectives and will require additional policy measures. Containing and then reducing lower priority spending is likewise necessary and will require ongoing vigilance. Stricter controls on procurement will support this effort, as well as governance. The plans

[11] SDR 220 million corresponds to 90 percent of Madagascar's new, increased quota that is expected to become effective shortly.

to transform Air Madagascar and JIRAMA into efficient, commercially viable businesses with no need for government subsidies and transfers will enable a shift to higher priority spending, reduce fiscal risks, and boost growth prospects; meeting this objective will require sustained, determined action. To avoid slippages, the government must stand ready to take additional steps promptly if needed.

38. **In light of large infrastructure needs, staff believe that substantial external borrowing is appropriate, but the financing and investment strategy must preserve debt sustainability.** The authorities are right to focus on building investment and debt management capacity, which is as important to the success of scaling up as increased resources. Risks to debt sustainability would increase in the event of large borrowing for low-return projects and underperforming tax revenues. The authorities also need to rely as much as possible on external grants and concessional financing. While PPPs can mobilize expertise and resources, vigilance is necessary to manage the significant fiscal risks they can pose, particularly due to both explicit and implicit guarantees.

39. **Reforms to strengthen governance and fight corruption are central to the program's success.** The PFM system is critical both to support the increase in priority public spending and improve governance. Measures to strengthen procurement practices will reduce costs and increase efficiency of public spending. Increased transparency in budget preparation and execution will be critical to build public support for further reforms in general and higher tax collection in particular. Tax compliance is more likely to improve when taxpayers see clear benefits in the form of better public infrastructure and services. Corruption threatens to weaken the results from the authorities' reforms in practically every sector, and continuing to intensify the fight against corruption is a key element for the program's success.

40. **Madagascar faces the challenge of developing the financial system while preserving financial stability.** While the financial sector has successfully managed the economic and political turmoil of the last decade, financial deepening and inclusion is lagging behind comparable countries. Creating a solid foundation for further financial deepening will require more frequent and penetrating supervision of banks and nonbanks, stepping up efforts against money laundering and the financing of terrorism, establishing a legal and operational framework for institutions in difficulty, promoting modern payment methods, and modernizing mechanisms for registering collateral. In addition, each government-owned non-bank financial institution should develop a viable strategy following audits.

41. **The central bank should remain vigilant on inflation and continue to improve the operational framework for monetary policy implementation.** The government has already taken important steps by strengthening central bank independence and the foundation for a more independent decision-making. Establishing a well-functioning money market, with frequent interbank transactions, is essential both for the long-term goal of adopting an inflation targeting framework and the near-term goal of facilitating government financing through the domestic market.

42. **Based on the protracted balance of payments need and policy commitments, staff supports the authorities' request for an arrangement under the ECF covering 40 months, with access equivalent to 180 percent of quota.**

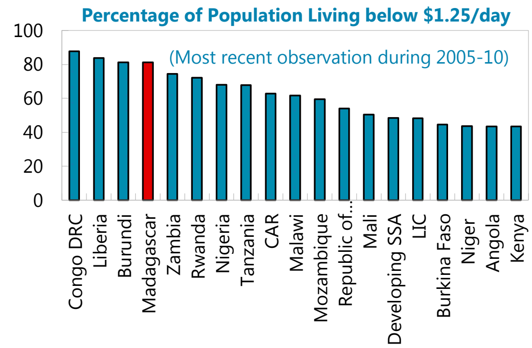
Box 3. Madagascar: Risk Assessment Matrix [1]

Source of Risks	Relative Likelihood	Potential Impact	Policy response
Domestic Risks			
Larger than anticipated transfers to SOEs (JIRAMA and Air Madagascar).	High	High: Government transfers to SOEs lead to a reduction of other priority expenditure. Potential economic disruption if SOE's operations are affected.	Look within the budget for ways to protect key public services. Encourage development partners to take a larger direct responsibility for spending in social priority areas. Strengthen governance structures, including government oversight of key SOEs. Consider private management of specific units or operations.
Political uncertainty and tensions.	High	High: Reduced inflows from FDI, donor support, and tourism. Less fiscal space impedes the ability to deliver public services.	Maintain exchange rate flexibility and reallocate fiscal spending from investment to support of the most vulnerable. Encourage authorities and development partners to protect spending in social priority areas.
Failure to begin tackling corruption	High	High: Reduced inflow of FDI and donor support.	Step-up anti-corruption and anti-money laundering/combating financing of terrorism (AML/CFT) efforts. See policy response to reduced inflows above.
Cyclones, floods, and droughts.	Medium	Medium: Loss of real and human capital and lower growth.	Reallocate fiscal spending to finance recovery work and make appeal to donors for post-disaster financing.
External Risks			
Structurally weak growth in key advanced and emerging economies	High (Euro area and Japan)/ Medium (emerging markets)	High: Loss of financing reduces fiscal space, impeding the ability to deliver public services. Slower growth in tourism. Weaker commodity prices and balance of payments.	Maintain exchange rate flexibility as a shock absorber. Energize donor support through a campaign emphasizing the merits and needs of the medium-term development plan; protect key public services within budget. Diversify sources of tourism. Promote "open skies" policy to improve travel connections.

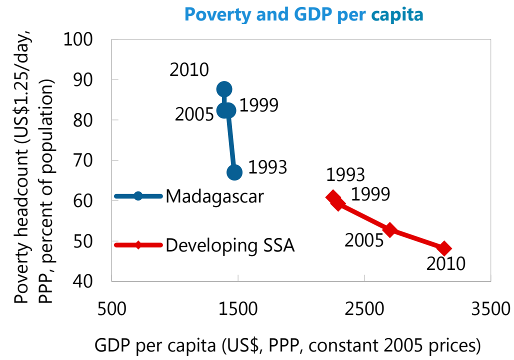
[1] The Risk Assessment Matrix (RAM) shows events that could materially alter the baseline path (the scenario most likely to materialize in the view of the IMF staff. The relative likelihood of risks listed is the staff's subjective assessment of the risks surrounding the baseline ("low" is meant to indicate a probability below 10 percent, "medium" a probability between 10 and 30 percent, and "high" a probability between 30 and 50 percent). The RAM reflects staff views on the source of risks and overall level of concern as of the time of discussions with the authorities. Non-mutually exclusive risks may interact and materialize jointly.

Figure 1. Madagascar: Poverty and Social Indicators

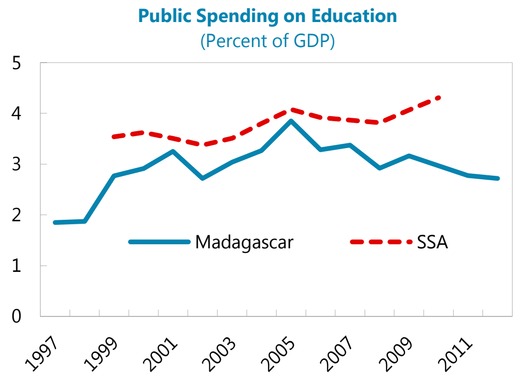
Poverty is widespread in Madagascar. About four-fifths of the population live on US$1.25/day or less and ...



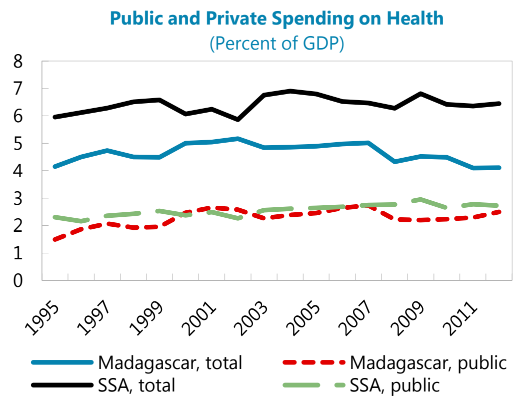
... poverty has increased, while it is decreasing in most of Sub-Saharan Africa (SSA)



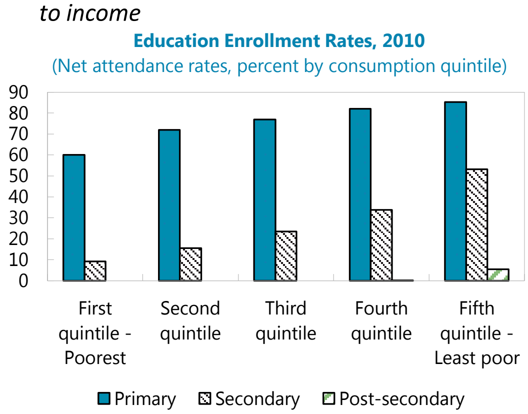
Public spending on education has declined from levels already below the SSA average and...



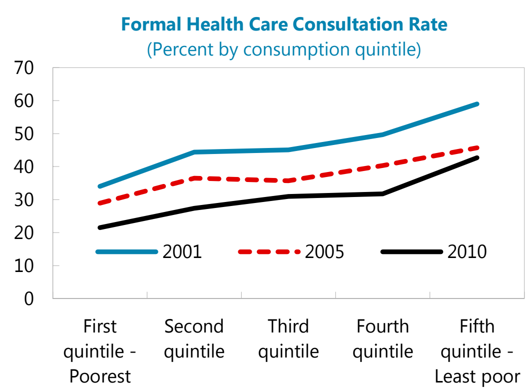
...private spending on health is less than in SSA



Access to education is limited and related to income



A declining proportion of the population can afford to visit a health center when ill

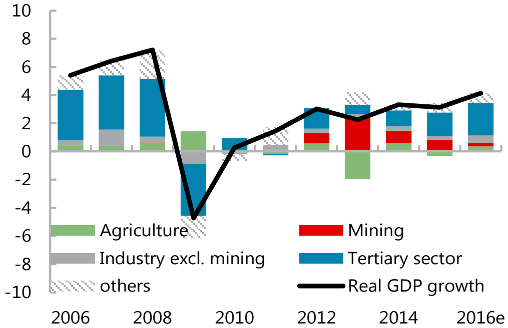


Sources: World Bank's *World Development Indicators*; Face of Poverty in Madagascar, World Bank Report No. 78131-MG, March, 2014; Malagasy authorities; and IMF staff estimates and projections.

Figure 2. Madagascar: Real Sector Developments, 2006-16

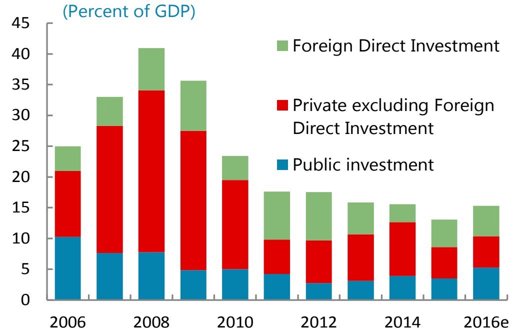
Mining (first construction and then production) was the main engine of growth during the 2009-13 crisis.

Real GDP growth and Sector Contribution to Growth
(Percent)



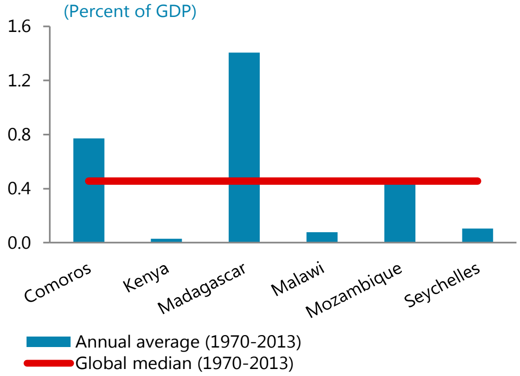
Private and foreign direct investment has fallen significantly due to weak confidence.

Investment (Public - Private)
(Percent of GDP)



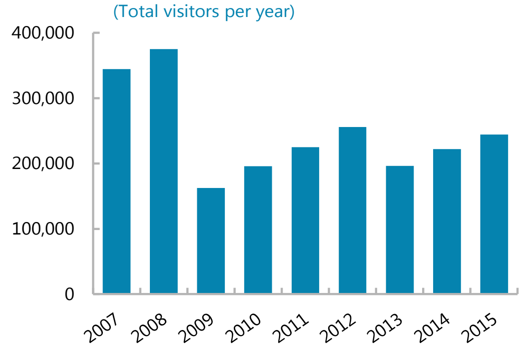
Madagascar is prone to costly natural disasters.

Damage by Natural Disasters
(Percent of GDP)



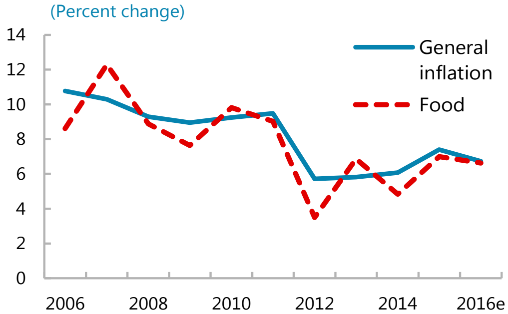
The post-crisis recovery in tourism has stalled, partially due to problems at Air Madagascar.

Tourism
(Total visitors per year)



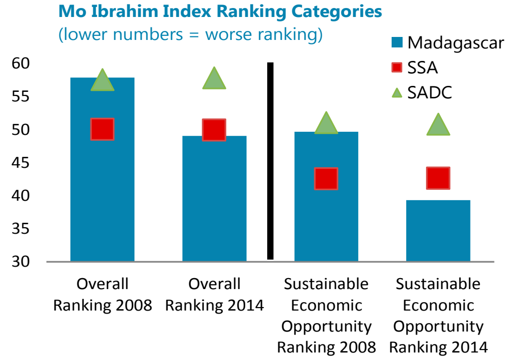
Inflation has remained contained despite macroeconomic challenges in recent years

CPI average
(Percent change)



Between 2008-14, Madagascar's rating deteriorated more than any other non-conflict country in the Mo Ibrahim Governance Index.

Mo Ibrahim Index Ranking Categories
(lower numbers = worse ranking)

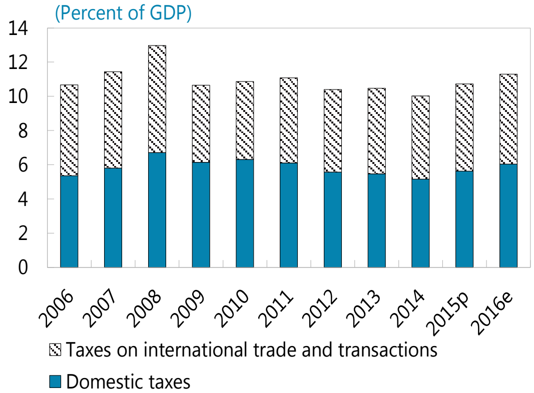


Sources: Malagasy authorities; and IMF staff estimates and projections

Figure 3. Madagascar: Fiscal Developments, 2006-16

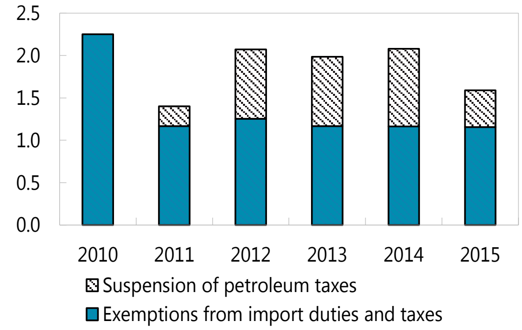
The mobilization of fiscal revenue remains challenging…

Gross Tax collections
(Percent of GDP)



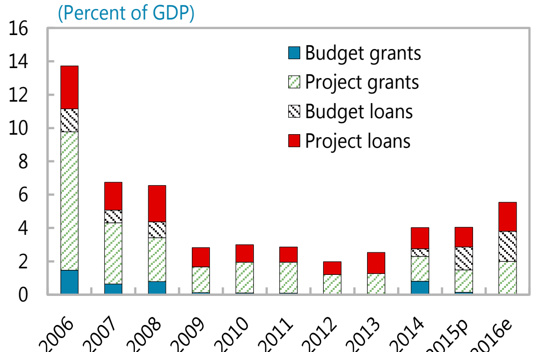
…partly as a result of tax exemptions and suspensions.

Estimated Costs of Exemptions and Suspension of Petroleum Taxes
(Percent of GDP)



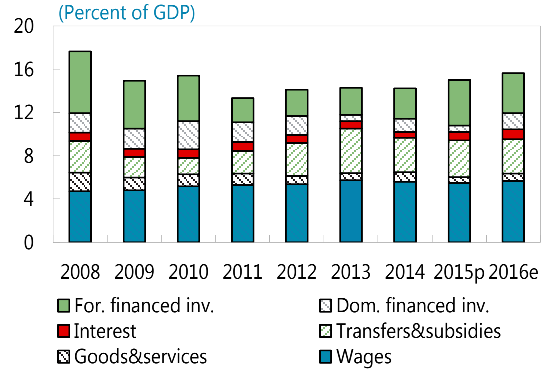
Donor flows also remain well below their pre-political crisis levels.

Donor Flows
(Percent of GDP)



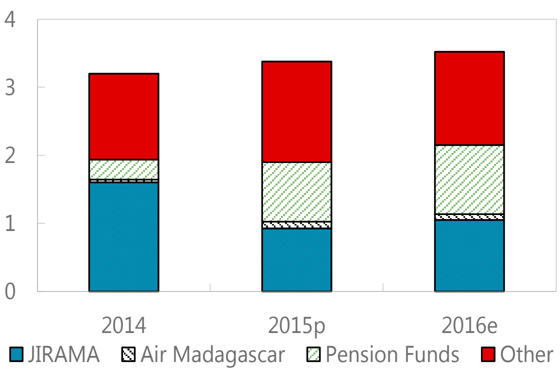
Subsidies and transfers continue to absorb a large but slowly shrinking share of spending…

Budgetary Spending
(Percent of GDP)



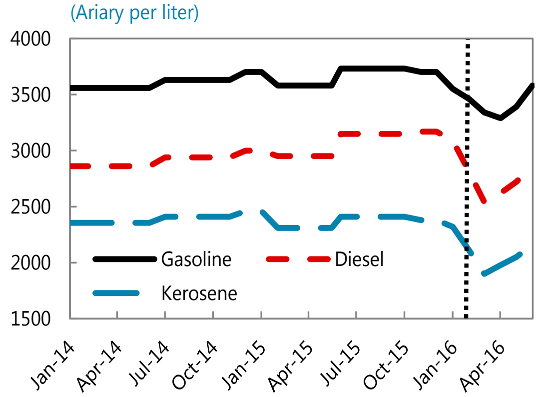
…mainly driven by transfers to SOEs and occupational pensions

Share of total budgetary transfers and subsidies
(Percent of GDP)



The automatic petroleum pricing formula, launched in February 2016, eliminated the need to subsidize petroleum consumption.

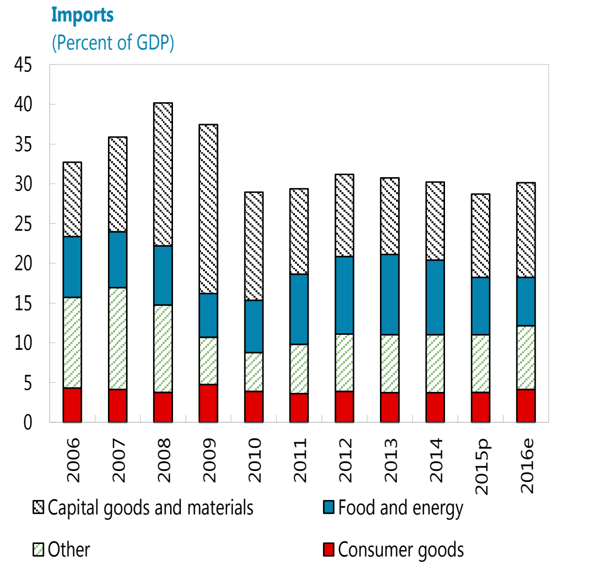
Fuel Prices
(Ariary per liter)



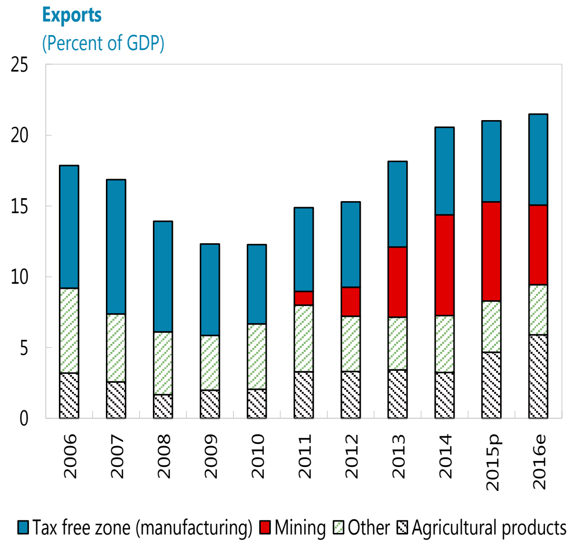
Sources: Malagasy authorities; and IMF staff estimates and projections.

Figure 4. Madagascar: External Sector Developments, 2006-16

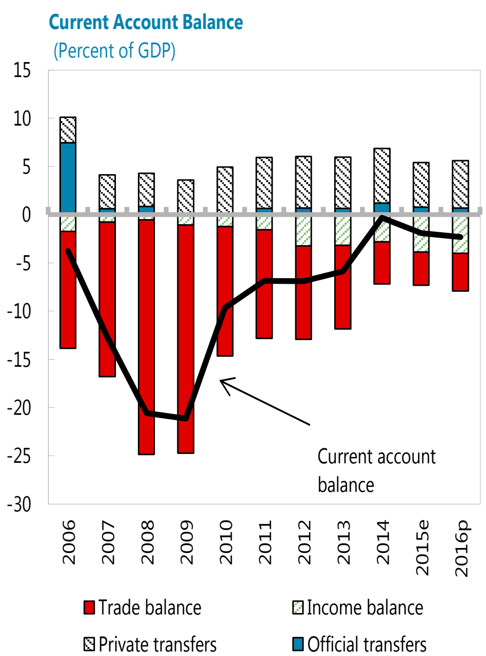
Imports are dominated by food, energy, and capital goods used in the large mining projects...



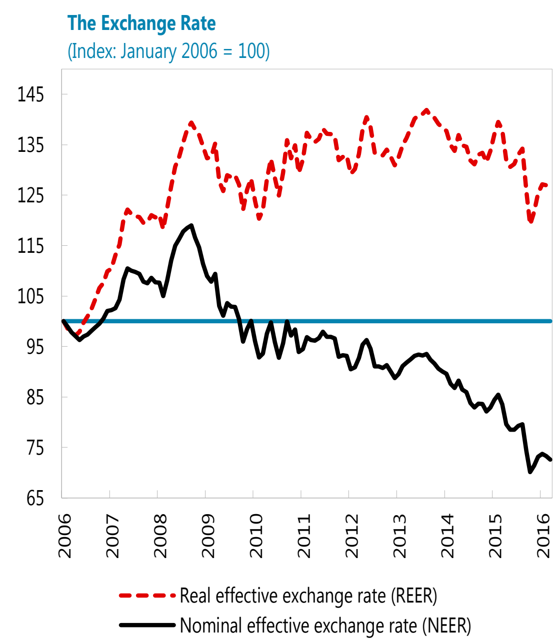
... and these projects have now started to generate export earnings.



The large mining projects explain most of the movements in the trade and current account balances.



While the NEER is depreciating, higher inflation than in its trading partners has kept the REER relatively stable.

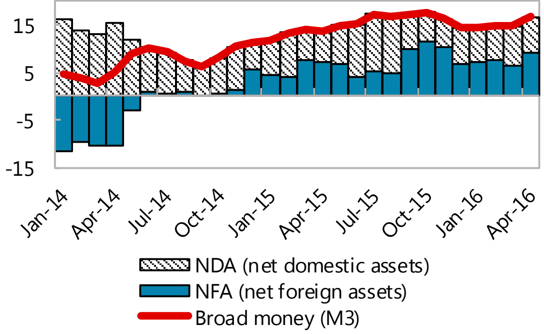


Sources: Malagasy authorities; and IMF staff estimates and projections.

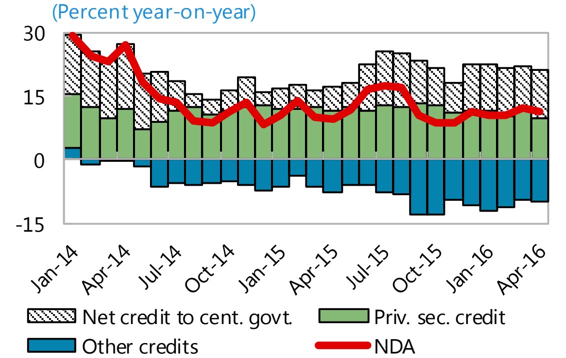
Figure 5. Madagascar: Monetary Developments, 2014-16

Broad money growth remains brisk and is driven by a combination of increasing net foreign assets, private sector credit growth (about 14 percent year-on-year in April 2016), and net lending to the central government.

Money Growth and Contribution from NFA and NDA
(Percent year-on-year)

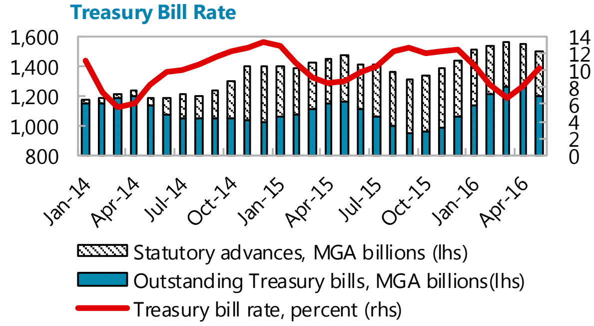


NDA Growth and Contributions from Different Credits
(Percent year-on-year)



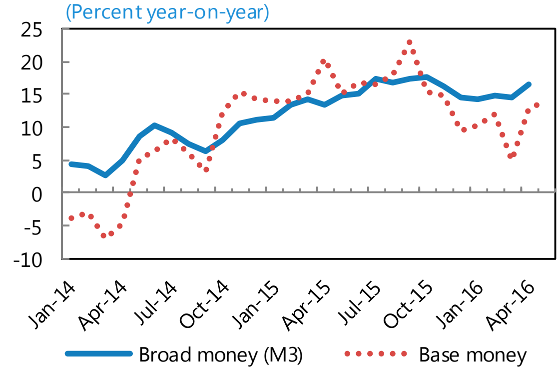
Lack of demand for Treasury bills constrained domestic financing in 2014-15 and in response, the central bank extended statutory advances.

Outstanding Stock of Treasury Bills and One-Year Treasury Bill Rate



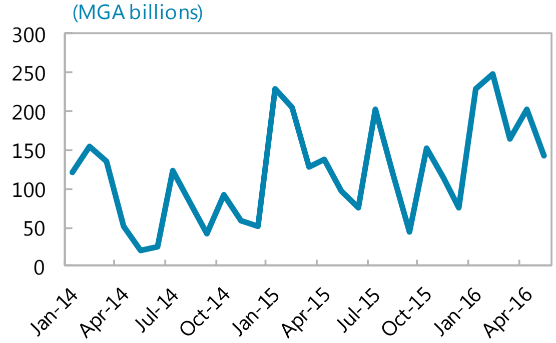
Statutory advances to the government have been curtailed and base money growth has slowed.

Broad Money and Base Money
(Percent year-on-year)



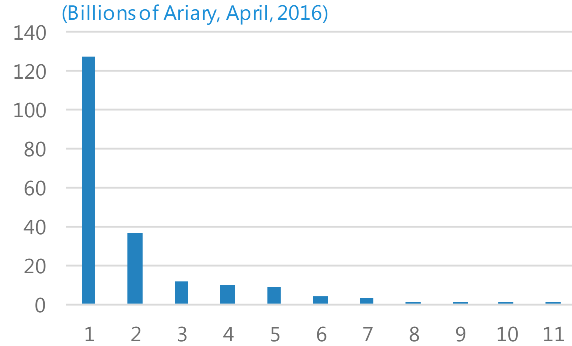
In aggregate, the banking system appears to have significant excess liquidity but...

Excess Bank Reserves
(MGA billions)



...two banks hold most of the liquidity.

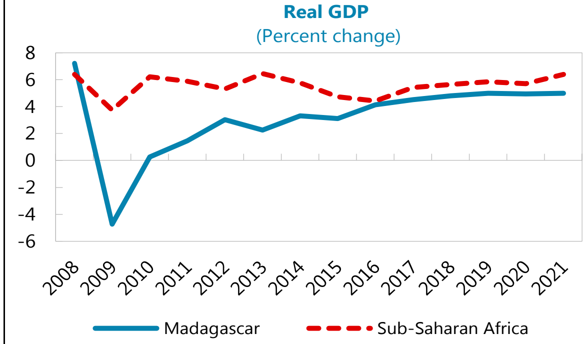
Distribution of Excess Reserves among Banks
(Billions of Ariary, April, 2016)



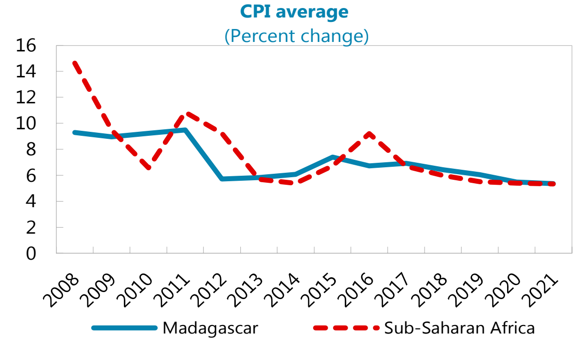
Sources: Malagasy authorities; and IMF staff estimates and projections.

Figure 6. Madagascar: Medium-Term Macroeconomic Prospects, 2008-21

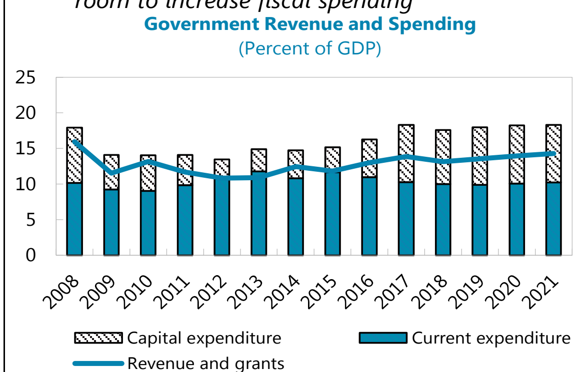
Growth increasing gradually over the medium term as a result of investment and reforms



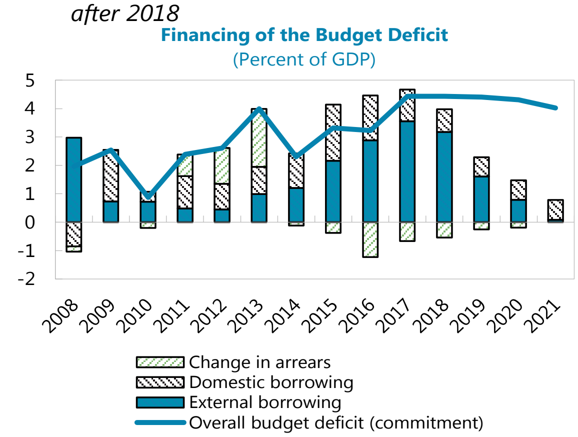
Inflation is unchanged in 2016-17 and starts to fall gradually in 2018



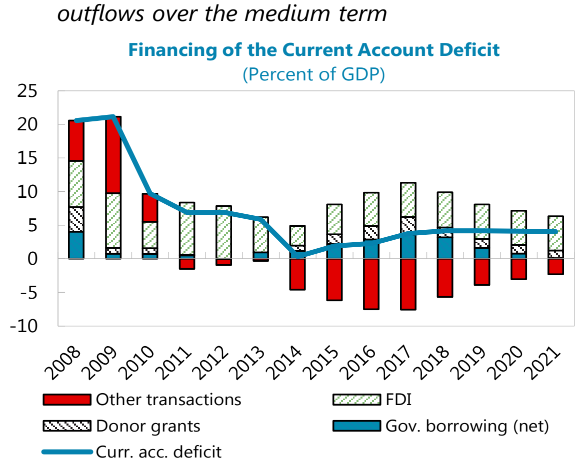
Improved revenue generation will create room to increase fiscal spending



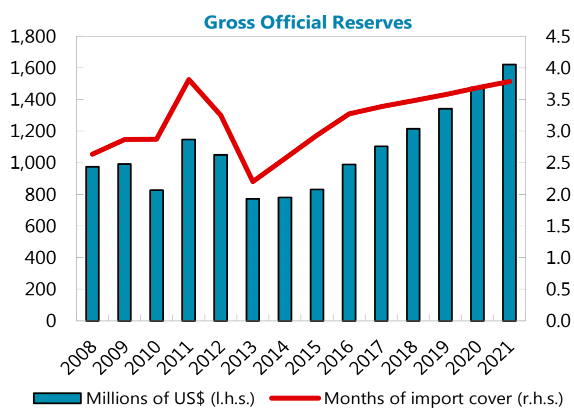
Significant financing remains to be identified after 2018



Profit repatriation (shown in other transactions) is creating significant balance of payment outflows over the medium term



Gross official reserves are projected to grow over the medium term

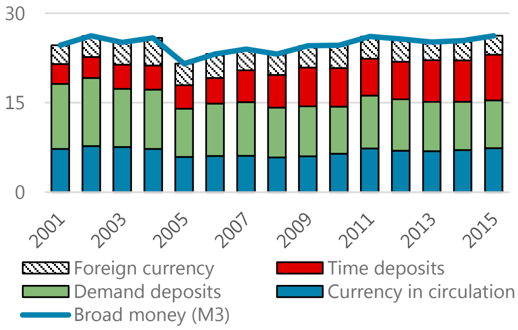


Sources: Malagasy authorities; and IMF staff estimates and projections.

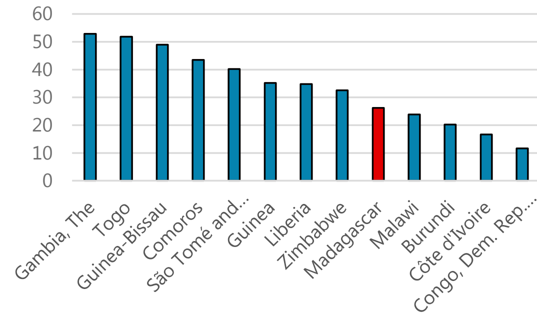
Figure 7. Madagascar: Financial Sector Overview

Financial deepening is lagging developments in many other fragile African countries

Broad Money (M3) and its Composition
(Percent of GDP)

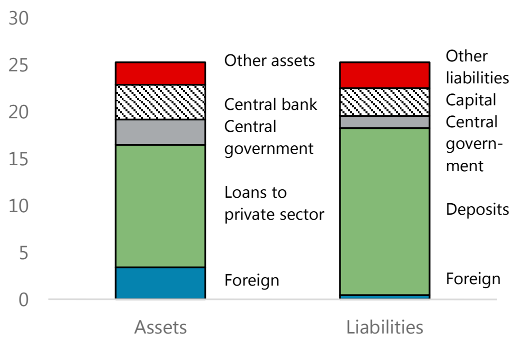


Broad Money (M3) at end-December 2015
(Percent of GDP)

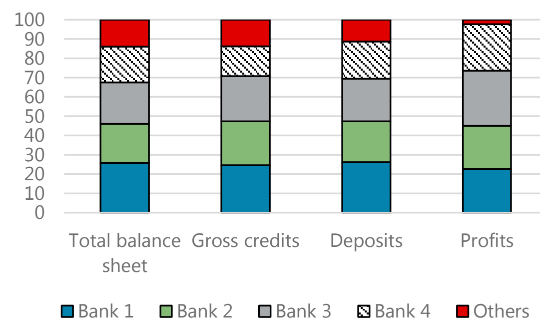


Madagascar's banking system is small and dominated by four banks

Commercial Bank Balance Sheets, End-December 2015
(Percent of GDP)

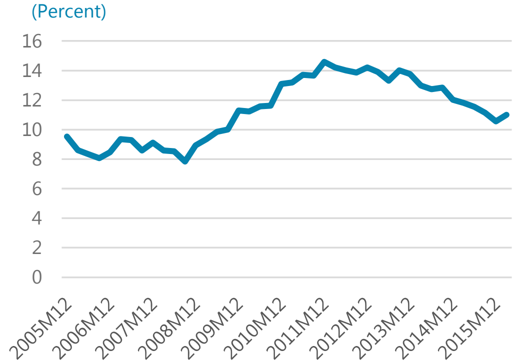


Madagascar's Banking System
(Percent)

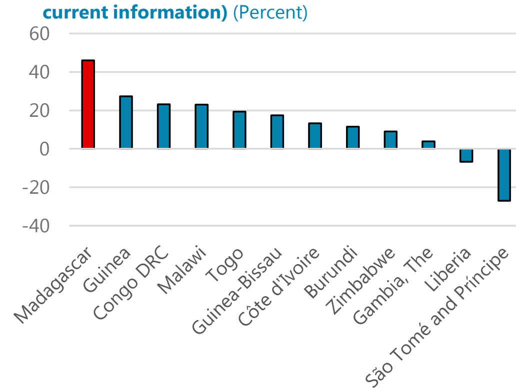


Non-performing loans are trending down and Madagascar's banks are profitable on average

Non-Performing Loans to Total Gross Loans
(Percent)



Return on Equity (End-December 2015 or most current information) (Percent)



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

Table 1. Madagascar: Selected Economic and Financial Indicators, 2013–21

	2013	2014	2015	2016	2017	2018	2019	2020	2021
	Actuals		Prel. Est.	Projections					
	(Percent change; unless otherwise indicated)								
National account and prices									
GDP at constant prices	2.3	3.3	3.1	4.1	4.5	4.8	5.0	5.0	5.0
GDP deflator	5.1	6.6	7.6	6.7	6.9	6.4	6.1	5.5	5.4
Consumer prices (end of period)	6.3	6.0	7.6	7.1	7.1	6.3	5.9	5.4	5.4
Money and credit									
Reserve money	-6.1	14.1	9.6	16.0	12.7	11.9	11.9	11.0	11.0
Broad money (M3)	5.3	11.1	14.6	17.9	12.7	12.5	12.3	11.7	11.6
	(Growth in percent of beginning of period money stock (M3))								
Net foreign assets	-13.5	5.4	6.9	7.5	3.3	2.6	2.5	2.7	2.9
Net domestic assets	18.7	5.7	7.7	10.4	9.4	9.9	9.8	9.0	8.6
of which: Credit to the private sector	6.9	8.6	8.2	4.6	6.6	7.8	7.7	6.4	6.2
	(Percent of GDP)								
Public finance									
Total revenue (excluding grants)	9.6	10.1	10.4	11.0	11.2	11.7	12.2	12.7	13.2
of which: Tax revenue [1]	9.3	9.9	10.1	10.8	11.0	11.5	12.0	12.5	12.9
Grants	1.3	2.3	1.5	2.0	2.7	1.5	1.3	1.2	1.1
Total expenditures	14.9	14.7	15.1	16.2	18.3	17.6	18.0	18.2	18.3
Current expenditure	11.8	10.8	11.7	11.0	10.3	10.0	9.9	10.1	10.2
Wages and salaries	5.7	5.6	5.5	5.7	5.6	5.3	5.1	5.0	5.0
Interest payments	0.7	0.6	0.8	0.9	0.9	1.0	1.0	1.1	1.2
Other	4.8	4.1	3.9	3.8	3.6	3.6	3.6	3.7	3.9
Goods and Services	0.6	0.9	0.5	0.7	0.8	1.1	1.2	1.3	1.3
Transfers and Subsidies	4.1	3.2	3.4	3.2	2.7	2.5	2.4	2.5	2.6
Treasury operations (net)	0.6	0.6	1.4	0.5	0.2	0.2	0.2	0.2	0.2
Capital expenditure	3.1	3.9	3.5	5.3	8.0	7.6	8.1	8.2	8.1
Domestic financed	0.6	1.2	1.0	1.5	1.9	2.4	3.0	3.3	3.4
Foreign financed	2.5	2.8	2.5	3.7	6.1	5.2	5.1	4.9	4.7
Overall balance (commitment basis)	-4.0	-2.3	-3.3	-3.2	-4.4	-4.4	-4.4	-4.3	-4.0
Float (variation of accounts payable, + = increase)	-0.2	0.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Variation of domestic arrears (+ = increase)	2.2	-0.7	-0.5	-1.2	-0.7	-0.5	-0.3	-0.2	0.0
Overall balance (cash basis)	-2.0	-2.4	-3.7	-4.5	-5.1	-5.0	-4.7	-4.5	-4.0
Primary balance excl. foreign-financed investment[2]	…	…	-1.3	-0.6	0.1	0.2	0.3	0.4	0.7
Total financing	2.0	2.4	3.7	4.5	4.7	4.0	2.3	1.5	0.8
Foreign borrowing (net)	1.0	1.2	2.2	2.9	3.6	3.2	1.6	0.8	0.1
Domestic financing	1.0	1.2	2.0	1.6	1.1	0.8	0.7	0.7	0.7
Excess financing after prospective financing (+)	0.0	0.0	0.0	0.0	-0.4	-0.5	-0.8	-1.0	-0.6
Savings and investment									
Investment	15.9	15.6	13.1	15.3	18.2	18.2	18.6	18.9	19.0
Gross national savings	10.0	15.3	11.1	13.0	14.5	14.0	14.4	14.8	14.9
External sector									
Exports of goods, f.o.b.	18.1	20.6	21.0	21.5	20.8	20.7	20.9	21.0	20.9
Imports of goods, c.i.f.	30.7	30.2	28.7	30.2	31.2	31.5	31.6	31.7	31.6
Current account balance (exc. grants)	-6.5	-1.5	-3.4	-4.3	-6.4	-5.6	-5.5	-5.3	-5.2
Current account balance (inc. grants)	-5.9	-0.3	-1.9	-2.3	-3.7	-4.2	-4.2	-4.1	-4.0
Public debt	33.9	35.8	41.0	41.7	42.8	43.6	44.5	45.2	45.7
External	22.8	24.4	28.4	30.4	32.6	34.5	35.8	36.9	37.4
Domestic	11.1	11.4	12.6	11.3	10.2	9.1	8.6	8.3	8.3
	(Units as indicated)								
Gross official reserves (millions of SDRs)	502	535	600	701	782	859	945	1,039	1,141
Months of imports of goods and services	2.2	2.5	2.9	3.3	3.4	3.5	3.6	3.7	3.8
Real effective exchange rate (period average, percent change)	3.6	-3.4	-0.5	…	…	…	…	…	…
Terms of trade (percent change, deterioration -)[3]	0.0	0.8	6.6	6.6	-4.6	-2.1	-1.9	-0.5	-1.8
GDP per capita (U.S. dollars)	462	453	402	391	405	419	437	456	476
Nominal GDP at market prices (billions of ariary)	23,397	25,775	28,585	31,773	35,507	39,609	44,103	48,824	54,011

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

[1] See tables 3 and 4 for details.

[2] Commitment basis.

[3] See table 5 for details.

Table 2. Madagascar: National Accounts, 2013-21

	2013	2014	2015	2016	2017	2018	2019	2020	2021
	Actuals		Prel. Est.	Projections					
				(Percent change)					
Real supply side growth									
Primary sector	-6.1	3.3	-0.7	2.2	2.8	3.2	3.6	3.7	3.7
Agriculture	-12.8	4.5	-2.4	2.8	3.5	4.3	5.0	5.1	5.1
Cattle and fishing	1.4	2.8	0.8	1.9	2.5	2.5	2.5	2.6	2.6
Forestry	-1.9	-1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Secondary sector	22.2	8.5	7.3	4.9	5.0	4.9	5.0	5.0	5.1
Food and drink	3.1	3.4	3.8	3.8	3.8	3.8	3.8	3.7	3.8
Export processing zone	5.9	2.1	-0.3	9.4	10.0	7.5	7.5	7.5	7.5
Energy	5.6	4.2	4.1	5.5	5.5	5.4	5.2	5.2	5.2
Extractive industry	219.2	25.9	19.5	5.0	5.0	5.2	5.2	5.2	5.2
Other	-2.0	2.1	1.2	4.5	4.8	5.0	5.1	5.3	5.4
Tertiary sector	0.8	2.1	3.3	4.8	5.3	5.7	5.8	5.6	5.7
Transportation	3.6	2.2	2.0	4.9	6.4	6.3	6.3	6.1	6.0
Services	2.2	1.2	5.3	5.1	5.1	5.1	5.1	5.1	5.1
Trade	-3.4	2.9	1.0	3.1	3.0	3.0	3.0	3.0	3.0
Public administration	1.0	1.4	1.0	1.0	1.1	1.1	1.1	1.1	1.1
Public works/construction	-2.2	3.1	9.4	10.0	10.0	13.6	14.2	12.0	12.0
Indirect taxes	8.4	2.1	5.7	4.8	4.8	4.8	4.8	5.0	5.0
Real GDP at market prices	2.3	3.3	3.1	4.1	4.5	4.8	5.0	5.0	5.0
Nominal demand side composition				(Percent of GDP)					
Resource balance	-8.7	-4.4	-3.5	-3.9	-5.5	-5.9	-5.9	-5.8	-5.9
Imports of goods and nonfactor services	38.7	37.1	35.5	36.8	37.7	37.9	37.9	38.0	37.8
Exports of goods and nonfactor services	30.0	32.8	32.1	32.9	32.2	32.0	32.0	32.1	31.8
Current account balance (including grants) = (S-I)	-5.9	-0.3	-1.9	-2.3	-3.7	-4.2	-4.2	-4.1	-4.0
Consumption	92.8	88.8	90.4	88.5	87.3	87.8	87.3	87.0	87.0
Government	11.1	10.2	10.8	10.0	9.3	9.0	8.9	8.9	9.1
Nongovernment	81.7	78.6	79.6	78.5	78.0	78.7	78.4	78.0	77.9
Investment (I)	15.9	15.6	13.1	15.3	18.2	18.2	18.6	18.9	19.0
Government	2.5	3.9	3.5	5.3	8.0	7.6	8.1	8.2	8.1
Nongovernment	13.4	11.6	9.6	10.0	10.2	10.6	10.5	10.7	10.9
Of which: foreign direct investment	5.2	2.9	4.5	4.9	5.1	5.2	5.1	5.1	5.1
National savings (S)	10.0	15.3	11.1	13.0	14.5	14.0	14.4	14.8	14.9
Government	-0.9	1.6	0.2	2.1	3.6	3.1	3.7	3.9	4.1
Nongovernment	10.9	13.6	11.0	11.0	10.9	10.9	10.7	10.9	10.9
Memoranda items:									
Nominal GDP (at market prices)	23,397	25,775	28,585	31,773	35,507	39,609	44,103	48,824	54,011
Net factor income	-3.2	-2.8	-3.9	-4.0	-4.0	-4.0	-4.1	-4.1	-4.0
Transfers	6.0	6.9	5.4	5.6	5.8	5.8	5.8	5.8	5.9
Nominal GNP	23,400	25,779	28,586	31,775	35,509	39,611	44,105	48,826	54,013

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

Table 3. Madagascar: Fiscal Operations of the Central Government, 2013-21

(Billions of Ariary)

	2013	2014	2015	2016[1]				2017			2018	2019	2020	2021
	Dec	Dec	Dec	Mar	June	Sep	Dec	Mar	June	Dec	Dec	Dec	Dec	Dec
		Actuals	Prel. Est.	Prel. Est.		Projections			Projections				Projections	
Total revenue and grants	2,550	3,204	3,381	844	1,859	2,889	4,135	907	1,985	4,918	5,206	5,982	6,798	7,720
Total revenue	2,254	2,611	2,959	756	1,624	2,437	3,499	820	1,837	3,974	4,623	5,388	6,194	7,108
Tax revenue [1]	2,182	2,547	2,878	746	1,592	2,388	3,431	809	1,801	3,898	4,538	5,293	6,088	6,992
Taxes on income, profits, and capital gains	455	694	707	185	391	558	806	191	439	937	1,108	1,370	1,623	1,882
Taxes on international trade and transactions	1,172	1,252	1,458	336	724	1,147	1,669	384	826	1,898	2,158	2,384	2,613	2,903
Domestic taxes on goods and services	556	601	713	226	477	683	956	234	536	1,063	1,271	1,539	1,852	2,207
Non-tax revenue	71	64	81	9	32	49	68	11	36	77	85	95	105	116
Grants	296	593	422	89	235	452	636	87	148	944	583	594	604	612
Current grants	1	207	40	0	0	0	0	0	0	43	0	0	0	0
Capital grants	296	386	382	89	234	451	636	87	148	901	583	594	604	612
Total expenditure and lending minus repayments	3,483	3,797	4,328	859	2,148	3,548	5,162	1,031	2,467	6,494	6,962	7,925	8,902	9,889
Current expenditure	2,752	2,781	3,331	681	1,581	2,417	3,481	669	1,633	3,647	3,965	4,360	4,909	5,517
Wages and salaries	1,342	1,445	1,566	386	923	1,326	1,809	421	1,006	1,972	2,099	2,257	2,459	2,705
Interest payments	159	142	230	52	133	183	290	62	145	334	390	449	541	627
Foreign	39	45	57	12	41	49	76	20	60	125	176	242	316	389
Domestic	120	97	173	40	92	134	214	42	84	209	214	207	226	238
Other	1,117	1,046	1,122	151	455	819	1,217	157	472	1,264	1,414	1,584	1,830	2,093
Goods and services	150	222	157	28	91	139	210	40	130	301	429	511	627	715
Transfers and subsidies	968	824	966	123	364	680	1,007	116	342	964	985	1,073	1,203	1,377
of which: SOEs	...	...	293	...	...	...	300	...	...	250	200	150	100	50
Treasury operations (net) [1]	135	148	412	93	71	89	166	30	10	76	61	69	79	92
Capital expenditure	731	1,016	997	178	567	1,131	1,680	362	835	2,847	2,998	3,565	3,993	4,371
Domestic financed	138	302	275	24	146	330	492	33	200	675	951	1,323	1,611	1,836
Foreign financed	593	714	722	154	421	801	1,189	329	634	2,173	2,047	2,242	2,382	2,535
Identified financing	...	...	...	...	...	...	1,189	...	...	2,173	1,870	1,561	1,387	1,138
Unidentified financing	...	...	...	...	...	...	0	...	...	0	177	681	995	1,397
Overall balance (commitment basis)[2]	-933	-593	-947	-15	-289	-659	-1,026	-124	-483	-1,576	-1,756	-1,943	-2,104	-2,169
Float (variation of accounts payable, + = increase)	-40	156	42	-41	81	218	0	-99	-110	0	0	0	0	0
Variation of domestic arrears (+ = increase)	516	-187	-149	-116	-310	-349	-389	-98	-120	-235	-214	-113	-94	0
Overall balance (including grants, cash basis)[2]	-457	-624	-1,053	-172	-518	-790	-1,415	-322	-713	-1,811	-1,970	-2,055	-2,198	-2,169
Primary balance excl. foreign-financed investment [3]	...	...	-377	103	30	-126	-184	180	148	30	98	154	215	382
Total financing	457	624	1,051	171	518	790	1,415	322	713	1,659	1,576	1,011	722	422
Foreign borrowing (residency principle)	234	310	618	42	136	431	915	193	453	1,261	1,258	710	389	48
External borrowing, Gross	297	443	733	66	243	586	1,142	242	571	1,511	1,539	1,060	783	526
Budget support loans	0	115	394	0	57	237	589	0	85	239	252	93	0	0
Project loans	297	328	340	66	187	349	553	242	486	1,271	1,288	967	783	526
Amortization on a due basis (-)	-63	-133	-115	-23	-108	-155	-227	-49	-118	-250	-281	-350	-394	-478
Domestic borrowing (residency principle)	223	314	565	182	432	408	500	129	261	399	318	301	333	374
Monetary sector	428	222	470	156	223	244	375	34	138	249	198	221	293	324
Non-monetary sector	63	17	98	26	210	165	125	95	123	150	120	80	40	50
Treasury correspondent accounts (net)	-268	181	-132	-57	-50	-50	0	0	0	0	0	0	0	0
Excess financing (+)	0	0	-3	0	0	0	0	0	0	-152	-394	-1,045	-1,476	-1,747
Prospective financing							0			0	177	681	995	1,397
Excess financing after prospective financing (+)							0			-152	-217	-363	-481	-349

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

[1] Projections for domestic taxes and other treasury operations net in 2016 include an amount of MGA 90bn (0.3 percent of GDP) corresponding to tax arrears of Air Madagascar used for its recapitalization.

[2] Data for overall balance in 2015 includes an amount of MGA 340bn (1.2 percent of GDP) corresponding to recapitalization and interest rescheduling operations with the central bank.

[3] Commitment basis.

Table 4. Madagascar: Fiscal Operations of the Central Government, 2013-21

(Percent of GDP)

	2013	2014	2015	2016[1]	2017	2018	2019	2020	2021
	Actuals		Prel. Est.	Projections					
Total revenue and grants	10.9	12.4	11.8	13.0	13.9	13.1	13.6	13.9	14.3
Total revenue	9.6	10.1	10.4	11.0	11.2	11.7	12.2	12.7	13.2
Tax revenue [1]	9.3	9.9	10.1	10.8	11.0	11.5	12.0	12.5	12.9
Taxes on income, profits, and capital gains	1.9	2.7	2.5	2.5	2.6	2.8	3.1	3.3	3.5
Taxes on international trade and transactions	5.0	4.9	5.1	5.3	5.3	5.4	5.4	5.4	5.4
Domestic taxes on goods and services	2.4	2.3	2.5	3.0	3.0	3.2	3.5	3.8	4.1
Non-tax revenue	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2
Grants	1.3	2.3	1.5	2.0	2.7	1.5	1.3	1.2	1.1
Current grants	0.0	0.8	0.1	0.0	0.1	0.0	0.0	0.0	0.0
Capital grants	1.3	1.5	1.3	2.0	2.5	1.5	1.3	1.2	1.1
Total expenditure and lending minus repayments	14.9	14.7	15.1	16.2	18.3	17.6	18.0	18.2	18.3
Current expenditure	11.8	10.8	11.7	11.0	10.3	10.0	9.9	10.1	10.2
Wages and salaries	5.7	5.6	5.5	5.7	5.6	5.3	5.1	5.0	5.0
Interest payments	0.7	0.6	0.8	0.9	0.9	1.0	1.0	1.1	1.2
Foreign	0.2	0.2	0.2	0.2	0.4	0.4	0.5	0.6	0.7
Domestic	0.5	0.4	0.6	0.7	0.6	0.5	0.5	0.5	0.4
Other	4.8	4.1	3.9	3.8	3.6	3.6	3.6	3.7	3.9
Goods and services	0.6	0.9	0.5	0.7	0.8	1.1	1.2	1.3	1.3
Transfers and Subsidies	4.1	3.2	3.4	3.2	2.7	2.5	2.4	2.5	2.6
of which: SOEs	…	…	1.0	0.9	0.7	0.5	0.3	0.2	0.1
Treasury operations (net) [1]	0.6	0.6	1.4	0.5	0.2	0.2	0.2	0.2	0.2
Capital expenditure	3.1	3.9	3.5	5.3	8.0	7.6	8.1	8.2	8.1
Domestic financed	0.6	1.2	1.0	1.5	1.9	2.4	3.0	3.3	3.4
Foreign financed	2.5	2.8	2.5	3.7	6.1	5.2	5.1	4.9	4.7
Identified financing	…	…	…	3.7	6.1	4.7	3.5	2.8	2.1
Unidentified financing	…	…	…	0.0	0.0	0.4	1.5	2.0	2.6
Overall balance (commitment basis)[2]	-4.0	-2.3	-3.3	-3.2	-4.4	-4.4	-4.4	-4.3	-4.0
Float (variation of accounts payable, + = increase)	-0.2	0.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Variation of domestic arrears (+ = increase)	2.2	-0.7	-0.5	-1.2	-0.7	-0.5	-0.3	-0.2	0.0
Overall balance (including grants, cash basis)[2]	-2.0	-2.4	-3.7	-4.5	-5.1	-5.0	-4.7	-4.5	-4.0
Primary balance excl. foreign-financed investment [3]	…	…	-1.3	-0.6	0.1	0.2	0.3	0.4	0.7
Total financing	2.0	2.4	3.7	4.5	4.7	4.0	2.3	1.5	0.8
Foreign borrowing (residency principle)	1.0	1.2	2.2	2.9	3.6	3.2	1.6	0.8	0.1
External borrowing, gross	1.3	1.7	2.6	3.6	4.3	3.9	2.4	1.6	1.0
Budget support loans	0.0	0.4	1.4	1.9	0.7	0.6	0.2	0.0	0.0
Project loans	1.3	1.3	1.2	1.7	3.6	3.3	2.2	1.6	1.0
Amortization on a due basis (-)	-0.3	-0.5	-0.4	-0.7	-0.7	-0.7	-0.8	-0.8	-0.9
Domestic borrowing (residency principle)	1.0	1.2	2.0	1.6	1.1	0.8	0.7	0.7	0.7
Monetary sector	1.8	0.9	1.6	1.2	0.7	0.5	0.5	0.6	0.6
Non-monetary sector	0.3	0.1	0.3	0.4	0.4	0.3	0.2	0.1	0.1
Treasury correspondent accounts (net)	-1.1	0.7	-0.5	0.0	0.0	0.0	0.0	0.0	0.0
Excess financing (+)	0.0	0.0	0.0	0.0	-0.4	-1.0	-2.4	-3.0	-3.2
Prospective financing				0.0	0.0	0.4	1.5	2.0	2.6
Excess financing after prospective financing (+)				0.0	-0.4	-0.5	-0.8	-1.0	-0.6

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

[1] Projections for domestic taxes and other treasury operations net in 2016 include an amount of MGA 90bn (0.3 percent of GDP) corresponding to tax arrears of Air Madagascar used for its recapitalization.

[2] Data for overall balance in 2015 includes an amount of MGA 340bn (1.2 percent of GDP) corresponding to recapitalization and interest rescheduling operations with the central bank.

[3] Commitment basis.

Table 5. Madagascar: Balance of Payments, 2013-21

	2013	2014	2015	2016	2017	2018	2019	2020	2021
	Actuals		Prel. Est.	Projections					
	(Millions of SDRs)								
Current account	-408.7	-22.1	-132.9	-158.8	-273.3	-325.2	-346.5	-365.9	-385.8
Goods and services	-604.9	-308.0	-241.5	-269.6	-404.1	-461.9	-489.7	-521.4	-569.1
Trade balance of goods	-558.0	-360.0	-235.1	-287.3	-419.7	-479.8	-499.2	-530.9	-571.1
Exports, f.o.b.	1,265.1	1,444.8	1,463.1	1,493.3	1,527.7	1,612.5	1,741.7	1,873.7	1,998.6
Of which: Mining	344.9	500.0	487.6	391.5	449.5	473.1	480.5	489.5	493.6
Imports, f.o.b.	-1,823.1	-1,804.8	-1,698.2	-1,780.6	-1,947.5	-2,092.3	-2,241.0	-2,404.5	-2,569.7
Of which: Petroleum products	-371.8	-360.5	-256.9	-189.2	-228.3	-248.6	-271.2	-294.5	-317.8
Of which: Food	-227.8	-200.5	-170.4	-171.2	-179.9	-184.8	-191.0	-197.6	-205.1
Of which: Intermediate goods and capital	-571.4	-585.2	-618.1	-702.1	-762.2	-829.7	-894.9	-964.7	-1,026.4
Services (net)	-46.9	52.0	-6.5	17.7	15.7	17.9	9.6	9.5	2.1
Receipts	831.0	858.4	770.6	796.1	838.5	884.7	931.7	989.6	1,049.7
Payments	-877.9	-806.4	-777.0	-778.4	-822.8	-866.8	-922.1	-980.1	-1,047.6
Income (net)	-221.0	-197.0	-268.8	-278.2	-296.4	-315.3	-340.1	-363.1	-383.7
Receipts	11.8	9.6	11.8	15.4	16.5	17.7	19.1	20.8	21.9
Payments	-232.8	-206.5	-280.6	-293.6	-312.9	-332.9	-359.2	-383.9	-405.6
Of which: interest on public debt	-11.9	-12.3	-13.8	-16.6	-26.0	-34.7	-45.8	-57.6	-68.9
Current transfers (net)	417.2	482.8	377.4	388.9	427.2	452.0	483.3	518.6	567.0
Official transfers	44.5	84.7	53.7	46.5	58.0	52.2	55.8	59.6	64.0
Of which: Budget aid [1]	0.0	54.8	9.0	0.0	8.8	0.0	0.0	0.0	0.0
Of which: Other (net)	44.5	29.9	44.7	46.5	49.1	52.2	55.8	59.6	64.0
Private transfers	372.7	398.2	323.7	342.5	369.3	399.8	427.5	459.0	503.0
Capital and financial account	234.7	36.9	181.5	259.5	322.9	325.5	234.5	190.8	177.7
Capital account	88.1	104.1	93.1	139.2	186.6	114.8	112.4	110.3	108.4
Of which: Project grant [1]	0.0	0.0	93.1	139.2	186.6	114.8	112.4	110.3	108.4
Financial account	153.7	-55.8	86.1	120.3	136.3	210.7	122.1	80.5	69.3
Foreign direct and portfolio investment	362.8	205.7	297.6	343.5	373.7	407.9	426.3	455.5	489.3
Other investment	-209.1	-261.5	-211.5	-223.3	-237.5	-197.2	-304.3	-375.0	-420.0
Government	66.6	82.7	150.6	198.1	261.0	247.9	134.3	71.0	8.5
Drawing	88.5	118.7	178.7	247.7	312.7	303.3	200.5	142.9	93.3
Project drawings [1]	88.5	88.3	82.8	121.0	263.1	253.7	182.9	142.9	93.3
Budgetary support [1]	0.0	30.4	96.0	126.7	49.6	49.6	17.7	0.0	0.0
Amortization	-21.9	-36.0	-28.1	-49.6	-51.7	-55.4	-66.2	-71.9	-84.8
Monetary authority and private sector	-118.1	-114.0	-123.6	-118.5	-118.1	-112.4	-111.1	-109.6	-117.8
Banks	34.8	-24.9	14.0	-4.3	0.0	0.0	0.0	0.0	0.0
Other (inc. unrepatriated export revenues)	-192.5	-205.3	-252.4	-298.5	-380.4	-332.7	-327.5	-336.3	-310.7
Errors and omissions	-7.1	-11.4	2.2	0.0	0.0	0.0	0.0	0.0	0.0
Overall balance	-174.0	14.7	48.6	100.7	49.6	0.3	-112.0	-175.1	-208.1
Financing	173.7	-14.7	-48.6	-100.7	-80.9	-77.9	-85.6	-94.4	-101.6
Central bank (net; increase = –)	173.7	-14.7	-48.6	-100.7	-80.9	-77.9	-85.6	-94.4	-101.6
Use of IMF credit (net)	-6.2	17.5	18.8	20.8	54.6	56.9	59.8	-6.1	-12.2
Other assets, net (increase = –)	179.8	-33.3	-67.4	-80.0	-26.4	-21.0	-25.8	-100.5	-113.8
Debt relief and cancellation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financing gap [2]	0	0	0	0	31	78	198	269	310
	(Percent of GDP; unless otherwise indicated)								
Memorandum items:									
Grants	0.0	0.8	1.5	2.0	2.7	1.5	1.3	1.2	1.1
Loans	1.3	1.7	2.6	3.6	4.3	3.9	2.4	1.6	1.0
Direct investment	5.2	2.9	4.5	5.0	5.1	5.2	5.1	5.1	5.1
Current account									
Excluding net official transfers	-6.5	-1.5	-3.4	-4.3	-6.4	-5.6	-5.5	-5.3	-5.2
Including net official transfers	-5.9	-0.3	-1.9	-2.3	-3.7	-4.2	-4.2	-4.1	-4.0
Debt service (percent of exports of goods)	40.0	34.0	33.4	32.0	29.7	27.1	24.7	22.4	21.0
Export of goods volume (percent change)	21.3	7.2	1.3	3.6	4.2	6.8	9.2	7.1	7.5
Import of goods volume (percent change)	11.1	4.6	-4.1	13.4	6.3	6.5	6.2	6.3	5.7
Gross official reserves (millions of SDR)	502	535	600	701	782	859	945	1,039	1,141
Months of imports of goods and nonfactor	2.2	2.5	2.9	3.3	3.4	3.5	3.6	3.7	3.8
Terms of Trade (based on RES trade deflators)	0.0	-2.5	6.6						
Terms of Trade (based on buttom-up BOP projections)				6.6	-4.6	-2.1	-1.9	-0.5	-1.8
Exchange rate (ariary/US$, period average)	2,207	2,415	2,934	…	…	…	…	…	…

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

[1] Only includes external financial support that has been signed by the authorities.
[2] Consists of unidentified project, budget, and balance of payment support.

Table 6. Madagascar: Monetary Accounts, 2013-21

(Billions of Ariary; unless otherwise indicated)

	2013	2014	2015		2016			2017	2018	2019	2020	2021
	Dec	Dec	Dec		March		Dec	Dec				
	Actuals		SMP	Actuals	SMP	Actuals	Proj.	Projections				
Net foreign assets	1,840	2,159	2,816	2,610	2,815	2,754	3,172	3,462	3,721	3,999	4,335	4,749
Net foreign assets (BCM)	1,219	1,389	1,937	1,763	1,924	1,881	2,250	2,493	2,709	2,949	3,251	3,634
Net foreign assets (deposit money banks)	621	770	878	847	891	873	922	969	1,012	1,050	1,084	1,116
Net domestic assets	4,054	4,390	4,516	4,892	4,597	4,999	5,672	6,505	7,491	8,592	9,724	10,939
Domestic credit	3,943	4,582	5,362	5,558	5,451	5,678	6,404	7,248	8,235	9,326	10,436	11,640
Net credit to government	1,119	1,232	1,595	1,696	1,690	1,843	2,118	2,375	2,582	2,811	3,113	3,446
BCM	430	652	1,051	1,049	1,068	1,023	1,137	948	755	712	669	626
DMBs	431	326	267	398	340	580	685	1,123	1,514	1,777	2,113	2,480
Gross credits (mainly BTAs)	810	695	662	773	735	941	1,060	1,498	1,856	2,255	2,696	3,185
Deposits	-379	-369	-394	-375	-394	-360	-375	-375	-342	-477	-583	-705
Other credits	258	254	277	248	282	240	296	305	313	322	331	340
Credit to the economy	2,824	3,350	3,767	3,863	3,761	3,834	4,286	4,873	5,653	6,515	7,323	8,195
Credit to public enterprises	54	79	82	60	82	66	148	148	148	148	148	148
Credit to private sector	2,745	3,250	3,677	3,785	3,671	3,758	4,128	4,715	5,495	6,357	7,165	8,031
Other credits	25	21	8	15	8	10	10	10	10	10	10	15
Other items (net)	111	-184	-846	-666	-854	-677	-732	-743	-744	-734	-711	-686
BCM	906	774	156	359	132	351	368	410	455	505	561	614
Other	-795	-965	-1,001	-1,025	-986	-1,028	-1,100	-1,153	-1,199	-1,239	-1,272	-1,300
Money and quasi-money (M3)	5,894	6,549	7,332	7,502	7,412	7,752	8,844	9,966	11,212	12,591	14,059	15,689
Foreign currency deposits	666	809	969	869	982	906	932	979	1,022	1,062	1,096	1,128
Short term obligations of commercial banks	36	43	43	34	41	44	44	34	34	34	34	34
Broad money (M2)	5,191	5,698	6,321	6,600	6,389	6,802	7,868	8,953	10,156	11,496	12,930	14,527
Currency in circulation	1,608	1,826	2,008	2,115	1,952	2,079	2,462	2,743	3,088	3,476	3,874	4,318
Demand deposits in local currency	1,945	2,087	2,342	2,285	2,410	2,395	2,710	3,011	3,305	3,609	3,913	4,225
Quasi-money including time deposits	1,638	1,786	1,971	2,200	2,026	2,330	2,696	3,199	3,762	4,410	5,143	5,985
	(Percentage change relative to broad money at beginning of the year)											
Net foreign assets	-15.8	6.1	11.5	7.9	0.0	2.2	8.5	3.7	2.9	2.7	2.9	3.2
Net domestic assets	22.0	6.5	2.2	8.8	1.3	1.6	11.8	10.6	11.0	10.8	9.9	9.4
Domestic credit	18.9	12.3	13.7	17.1	1.4	1.8	12.8	10.7	11.0	10.7	9.7	9.3
Net credit to government	10.8	2.2	6.4	8.1	1.5	2.2	6.4	3.3	2.3	2.3	2.6	2.6
Credit to the economy	8.1	10.1	7.3	9.0	-0.1	-0.4	6.4	7.5	8.7	8.5	7.0	6.7
Credit to public enterprises	0.0	0.5	0.0	-0.3	0.0	0.1	1.3	0.0	0.0	0.0	0.0	0.0
Credit to private sector	8.1	9.7	7.5	9.4	-0.1	-0.4	5.2	7.5	8.7	8.5	7.0	6.7
Other items (net; asset = +)	3.2	-5.7	-11.6	-8.5	-0.1	-0.2	-1.0	-0.1	0.0	0.1	0.2	0.2
	(Percentage change year-on-year)											
Broad money (M2)	9.0	9.8	10.9	15.8	8.4	15.4	19.2	13.8	13.4	13.2	12.5	12.4
Currency in circulation	6.0	13.6	10.0	15.9	9.6	16.7	16.4	11.4	12.6	12.6	11.4	11.4
Demand deposits in local currency	3.9	7.3	12.2	9.5	8.6	7.9	18.6	11.1	9.8	9.2	8.4	8.0
Quasi-money in local currency	19.3	9.0	10.4	23.2	7.1	23.2	22.6	18.7	17.6	17.2	16.6	16.4
Credit to the private sector (in nominal terms)	16.2	18.4	13.2	16.5	13.6	16.3	9.1	14.2	16.6	15.7	12.7	12.1
Credit to the private sector (in real terms)	10.0	12.4	5.2	8.9	...	...	2.0	7.1	10.3	9.7	7.3	6.7
Memorandum items:												
Money multiplier (M3/reserve money)	2.40	2.34	2.36	2.45	2.47	2.65	2.49	2.48	2.50	2.51	2.52	2.53
Velocity of money (GDP/end-of-period M3)	3.97	3.94	3.90	3.81	3.98	3.68	3.59	3.56	3.53	3.50	3.47	3.44

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

[1] End of period.

Table 7. Madagascar: Balance Sheet of the Central Bank, 2013-17[1]

(Billions of Ariary; unless otherwise indicated)

	2013	2014	2015			2016						2017		
	Dec	Dec	Dec			Mars			June	Sep	Dec	March	June	Dec
	Actuals		SMP	Actuals		SMP	Actuals		Projections					
				SDR fixed	SDR revalued		SDR fixed	SDR revalued						
Net foreign assets	1,219	1,389	1,937	1,847	1,763	1,924	1,965	1,881	1,968	2,036	2,250	2,283	2,349	2,493
Gross foreign assets	1,734	2,013	2,820	2,666	2,666	2,793	2,767	2,767	2,888	3,086	3,312	3,336	3,567	3,883
Gross foreign liabilities [2]	-515	-624	-882	-818	-903	-869	-802	-886	-920	-1,051	-1,062	-1,053	-1,217	-1,390
Net domestic assets	1,234	1,410	1,165	1,219	1,304	1,073	962	1,047	1,243	1,421	1,309	1,404	1,484	1,519
Credit to government (net)	430	652	1,051	1,049	1,049	1,068	1,023	1,023	1,028	1,112	1,137	1,148	1,064	948
Claims on central government	541	919	1,151	1,263	1,263	1,168	1,156	1,156	1,148	1,233	1,279	1,268	1,184	1,090
Statutory advances	33	366	231	376	376	248	296	296	296	296	296	296	223	150
Securitized debt (T-bonds and bills)	338	338	735	734	734	735	734	734	851	840	829	819	808	786
Discounted bills of exchange	87	19	60	27	27	60	0	0	0	0	57	57	57	57
Other credits	82	195	124	126	126	124	126	126	2	97	97	97	97	97
Government deposits	-111	-267	-100	-213	-213	-100	-133	-133	-121	-121	-142	-120	-120	-142
Claims on other sectors	9	8	8	6	6	7	8	8	8	7	4	7	7	3
Claims on banks: Liquidity operations (+ = injecti	-111	-24	-49	-110	-110	-134	-335	-335	-102	-35	-200	-136	13	158
Other items (net; asset +)	906	774	156	274	359	132	267	351	309	337	368	385	400	410
Reserve money	2,453	2,799	3,102	3,067	3,067	2,997	2,927	2,927	3,211	3,457	3,559	3,687	3,834	4,012
Currency outside banks	1,608	1,826	2,008	2,115	2,115	1,952	2,079	2,079	2,209	2,241	2,462	2,390	2,487	2,743
Bank reserves	844	972	1,094	951	951	1,044	848	848	1,001	1,216	1,097	1,296	1,346	1,268
Currency in banks	153	170	161	188	188	130	146	146	134	167	188	167	199	223
Deposits	691	802	933	762	762	914	702	702	867	1,049	908	1,129	1,147	1,045
						(Cumulative annual flows)								
Memorandum items:														
Net foreign assets		170	548	458	374	-13	-1,763	202	206	273	487	33	99	243
Millions of SDRs		16	36	46	27	-8	42	23	27	38	79	1	9	26
Net domestic assets		176	-245	-190	-106	-91	-1,304	-342	-61	117	5	95	175	210
Credit to government (net)		222	399	397	397	17	-1,049	-26	-22	63	87	12	-72	-189
Reserve money		346	303	268	268	-105	-3,067	-139	144	390	492	128	275	453
						(Millions of SDRs)								
Net foreign assets	353	369	405	416	397	397	439	420	424	435	476	477	485	502

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

[1] End of period.

[2] New accounting principles increased the value of liabilities by SDR 19.04 million in December 2015 as a result of a revaluation of the SDR allocation.

Table 8. Madagascar: External Financing Requirements and Sources, 2015-19

(Millions of U.S. Dollars)

	2015	2016	2017	2018	2019	2016-19
	Prel. Est.	Projections				
Total financing requirements	859	1,068	1,365	1,365	1,416	5,213
Current account deficit	186	222	386	459	491	1,558
Net repayment of private sector debt	173	166	167	159	157	649
Repayment of government debt	39	70	73	78	94	314
Gross reserves accumulation (+ = increase)	90	141	114	110	121	487
IMF repayments	17	15	12	8	4	39
Other (inc. unrepatriated export revenues)	354	454	614	550	549	2,166
Available financing	859	1,067	1,321	1,255	1,136	4,780
Foreign direct and portfolio investment	436	482	527	576	604	2,189
Budgetary support	134	177	70	70	25	342
Project support	246	364	635	520	418	1,938
Project grants	130	195	263	162	159	780
Project drawings	116	169	371	358	259	1,158
IMF: RCF and ECF arrangement	43	44	89	89	89	310
External financing gap	0	0	44	110	280	434
Memorandum items:						
Gross official reserves	839	981	1,103	1,214	1,339	

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

Table 9. Madagascar: Projected External Borrowing, 2016Q1-17Q2

Public and publicly-guaranteed external debt	Volume of new debt in 2016Q1-2017Q2		PV of new debt (program purposes)	
	USD million	Percent	USD million	Percent
By sources of debt financing	**2419**	**100**	**1314**	**100**
Concessional debt, of which	**2299**	**95**	**1207**	**92**
Multilateral debt	1106	46	579	44
Bilateral debt	1193	49	628	48
Other	0	0	0	0
Non-concessional debt, of which	**120**	**5**	**107**	**8**
Semi-concessional	49	2	36	3
Commercial terms	71	3	71	5
By Creditor Type	**2419**	**100**	**1314**	**100**
Multilateral	1155	48	615	47
Bilateral - Paris Club	529	22	196	15
Bilateral - Non-Paris Club	664	27	432	33
Other	71	3	71	5
Uses of debt financing	**2419**	**100**	**1314**	**100**
Infrastructure	2054	85	1101	84
Social Spending	146	6	68	5
Budget Financing	218	9	144	11
Other	1	0.0	1	0.1

Source: Malagasy authorities, and IMF staff estimates and projections.

Table 10. Madagascar: Financial Soundness Indicators, 2009-16[1]

(Ratios, percent)

	2009 Dec	2010 Dec	2011 Dec	2012 Dec	2013 Dec	2014 Dec	2015 Dec	2016 Mar
Capital Adequacy								
Regulatory capital to risk-weighted assets	14.64	14.37	15.31	15.17	14.75	13.25	12.39	12.25
Capital to assets	7.13	7.36	7.17	7.24	7.89	7.68	7.29	6.82
Regulatory Tier 1 capital to risk-weighted assets	14.78	14.87	16.18	15.86	14.97	13.68	12.97	12.82
Tier 1 to assets	7.20	7.61	7.58	7.57	8.00	7.93	7.63	7.14
Non-performing loans net of provisions to capital	20.25	19.20	17.98	13.48	17.74	17.29	19.01	20.18
Net open position in equities to capital	6.65	6.34	6.84	5.96	6.47	7.56	8.63	8.74
Asset Quality								
Non-performing loans to total gross loans	11.29	13.11	14.61	14.21	13.78	12.02	10.56	11.03
Earnings and Profitability								
Return on assets	1.60	1.50	1.80	1.95	2.34	3.10	3.65	2.69
Return on equity	21.88	19.90	22.90	25.36	29.15	38.12	46.06	25.10
Interest margin to gross income	60.71	62.12	63.20	63.64	63.88	58.80	57.84	65.39
Non-interest expenses to gross income	50.90	52.32	52.81	55.97	54.23	48.03	48.18	52.62
Trading income to total income	97.46	97.93	97.42	97.68	97.49	97.70	97.80	98.58
Personnel expenses to non-interest expenses	36.58	37.65	37.17	38.41	39.52	41.31	39.79	40.63
Liquidity								
Liquid assets to total assets (liquid asset ratio)	46.89	45.87	49.66	50.43	43.24	39.93	37.80	40.14
Liquid assets to short-term liabilities	69.73	67.83	71.01	74.08	63.73	58.92	55.30	59.94
Customer deposits to total (non-interbank) loans	183.51	175.02	188.22	188.34	158.18	145.81	142.33	150.41
Sensitivity to Market Risk								
Net open position in foreign exchange to capital	15.39	15.13	14.50	11.90	17.12	8.92	9.32	10.60
Spread between reference lending and deposit rates	10.57	11.16	11.58	11.85	12.54	11.97	11.63	11.42
Foreign currency-denominated loans to total loans	4.87	4.72	7.31	5.87	6.26	5.27	5.67	6.05
Foreign currency-denominated liabilities to total liabilities	17.84	19.34	18.31	17.53	16.33	17.61	16.67	16.52

[1] Ratios only concern banking sector.
Sources: Malagasy authorities.

Table 11. Madagascar: Indicative Targets, End-December 2015 and End-March 2016

	End-Dec. 2015				End-March 2015			
	Projected	Adjusted	Actual	Status	Projected	Adjusted	Actual	Status
	(Billions of Ariary; unless otherwise indicated)							
External								
Ceiling on accumulation of new external payment arrears (US$ millions) [1]	0		11	Not met	0		15	Not met
Ceiling on new nonconcessional external debt with original maturity of more than one year, contracted or guaranteed by the central government or BCM (US$ millions) [1]	200		0	Met	200		23	Met
Ceiling on new nonconcessional external debt with original maturity of up to and including one year, contracted or guaranteed by the central government or BCM (US$ millions) [1]	0		0	Met	0		0	Met
Central bank								
Floor on net foreign assets (NFA) of BCM (millions of SDRs) [2]	416	403	417	Met	407	394	443	Met
Ceiling on net domestic assets (NDA) of BCM [2]	1,558	1,607	1,498	Met	1,485	1,535	1,261	Met
Fiscal								
Ceiling on net bank credit to the government [3]	340	389	463	Not met	90		148	Not met
Floor on social priority spending [3]	204		311	Met	33		85	Met
Floor on gross tax revenue [3]	2,994		3,011	Met	746		750	Met
Memorandum items								
Budget support grants and loans (millions of SDRs) [4]	119		106		119		106	
New concessional loans, contracted or guaranteed by the central government or BCM (US$ millions) [5]	167		232		327		294	
Program exchange rate (MGA/SDR)	3,761.88				3,761.88			
Recapitalization of the central bank for losses made during 2011-13 [4]	214		214		214		214	

Sources: Madagascar authorities; and IMF staff projections.

[1] Cumulative ceilings that will be monitored on a continuous basis starting from end-August, 2015.

[2] Stock of NFA and NDA respectively measured at the program exchange rate and excluding the SDR revaluation.

[3] Cumulative figures from the beginning of each calendar year.

[4] Cumulative figures starting from the beginning of 2015.

[5] Cumulative figures starting from end-September, 2015.

Table 12. Madagascar: Structural Benchmarks for SMP

Action	Test Date	Status
Improve exchange rate policies		
Refrain from reintroduction of buyback operations at non-market rates.	Continuous benchmark	Met
Mobilizing fiscal revenue		
Set up remote audit teams with the mission to undertake ex-post verifications focused on highly suspected fraud operations.	End-December 2015	Met at end-December
Ensure that local sales of EPZ companies are restricted to 5 percent of total sales and that they are subject to customs declaration and duties and taxes.	End-March 2016	Met at end-March 2016
Improving the composition and quality of fiscal spending		
Implement an automatic pricing formula for maintaining full cost-recovery fuel prices (for diesel, gasoline, and kerosene).	Continuous benchmark from end-Dec. 2015	Implemented with delay March 1, 2016
Create an escrow account at the Central Bank to ring fence the resources required by VAT reimbursements.	January 1, 2016	Implemented with delay Jan. 29, 2016
Improving fiscal transparency		
Bring the DMFAS database into full operation and publish details on the stock and flows of public and publically-guaranteed debt starting with the 2016 budget law.	End-March 2016	Met at end-March 2016
Strengthening the independence of the central bank		
Submit Central Bank Act revised to incorporate the elements outlined in the MEFP (paragraph 30) to the Cabinet for approval.	End-December 2015	Implemented with delay Jan. 12, 2016
Promoting inclusive growth		
Cabinet approval of the National Social Protection Policy to guide the design and implementation of social protection programs, including social safety nets for the poorest and most vulnerable households.	End-December 2015	Met before end-Dec. deadline

Table 13. Madagascar: Proposed Schedule of Disbursements and Timing of ECF Arrangement Reviews

Availability Date	Disbursement (In percent of quota)	Disbursement (In SDRs)	Conditions for Disbursement
July 27, 2016	25.7	31,428,000	Board approval of the arrangement
January 27, 2017	25.7	31,428,000	Board completion of first review based on observance of performance criteria for end-December 2016
July 27, 2017	25.7	31,428,000	Board completion of second review based on observance of performance criteria for end-June 2017
January 27, 2018	25.7	31,428,000	Board completion of third review based on observance of performance criteria for end-December 2017
July 27, 2018	25.7	31,428,000	Board completion of fourth review based on observance of performance criteria for end-June 2018
January 27, 2019	25.7	31,428,000	Board completion of fifth review based on observance of performance criteria for end-December 2018
July 20, 2019	25.7	31,432,000	Board completion of sixth review based on observance of performance criteria for end-June 2019
Total	180.0	220,000,000	

Source: IMF.

Table 14. Madagascar: Indicators of Capacity to Repay the Fund, 2016-30

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
								(Millions of SDRs)							
Fund obligations based on existing credit															
Principal	5.3	8.3	5.9	3.1	6.1	12.2	12.2	12.2	9.2	6.1	0.0	0.0	0.0	0.0	0.0
Charges and interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fund obligations based on existing and prospective credit															
Principal	5.3	8.3	5.9	3.1	6.1	12.2	21.7	34.2	43.7	50.1	44.0	34.6	22.0	9.4	0.0
Charges and interest	0.03	0.03	0.03	0.49	0.58	0.58	0.57	0.53	0.47	0.37	0.26	0.16	0.09	0.05	0.03
Total obligations based on existing and prospective credit															
Millions of SDRs	5.3	8.3	5.9	3.6	6.7	12.8	22.2	34.8	44.2	50.5	44.3	34.7	22.1	9.5	0.0
Billions of Ariary	24.4	40.0	30.1	18.8	36.6	72.2	129.1	208.0	272.6	320.6	289.6	234.1	153.4	67.8	0.2
Percent of exports of goods and services	0.2	0.3	0.2	0.1	0.2	0.4	0.7	1.0	1.2	1.3	1.0	0.8	0.5	0.2	0.0
Percent of debt service	4.7	6.8	4.5	2.3	3.9	6.5	10.0	13.9	16.2	15.8	12.1	8.2	4.6	1.8	0.0
Percent of GDP	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.3	0.4	0.4	0.3	0.2	0.1	0.1	0.0
Percent of government revenue	0.7	1.0	0.7	0.3	0.6	1.0	1.6	2.3	2.6	2.7	2.2	1.6	0.9	0.4	0.0
Percent of quota	4.4	6.8	4.8	2.9	5.5	10.5	18.2	28.4	36.2	41.3	36.2	28.4	18.1	7.8	0.0
Outstanding IMF credit based on existing and prospective drawings															
Millions of SDRs	106.7	161.3	218.2	278.0	271.9	259.7	238.0	203.8	160.1	110.0	66.0	31.4	9.4	0.0	0.0
Billions of Ariary	487.4	779.0	1,107.7	1,469.5	1,489.3	1,464.7	1,382.9	1,220.1	987.2	698.6	431.8	211.8	65.4	0.0	0.0
Percent of exports of goods and services	4.7	6.8	8.7	10.4	9.5	8.5	7.3	5.8	4.3	2.7	1.5	0.7	0.2	0.0	0.0
Percent of debt service	94.3	133.3	165.0	184.0	159.2	132.5	106.9	81.4	58.5	34.4	18.0	7.4	2.0	0.0	0.0
Percent of GDP	1.5	2.2	2.8	3.3	3.1	2.7	2.3	1.9	1.4	0.9	0.5	0.2	0.1	0.0	0.0
Percent of government revenue	13.9	19.6	24.0	27.3	24.0	20.6	17.1	13.3	9.5	5.9	3.2	1.4	0.4	0.0	0.0
Percent of quota	87.3	132.0	178.6	227.5	222.5	212.5	194.8	166.8	131.0	90.0	54.0	25.7	7.7	0.0	0.0
Net use of IMF credit (millions of SDRs)	26.1	54.6	57.0	59.8	-6.1	-12.2	-21.7	-34.2	-43.7	-50.1	-44.0	-34.6	-22.0	-9.4	0.0
Disbursements	31.4	62.8	62.8	62.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Repayments and repurchases	5.3	8.3	5.9	3.1	6.1	12.2	21.7	34.2	43.7	50.1	44.0	34.6	22.0	9.4	0.0
Memorandum items:								(Billions of Ariary, unless otherwise indicated)							
Exports of goods and services (millions of SDRs)	2,289	2,366	2,497	2,673	2,863	3,048	3,247	3,514	3,749	4,004	4,279	4,577	4,900	5,225	5,574
Debt service	516.6	584.2	671.4	798.6	935.4	1,105.0	1,293.9	1,498.9	1,687.6	2,033.8	2,395.1	2,864.4	3,322.3	3,811.9	4,349.1
Nominal GDP (at market prices)	31,773	35,507	39,609	44,103	48,824	54,011	59,547	65,651	72,380	79,799	87,978	96,996	106,938	117,900	129,984
Government revenue	3,499	3,974	4,623	5,388	6,194	7,108	8,075	9,166	10,394	11,779	13,338	14,997	16,534	18,228	20,097
Quota (millions of SDRs)	122.2	122.2	122.2	122.2	122.2	122.2	122.2	122.2	122.2	122.2	122.2	122.2	122.2	122.2	122.2

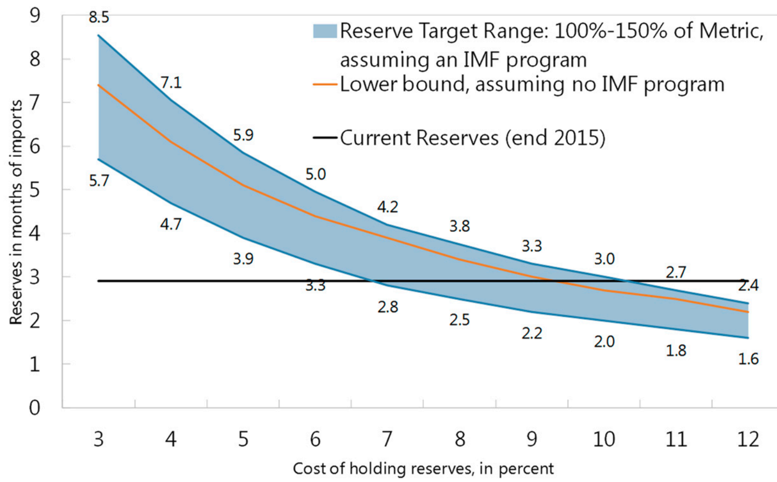
Source: IMF staff estimates and projections.

Annex I. Madagascar: Estimate of Optimal Reserves

1. **International reserves are currently below optimal levels.** While a flexible exchange rate reduces the need for reserves, Madagascar's reliance on mining exports and the challenging international environment increases the probability of shocks and hence the need for additional buffers. Assuming a cost of holding reserves of 6 percent, the current level (2.9 months import cover at end-2015) is below the lower bound of the target range (3.3 months import cover assuming an IMF program and 4.4 months without a program). With an ECF arrangement, reserves are projected to reach the lower bound by end-2019.[1]

Optimal Reserves

(target range and current levels, in months of imports)



Sources: IMF staff calculation

[1] The reserve target range is calculated with the IMF Reserve Adequacy Template for credit constrained economies. Given the importance of mining exports, Madagascar is classified as resource rich.

Appendix I. Letter of Intent

Antananarivo, Madagascar

July 12, 2016

Ms. Christine Lagarde
Managing Director
International Monetary Fund
Washington, D.C. 20431 USA

Dear Madam Managing Director:

1. We have continued our program of recovery from the transition period. Our policy measures in 2015 and 2016 have aimed to strengthen our macroeconomic stability and sustainability in support of durable poverty reduction and growth. Despite a difficult external environment and deep-rooted structural weaknesses, we have made progress over the past year.

2. These policies represent both the continuation and intensification of a medium-term economic reform program. Durable poverty reduction and growth will call for significantly increased investment, which in turn will require improved mobilization of domestic revenue and increased external official resources, leading to a protracted balance of payments need. To assist us in this effort, we are counting on the financial support of the international community, which is needed if our efforts are to succeed in materially improving living standards in the next few years. We are asking the International Monetary Fund to support our program in the form of an arrangement under the Extended Credit Facility (ECF) in an amount equivalent to 180 percent of quota, or SDR 220 million that would be disbursed to the Central Bank of Madagascar.

3. The attached Memorandum of Economic and Financial Policies (MEFP) describes the policies that we have implemented this year, as well as those we plan to implement both for the rest of this year and over the program period (2016-2019). The government is convinced that the policies and measures included in this memorandum will help to address our balance of payment difficulties and advance our poverty reduction and growth objectives. We stand ready to take any further measures that may prove necessary to meet our objectives and will consult with IMF staff prior to the adoption of any changes to the policies set forth in this Memorandum. The government also undertakes to cooperate fully with the IMF to achieve its policy objectives and not to introduce measures or policies that would compound Madagascar's balance of payment difficulties. We are

committed to provide timely monitoring information and the Central Bank will undergo a safeguards assessment update, as required.

4. The Malagasy authorities agree to the publication of this Letter of Intent (LOI) and the attached MEFP and Technical Memorandum of Understanding (TMU), as well as the IMF staff report related to the request for an arrangement under the Extended Credit Facility (ECF) and the Debt Sustainability Analysis, after approval by the Executive Board of the IMF.

Sincerely yours,

/s/	/s/
Mr. François Marie Maurice Gervais Rakotoarimanana Minister of Finance and Budget Madagascar	Mr. Alain Hervé Rasolofondraibe Governor Central Bank of Madagascar

Attachments: - Memorandum of Economic and Financial Policies
- Technical Memorandum of Understanding

Attachment I. Memorandum of Economic and Financial Policies, 2016-19

I. OVERVIEW

1. **This memorandum lays out the medium-term reform program of the government of Madagascar under the Extended Credit Facility (ECF)**. The ultimate policy objective of this program is to scale up spending on essential infrastructure and social development to reverse the deterioration in development indicators. This program aims to place the country on a sustained path toward raising living standards and improving social conditions, consistent with the objectives of the National Development Plan (NDP) and the Sustainable Development Goals (SDGs). This memorandum focuses on the targets and objectives both in the first year of the ECF and over the program period, setting forth the policy measures and structural reforms needed to preserve macroeconomic stability, strengthen the external position, and enhance overall competitiveness.

2. **Over the past two decades, economic growth in Madagascar (2.8 percent) barely kept pace with population growth rate, leading to stagnant living standards and missing most Millennium Development Goals (MDGs).** This low growth trajectory was exacerbated by the political transition period, lasting from 2009-2013. The country emerged from this political crisis with weakened social conditions: the poverty rate reached 71.5 percent of the population in 2012 (as defined as the FAO as minimal caloric intake); access to education barely improved, with the success rate in examinations, in particular at the baccalaureate level, having fallen (36 percent in 2014 compared to 41 percent in 2013); public health access improved slightly (with an increase in the rate of outpatient care provided at basic health centers: 29.2 percent and 32.9 percent in 2013 and 2014, respectively).

3. **Progress toward political stability following the transition has been steady, enabling the government to rebuild institutions and step up reforms.** The period 2014-15 has been somewhat overshadowed by political instability that prevented the implementation of deep-rooted reforms. Recent political developments, including the municipal and Senatorial elections, have strengthened institutional stability. Governance issues, especially corruption, weigh on the effectiveness of reform measures, but are starting to be addressed as well. The three anti-corruption agencies (*Comité pour la Sauvegarde de l'Intégrité*, BIANCO and SAMIFIN) have been bolstered, both financially and in terms of their strategy to strengthen the fight against corruption. Strong reforms

will now be undertaken in order to send the right signal to investors, to catalyze the much needed donor support and above all to help improve the social and economic conditions of the population.

4. **Under the Staff Monitored Program (SMP) in place from September 2015 to March 2016, the country has built a strong track record, with satisfactory progress in most areas**. The program was able to reverse some negative trends witnessed in late 2014-early 2015, particularly in revenue and arrears accumulation. Performance during the six months of the SMP demonstrated a capability to sustain reforms. We began implementing significant measures aiming to further strengthen macroeconomic stability, to improve revenue generation, enhance the quality of fiscal spending and strengthen central bank operations. All quantitative targets were met through end-March, except the ceiling on net credit to government and new external payments arrears. In particular, tax revenue has steadily improved, while priority social spending was protected. The missed targets on net credit resulted from a large shortfall in external financing, larger-than-planned arrears payments, and inadequate time to adjust spending. External payments arrears resulted from technical difficulties in making debt service payments. In addition, all the measures envisaged in the structural benchmarks (SBs) were implemented, although some with minor delays compared to plans; in particular, these measures have discontinued fuel subsidies and ensured adequate resources for the reimbursement of VAT credits.

II. MACROECONOMIC PROGRAM AND TARGETS

A. Medium-Term Objectives

5. **The government is committed to placing Madagascar on the path of sustainable and inclusive growth, improved physical and human capital, and strong governance, as laid out in the National Development Plan and the 2016-2021 Government's Priority Investment Program.** The objective is to address the existing complex and significant challenges in several areas: economic, political, geographical, socio-cultural, and environmental. While the challenges are enormous and our strategy is ambitious, we are determined to advance on this path. The government's vision of the future, outlined in the NDP, has the following five unifying and complementary priorities: (i) governance, rule of law, security, decentralization, democracy, and national solidarity; (ii) preservation of macroeconomic stability and support for development; (iii) inclusive growth and territorial anchoring of development; (iv) adequate human capital for the development process; and (v) development of natural capital and strengthening resilience to disaster risk. This vision is elaborated in the 2016-2021 Government's Priority Investment Program.

6. **In the medium-term, economic growth is projected to accelerate, driven by scaled-up investment and expansion of agriculture, tourism, manufacturing and mining.** Rising public investment will spur construction activity beginning in 2016, and in the medium-term the investment-to-GDP ratio would approach 19 percent. Public investment in infrastructure, particularly the energy and transportation sectors, will be financed through domestic resource mobilization, donors and public private partnerships (PPPs). Promoting private investment is also central to our strategy. We aim to improve the business climate to attract investment. In tourism, the government's goal is to attract 450,000 tourists annually within three years. Improved land rights management, rural infrastructure maintenance and rehabilitation, and productivity gains will spur growth in agriculture, which employs about 80 percent of the population. The introduction of new mining and petroleum codes will spur investment in our mining, natural gas, and oil industries. Economic growth is projected to steadily accelerate from 4.1 percent in 2016 to 5 percent by 2019. Against the backdrop of subdued international price pressures and the restrained monetary policy, inflation is projected to gradually decline from 7.6 percent in 2015 to around 6 percent by 2019.

7. **The government's fiscal policy supports the implementation of the NDP while reinforcing both stability and sustainability.** We will increase spending on critical infrastructure, education, and health care to rebuild Madagascar's physical and human capital. We will also invest in rural development. Fiscal space for these priorities will be created through additional revenue mobilization, expenditure reprioritization, and domestic financing, as well as additional external resources. We expect to increase public investment to attain the objectives set out in the NDP, in a manner consistent with macroeconomic stability. The investments will be based on the Government's Priority Investment Program (2016-2021). Borrowing and guarantees to fund Madagascar's investment needs will be prudently managed to ensure that the risk of debt distress remains moderate and we will favor grants and concessional financing as much as possible.

8. **We plan to increase the tax ratio (on a gross/net basis) from 11.0/10.5 percent of GDP in 2016 to around 12.5/12.0 percent of GDP by 2019**. The increase reflects gains from tax policy and revenue administration measures. To meet our revenue measures, we plan on improving human resource management in the tax and customs administrations to reduce corruption (for example via performance-based contracts), bettering post-audit performance, and introducing effective sanctions against fraud and corruption. To control less productive expenditures, we will take measures to improve the performance of SOEs, reform the pension system, and strengthen budget execution. The overall deficit on a commitment basis is projected at 3.2 percent of GDP in 2016. During the implementation of the NDP, we will increase public investment spending from 5.3 percent in 2016 to over 8 percent of GDP by 2019, while priority social spending will rise from 0.8

percent of GDP to 1.3 percent. Over the 2017-19 period, 3.6 percent of GDP of financing still needs to be identified, of which 1.9 percent of GDP for externally financed investment projects. To promote priority spending while keeping debt on a sustainable path, the primary balance, excluding foreign financed investment (commitment basis), will serve as an anchor for fiscal policy and will target a sustainable level over the medium-term, currently estimated to be a modest surplus.

9. **Monetary and exchange rate policy will aim to maintain internal and external stability – including keeping inflation in single digits – while building an adequate reserve buffer.** We remain committed to maintaining a flexible exchange rate to ensure orderly conditions in the foreign exchange market and to facilitate external adjustment over the medium-term. We will refrain from reintroducing the buyback operations at non-market rates in the interbank foreign exchange market. The Central Bank of Madagascar (CBM) will pursue a restrained monetary policy supportive of moderate inflation and take further steps to strengthen liquidity management. The government and CBM will work to develop our financial sector and improve access, by implementing the action plan and recommendations identified by the Financial Sector Assessment Program (FSAP).

10. **Current account deficits are projected to rise to about 4 percent of GDP in 2018, due mostly to investment-related imports and deteriorating terms of trade**. The deficits will be primarily financed by sustained FDI inflows and public sector borrowing. Improvements in the business climate will attract private investment, which in turn will expand production and export capacities over the medium-term. The CBM will gradually accumulate international reserves, targeting 3.6 months of import coverage by 2019.

III. THE STRUCTURAL REFORM AGENDA

11. Our agenda for structural reforms will be focused on: (i) enhancing conditions for a sustained and inclusive growth; (ii) creating more fiscal space for development priorities; (iii) improving economic governance and combating corruption; and (iv) strengthening the capacity to support stability and financial sector development.

A. Promoting Inclusive Growth

12. **Poverty reduction and sustainable development call for inclusive and robust growth, benefitting all citizens and regions**. We will set aside financial resources and implement structural reforms focused on improving health and education, advancing agricultural production, decentralizing the public administration, increasing the amount and quality of investment, and improving the business climate. Sectoral expenditure frameworks will align objectives with

expenditures, and the health and education sectoral spending plans will then be integrated into a medium-term budget framework by end-June 2017 (structural benchmark), as well as perhaps other sectors. Setting aside contingencies and preparing for periodic cyclones and drought is also a priority.

13. **The new social protection policy, approved in 2015, aims to increase income and access to social services for the poorest, provide social protections to the most vulnerable, and develop social contribution systems.** We are working to establish a legal and institutional framework to coordinate social projects and programs and improve the quality of services provided. An inter-ministerial framework supporting the national social protection policy will be in place by 2017 and we expect to reserve significant human, financial, and capital resources for social objectives over the medium-term. Introducing conditional monetary transfers to vulnerable households is a priority.

14. **Broadening access to education and health care is essential for inclusive growth.** Establishing one year of preschool, constructing and equipping new schoolrooms, recruiting new educators, and textbooks for primary school students will increase the quality of education. We will also provide more resources for teacher training, including coaching programs for primary school educators, launch school food programs in underserved districts, and recruit so-called community teachers (Maîtres FRAM) based on qualifications and performance evaluation. To fully achieve our priority health objectives would require additional financial resources, which would entail substantial donor support. We will also put in place a performance-based payments system to improve the quality of services. Mutual health insurance programs and a national solidarity health fund will create the foundation for universal health coverage, addressing nutrition, vaccination, and infant and maternal health.

15. **Agriculture will play a central role in poverty reduction.** Agriculture generates about 26 percent of GDP and is the main source of income for a majority of households. Agricultural reforms aim to improve productivity, support the move from just subsistence farming toward production for domestic, regional, and international markets, and reduce risks for the most vulnerable households. In this context, we aim to: (i) increase investment in roads and irrigation infrastructure; (ii) expand investment in agricultural training centers; (iii) increase funding of agricultural research; (iv) expand social protection programs targeting vulnerable subsistence farmers; and (v) protect farmers' land rights. These measures should increase the amount of land used for agriculture, expand the number of trained agriculture workers, increase the number of

households covered by social protection significantly, and boost the number of local land offices that issue land certificates.

16. **Drawing on the Regional Development Plans, decentralization aims to improve the quality of and access to public services and foster policies better suited to meet the immediate needs of citizens.** We are working to identify and define appropriate government structures and measures to strengthen local governance. Such measures include reforms to the legal framework for local civil service, while ensuring full coherence between the existing legal and institutional frameworks for decentralization with local development plans and the NDP objectives.

17. **A successful private sector and a favorable business climate are essential for inclusive growth.** Indicators such as the World Bank Doing Business Report (164 out of 189 countries) and the World Economic Forum Competitiveness Index (130 out of 140 countries) demonstrate the need for improvements in Madagascar's competitiveness. With support from the World Bank, we aim to reduce burdensome regulations by: (i) reducing the time and documents necessary to create a business, (ii) facilitating the acquisition of construction permits, (iii) expediting property transfers, (iv) easing lending requirements for small-and medium-sized enterprises, (v) reducing barriers to international trade, and (vi) reducing the administrative burden required to pay taxes. We also envisage on-line registration of businesses, a centralized database for land registries, a legal framework establishing credit reference bureaus, and reduced transaction costs for construction permits and electricity hook-ups. Moreover, we will submit revisions to modernize the company act to parliament, *inter alia* to facilitate the creation of new businesses. At the same time, we will also finalize the legislative process of joining OHADA by end-2017 (*Organisation pour l'Harmonisation en Afrique du Droit des Affaires*). Moreover, we will implement the action plan to significantly improve our performance in the ease of doing business survey.

18. **To promote investment, the institutional and legal frameworks for mining, petroleum, and Special Economic Zones (SEZ) will be revamped.** The mining and petroleum codes will be brought in line with international best practices and made consistent with the existing law on large mining investments (LGIM). The principal measures include: an increase in royalty rates and more differentiation by type of mineral; a review of the royalty revenue-sharing formula; simplification of the corporate income tax regimes; and a reduction in the length of fiscal stability clauses. We are developing a law on SEZs, with a view to promoting investment. Specific locations will benefit from special tax and customs provisions, labor and immigration regulations, land tenure, and corporate law.

19. **Investment in public infrastructure will require prioritization and good management.** Investments are needed in roads, railways, seaports, airports and energy (a particular impediment to growth according to the World Bank Doing Business report). Given the constraints of debt sustainability and absorptive capacity, careful prioritization is required. The Government's Priority Investment Program will be presented to international donors in 2016. Management of our public investment clearly needs improvement as we scale up, and we are elaborating a strategy and action plan to strengthen existing practices, drawing on technical support from the IMF and World Bank.

20. **We expect significant financing from public-private partnerships (PPPs) that will be managed based on a new legal framework.** While PPPs can help mobilize additional funds, attract technical expertise, and improve efficiency, they pose significant fiscal risks. Incorporating existing PPPs into a fiscal risk statement and the new legal framework should reduce the budgetary risks. The new PPP law was enacted in February 2016 and the application decrees, elaborated in cooperation with an international legal expert and with comments from our development partners, are planned to be published in September 2016 and will specify the circumstances for exception to open tenders. A dedicated unit at the presidency is responsible for coordination, while the ministry of finance and budget maintains the right to disapprove/stop all projects at any stage in the process (before signature) if the fiscal implications are assessed to be disproportionate. PPP contracts can be suspended in the event of a breach of obligations by decision of the *Comité de Suivi* for PPPs. The PPP unit in the Ministry of Finance and Budget will remain appropriately staffed and financed and fully involved throughout the process (*approche participative*). To assure full transparency and minimize fiscal costs, all new contracts will be attributed through open and transparent tenders—except under the conditions provided for by the law and decrees —and the terms and conditions will be published within one month of the date of signature (continuous structural benchmark).

21. **The new debt management strategy will reinforce debt sustainability.** Based on the *Loi Régissant la Dette Publique et la Dette Garantie par le Gouvernement Central*, which states the roles and objectives of the government with respect to new borrowing, a debt management strategy has been developed and published in December 2015. The strategy aims to minimize costs and risks by maximizing the share of concessional external loans and progressively increasing the maturity of domestic debt instruments. To support transparency and inspire confidence, the 2016 budget started to include details on the anticipated stock and flows of the central government's public and publicly-guaranteed debt; and with the support of UNCTAD, our external debt database has become fully operational (which was a structural benchmark under the SMP).

22. **External financing will have to be primarily on grants and concessional terms to reconcile investment needs with debt sustainability.** Madagascar is assessed to have a moderate risk of external debt distress. We will follow a prudent debt management strategy that aims to maintain a present value of debt consistent with this risk rating. Debt contracted on concessional terms will help maintain the current risk rating and debt sustainability. That said, if concessional external financing is exhausted, some limited long-term non- and semi-concessional borrowing could be considered to support critical expenditure needs, e.g. for high-yield investment projects. In these circumstances, we will consult in advance with IMF and World Bank staff. To assist in the policy implementation of the ECF program, we will avoid all non-concessional short-term external borrowing (with original maturity of less than one year) and will set yearly explicit ceilings for long-term non-concessional borrowing. Given the prospect of a donor conference during the second semester of 2016, we have set explicit performance criteria (Table 1) on a non-concessional borrowing ceiling at a level of $300 million for 2016 of which $100 million with grant element of less than 20 percent. For 2017, the ceiling for non-concessional debt is $383 million (cumulative).

B. Creating More Fiscal Space

23. **To support the NDP, the government is determined to increase fiscal space over the medium term while maintaining debt sustainability.** Sustainable and inclusive growth will require increased priority spending, especially on infrastructure, education, healthcare, and targeted social and natural disaster assistance. These priorities aim to lift living standards and protect the most vulnerable segments of our society. At the same time, we are committed to fiscal sustainability. In the current year we will contain the budget deficit (commitment basis) to 3.2 percent, and we are aiming at a modest surplus in the primary balance, excluding foreign financed investment, by the end of the program. Continued revenue mobilization, strict expenditure control and rationalization across all layers of the general government are at the center of the short to medium term budget planning to increase fiscal space. We will strengthen public financial management and revenue administration, enhance execution of budget plans, and reduce transfers to SOEs and pensions. In particular, we will continue the application of the automatic pricing formula for maintaining full cost recovery prices for fuel (continuous structural benchmark). Separately, we are studying the possibility of revising the fuel price structure, including the level of oil distributors' margins and taxes. We are also discussing with the distributors the settlement of amounts due, including the distributors' unpaid contributions to the Road Maintenance Fund (FER).

24. **The government will be facing additional fiscal pressures in 2016 due to a revenue shortfall from lower petroleum prices as well as potentially higher spending needs.** To balance these effects, the 2016 supplementary budget was submitted in June 2016 to parliament *(prior*

action), which subsequently passed it. This includes a package of measures to boost revenue, rationalize expenditures, and close the financing gap, accompanied by complementary administrative actions:

- The fiscal revenue target will be reached by means of the following measures: (i) DTI (duties and taxes on imports) paid by the ministries on foreign investment will increase, gaining an additional MGA 22.7 billion; (ii) a reinforcement of the collection of excise taxes on spirits (MGA 9 billion); and (iii) administrative actions to strengthen joint inspection by tax and custom administration of exempted products (MGA 11 billion). Custom administration efforts have led to larger than projected revenues on non-oil products (MGA 57.8 billion until end of April).

- Spending on non-priority items in current and capital outlays is reduced by MGA 99 billion. If adequate financing cannot be identified by end-September, controls over spending will be imposed.

- Immediate measures (see below) will eliminate the need for transfers to SOEs beyond budgeted amounts in 2016, particularly MGA 300 billion for JIRAMA.

Arrears Clearance and Fiscal Financing

25. **The government remains committed to clearing current arrears over the medium-term and avoiding any significant new arrears accumulation**. The stock of arrears will be repaid in the coming years in the form of cash payments, securitization and tax offsets: agreements are already in place for clearing MGA 388 billion and understanding are expected on the remaining MGA 632 billion later this year, covering primarily arrears to power producers and petroleum importers. To this effect, we aim at negotiating the already identified payment amounts under a coherent approach, focusing on a long maturity profile of domestic debt instruments, and limiting the use of cash repayments in the short term to affordable amounts. We will intensify our efforts to identify all existing arrears for the central government. To avoid new arrears, we will establish clear definitions and begin monitoring closely. Subsequently, we will also review the arrears of other public entities, with a view to prevent future occurrence.

26. **VAT refund repayments are operated through a designated escrow account at the Central Bank, effective since March 2016,** and funded by monthly transfers (currently 33 percent of large taxpayer revenues), which is adjustable according to needs for reimbursement. Its effectiveness will be enhanced by (i) establishing close monitoring of the needs and funds available;

and (ii) strengthening the risk-based approach in VAT refund processing. Furthermore, we are intensifying efforts to shorten the lag between filing for and reimbursement of VAT refunds.

27. **The Government will continue to encourage SOEs to move toward borrowing on the strength of their own balance sheet.** This approach not only ensures the efficient running of these SOEs but also removes the need for Government to backstop SOE payment default in purely commercial agreements. It prevents the situation under which SOE debt increases the State's contingent liability and potentially, when they crystallize, add to public debt stock.

28. **To help avoid arrears going forward, we will continue to improve government financing and cash management.** We intend to limit domestic banking system credit to the government (to around one percent of GDP this year and below that level thereafter) to continue creating space for private sector credit growth and to limit domestic debt. In addition, we are focusing on reducing rollover risks by balancing financing from domestic and external sources and lengthening the maturity profile of domestic public debt instruments.

29. **To offset the reduction in statutory advances, the central bank will on-lend up to MGA 113 billion following the ECF disbursement**. The terms of the loan will resemble the ECF disbursement and all foreign exchange risks will be carried by the government, as formalized in a memorandum of understanding.

Tax Policy and Administration

30. **The government views improvements in tax compliance of utmost importance to increase the very low ratio of fiscal revenue to GDP in Madagascar.** Incorporating the conclusions of the 2015 IMF TA report on tax and customs administration, we will develop a priority action plan that aims at improving the culture of taxation by aggressively pursuing tax evaders, strengthening capacity of tax and customs officials, and improving enforcement efforts on non-filers and misconduct by officials.

- Collection of outstanding tax arrears will be improved by (i) strengthening the identification of the current amount of collectible tax arrears; (ii) collecting at least MGA 30 billion of tax arrears this year and publishing a report on outstanding arrears by end-February (structural benchmark); and (iii) implementing the rules and criteria to write-off non-collectible arrears.

- The Government will further enhance data matching between the tax authority and customs. We have introduced the use of a unique tax identification number (TIN) for corporations and individuals, the use of which will be extended to other departments at the Ministry of Finance and the social security agency (CNAPS) by end-2017. Taxpayers who show significant discrepancies between the different sources or are classified as high risk in any given year will be subject to audit with losses recovered in the following years.

- A framework to identify and investigate employees registered by the social security agency but unknown to the tax authorities will be developed by December 2016. We will authorize the joint payment and declaration of taxes (IRSA) and contributions to the CNAPS (by end 2017).

- To broaden the tax base, we enforced that all wholesalers and industries withhold 5 percent from the amount invoiced by suppliers that are unknown to the tax administration (without a TIN). Monitoring will be enhanced by setting up an electronic declaration return process of the list of suppliers not registered by industries and wholesalers, by end 2016.

- We will strengthen monitoring and control of tax expenditures with the assistance of the World Bank, by enhancing data sharing among various stakeholders (customs and revenue authorities, Ministry of Finance). Reports on tax expenditures will be produced annually starting this year.

- The large amount of tax credits granted for investment to major companies will be audited to identify large taxpayers who have benefitted but not complied with legal requirements by the end of 2016. For companies claiming unjustified tax credit, the normal situation will be re-established by assessing and collecting the amounts due retroactively. Tax credits granted and irregular tax credits that will have been cancelled will be summarized in a report by June 2017 (structural benchmark).

- To improve the performance of tax audit outcomes, customs and revenue authorities have started to apply risk-based audits to enhance the detection and deterrent effect of audits. The MFB will regularly prepare semi-annual reports starting end of July 2017, on progress made in the use of risk based audits, highlighting its effectiveness in widening the tax net.

- Customs will establish a framework to strengthen the control of exemptions (good falsely declared to be tax exempted) and relief procedures (goods falsely declared to be used for tax exempted purposes). All exempted declarations that are classified as red category (e.g. for rice and fertilizers) will be scanned and at least 50 percent (randomly selected), physically inspected. For goods that are accurately declared but have a conditional exemption or conditional temporary admission, a post clearance audit program will verify the final use of the goods. Violations will result in penalties.

- Customs will continue to strictly control consolidated cargo: (i) a declared detailed list of goods in the container (*liste de colisage*) is compulsory, (ii) each type of goods is declared separately with their individual value, and (iii) serious or repeated offences or non-compliance with these requirements result in penalties and suspension of the use of bonded warehouses.

- To enhance transparency, we will start to regularly publish aggregate information on tax crime prosecutions (i.e., cases, convictions, custodial sentences, reparation orders and court fines) by end-2017.

31. **We will work towards establishing a tax policy research and analysis unit under the MFB by end-2017,** to efficiently reconcile data from tax and customs administration and improve our analytical capacity for tax policymaking in the medium term. In addition, by December 2016 we will complete a comprehensive review of tax exemptions to large taxpayers and the free trade zones, to identify those measures harming the revenue base most and thus could contribute to a future broadening of the revenue base.

Pensions

32. **Reforms to the pension system will reduce public transfer needs and ensure its long-term sustainability**. Several measures have already been introduced, including a census of retirees that will reduce 2016 transfer amounts by MGA 10 billion. To aid predictability of transfer amounts, the contribution rates of the two pension schemes (CRCM and CPR) will be unified in January 2017, and the two schemes will be combined effective the beginning of 2019. Contribution rates will increase and the retirement age will rise to 65 in two steps. All these measures will reduce public transfers to the pension fund by MGA 50 billion per year to arrive to MGA 150 billion by 2019. In addition, we will implement recent recommendations of the World Bank TA report, including changing the basis for calculating pensions at the time of retirement from the last year's base salary, for example to the last five years.

State-Owned Enterprises

33. **We are implementing a restructuring plan to address Air Madagascar's difficult operational and financial situation.** In the context of the government's new international "open sky" policy and the objective of hosting 450,000 tourists annually within three years, we remain committed to rehabilitating Air Madagascar to be a commercially competitive and viable airline. Management and the Board were replaced following a month-long strike in 2015 over governance issues. To restore Air Madagascar's operational profitability by end-2016, the company is undertaking several measures: (i) restructuring its flight schedule to focus on more lucrative routes;

(ii) increasing its network partnerships; (iii) reducing maintenance and distribution costs; and (iv) initiating a staff reduction program of 30 percent (about 400 positions) of its workforce. Other major savings will be achieved via renegotiation of contracts and the replacement of the Airbus 340 fleet by Airbus 330. The Civil Aviation Authority of Madagascar and Air Madagascar were removed from EU's Annex B list on June 16, which will allow Air Madagascar to fly to Europe with its own crews and a Malagasy registration. This will significantly improve the performance of the route both operationally, with back-up equipment, and financially, with savings in the order of US$5M, making the route profitable. The restructuring plans include refinancing with a government guarantee of a loan of about $25 million to reduce high-cost debt. The government has taken the decision to divest a minority ownership share in a strategic partnership. With the help of financial advisers, the company is seeking options for strategic private sector participation by October 2016.

34. **The government wants to restructure the electricity and water company (JIRAMA) into an efficient, financially healthy enterprise.** Transfers from the government to JIRAMA in 2015 were very costly, and potential losses in 2016 threaten the execution of the budget. Our aim is to make JIRAMA an operationally viable company capable of self-financing its operations, including maintenance, by 2020. The strategy to improve the company's financial position is centered on boosting revenues and reducing costs. With the agreement of the Minister of Energy and Hydrocarbons, the *Office de Régulation de l'Electricité* (ORE) authorized an increase in tariffs – previously at 2009 levels in nominal terms – in June 2016 by 10 percent and a further five percent in July (prior action). For the future, we plan cost reductions and revenue enhancement, including gradual tariff increases if necessary, to achieve full operational cost recovery. We will install smart-meters on the 6,000 largest customers, representing 60 percent of total sales, and continue our program of on-site inspections of 20,000 customers each year. Our goal is to reduce total electricity losses (technical and non-technical) from around 35 percent in 2015 to 15 percent in 2020. We are preparing legislation to address the widespread losses by criminalizing the theft of electricity and water. To contain costs, we have conducted an audit of contracts, which revealed numerous weaknesses. We will review, renegotiate, or terminate contracts as needed and possible, based on the interests of the company and consistent with legal requirements. We are actively switching diesel-based generation facilities to be able to run on less expensive heavy fuel oil and are studying the installation of fuel consumption meters in all plants, as these are potentially important sources of savings.

35. **We will also undertake measures to address JIRAMA's governance problems**. With the support of the World Bank's PAGOSE program, we are developing a new business plan, which we will publish in 2016. We will also hire director level staff and above via a competitive recruitment

process. Corporate decisions will be founded on data derived from new Management Information Systems, funded by the PAGOSE project, to be installed at JIRAMA in 2017 and producing operational and financial reports in 2018. Future investment and contracts will be guided by the Least Cost Power Development Plan (LCPDP), estimated to be completed in 2017. Via implementation of this plan, we aim to gradually move away from imported, fuel-based generation to renewable sources of energy, such as hydropower, wind and solar. This plan will contain the company's strategy and action plans to identify investments on the basis of clear criteria, rules, and procedures, and the selection of private partners on a competitive basis. Other elements of the plan include tariff studies and plans to establish social safety nets. The PAGOSE project is also funding investment in new substations, transmission lines, and distribution systems in selected districts. In addition to the prior review of JIRAMA's procurement by the ARMP established by Ordinance (*Arrêté*) 7275/2016, JIRAMA's executive board announced on June 30, 2016 the requirement that all of the company's procurement contracts for the purchase of electricity and the purchase and rental of generators be awarded competitively through open bidding in conformity with the existing procurement law, until the adoption of the LCPDP expected in 2017. We will provide prior notification to World Bank and IMF staff of any exceptions (such as emergencies) allowing for single source procurement contracts for JIRAMA's purchases of electricity and purchases and rental of generators (continuous structural benchmark). In support of transparency, all tender offers and final contracts will be published on ARMP's website, according to normal procedures. There will be an independent annual audit of the contracts within six months of the end of company's fiscal year.

Personnel

36. **The government is working toward productive, efficient work force that will meet society's needs at a reasonable cost, creating space for other priority spending**. Audits of civil service personnel and pay data are being extended to sectoral ministries and are expected to yield further cost-savings over the next 18 months. An electronic platform for workforce planning (*Gestion Prévisionnelle des Effectifs, des Emplois et Compétences*) is expected to be completed by June 2017, with support from the European Union, paving the way to begin a comprehensive civil service census by end-2017. An evaluation of the effectiveness of the current sanctions system, including the *Conseil de Discipline de la Fonction Publique*, is underway, with a report expected by 2019. In addition, the Ministry of the Civil Service will terminate the employment of any civil servant convicted of a crime in accordance with Article 1 of the law 61-026. These measures will enhance the productivity of the civil service while reducing the public sector wage bill as a proportion of GDP.

C. Enhancing Economic Governance

Public Financial Management (PFM)

37. **The government is committed to strengthen controls of public spending**. We will reduce administrative discretion by developing more comprehensive administrative manuals, standardized procedures, and computerized data systems that automate critical processes, including, for example, the modernization and centralization of all MFB systems into the SIIGFP (*Système Informatisé et Intégré de Gestion des Finances Publiques*). We will furthermore reinforce external audits, including by timely submission of audit reports to the Parliament, and submit audit reports on actual spending for 2012-14 to the Parliament by end-November 2016 and the report for 2015 by end-June 2017. Expenditure management will be strengthened, particularly by open and competitive procurement procedures:

- The Prime Minister issued a "*note d'instruction*" to all public institutions and ministries reiterating that all procurement contracts (valued above MGA 140 million for public works, MGA 80 million for goods, and MGA 25 million for services) will be awarded competitively through open bidding, thereby limiting the use of restricted tenders to those in full compliance with legal provisions. Public institutions and ministries will be responsible for transmitting the instructions to the *Etablissements Publics Nationaux* (EPN) and public enterprises under their authority.
- To improve transparency and permit monitoring, the Autorité de Régulation des Marchés Publics (ARMP) will certify and publish all tender offers and final contracts on its website within 7 days of finalization. An independent annual audit of the ARMPs activities will be conducted, due within 180 days of the end of the calendar year (structural benchmark).
- The ARMP will ensure that the ordinance (arrêté) 7275/2016 subjecting State-Owned Enterprises to the public procurement code will be enforced.
- Requests for proposals for public procurement will be published on the ARMP website at least 30 calendar days before their due date, in addition to three publications, in accordance with the law.

38. **The government will develop a medium-term PFM strategy and action plan with the assistance of the AfDB and inputs from other development partners, including the IMF**. The action plan, developed in consultation with major stakeholders and intended for Cabinet approval by December 2016, will include:

- Full integration of cash flow needs from arrears clearance into Treasury plans and finalization of the accounting and monitoring of domestic arrears for the central government. In addition, we will review the arrears of other public entities, such as SOEs and sub national government levels, with a view to prevent future occurrence.
- Inclusion of an annex to the 2017 budget law detailing non-tax revenue in order to improve its transparency, coverage and risk management. The annex will be extended to include revenue collected from natural resources (mining, water, etc.) as of the 2018 budget law.
- Improvements in public investment management, taking into account the IMF TA mission planned for August 2016. This will include the establishment of a domestically-financed public investment project database, a list of donor financed projects as annexes to the budget law as of 2017, and a multi-year implementation schedule for existing projects.
- Introduction of the national framework for public-private partnerships (PPPs) to promote infrastructure investment within well-structured fiscal arrangements.
- The MFB intends to submit quarterly implementation reports on the action plan to the Steering Committee starting in the quarter after Cabinet approval.

39. **The MFB intends to implement several measures to improve transparency of SOE activities and strengthen monitoring of public sector contingent liabilities**: (i) publication and submission of the 2015 financial statements of ten large SOEs to the Court of Auditors: Air Madagascar, FANALAMANGA, CEM, ARO, ADEMA, SOAVOANIO, SPAT, SMMC, SONAPAR, and SEIMAD by end-December 2016 (structural benchmark); (ii) the accounts of two large SOEs, JIRAMA and KRAOMA, will require additional time to complete, and we intend to submit their 2015 and 2016 accounts to the Court of Auditors before the end of 2017; (iii) the 2017 budget law will commence publication of an annex that includes summary information on all SOEs, their names, activity, identity of all shareholders, equity of the government, and budgeted transfers and subsidies; and (iv) the Department of Financial Operations at the MFB will be strengthened to improve monitoring and reporting of SOEs, and to determine fiscal risks, with annual public reports starting in 2017.

Corruption

40. **The government launched a national strategy to fight corruption in 2015.** Key actions include: (i) drafting and approving new, stronger anti-corruption legislation; (ii) restructuring BIANCO (public anti-corruption agency) with the aim of increasing its independence and resources; (ii) establishing anti-corruption units at all ministries; (iii) developing an information system that tracks all legal anti-corruption cases from the start of proceedings until the final stage; (iv) establishing a commission to identify measures to improve the integrity of the judicial system;

(v) launching of a system for the coordination, monitoring, and evaluation of anti-corruption measures; and (vi) making the Council of Budget and Financial Discipline (CDBF) fully operational by a decree submitted by end-September 2016, which regulates the organization, office allocation, and appointment of senior staff (the CDBF's disciplinary decisions will be published online) (structural benchmark). We will update the range of fines that can be imposed in the budget law 2017 (as foreseen by the article 2 of the law 2004-06 on the CDBF).

41. **Three new draft laws under development aim to strengthen the anti-corruption legislation.** The draft laws on declaration of assets and the formation of anti-corruption centers were approved by the Council of Ministers in June 2016. The first draft law: (i) harmonizes the provisions on the declaration of assets; (ii) expands the definition of corruption offences; (iii) strengthens the protection of investigators, experts, judges, witnesses, and whistleblowers; and (iv) facilitates BIANCO's use of the asset declarations and support for the public prosecution during trials. The second draft law: (i) ensures the operational independence of each anti-corruption center and (ii) establishes an independent committee at each center that is responsible for staff recruitment and management, supervision, monitoring, and evaluation of the center activities. A third draft law on asset recovery is being drafted and: (i) establishes a procedure for recovering assets acquired through corruption and activities related to money laundering, financing of terrorism, and organized international crime; (ii) harmonizes procedures of seizure, freezing, and confiscation of assets; (iii) facilitates the seizure of assets during an ongoing investigation; (iv) regulates the management of recovered assets; and (v) establishes a procedure for monitoring and control of property that has been seized, frozen, and confiscated to ensure transparent management. The government submitted the first two laws to Parliament in June (prior action) and intends to submit the third law to Parliament at its session opening in October, in line with the relevant FATF recommendations on asset recovery (structural benchmark). In addition, the law to establish special courts for precious wood trafficking has been promulgated, and the implementing decrees are expected to be approved by end-September.

42. **Judicial reform is essential both in the fight against corruption and in our efforts to improve the business climate.** Justice must be served within a reasonable time frame consistently between court decisions. We are, therefore, developing measures to reduce the currently excessive delays in trying of court cases. We also aim to make all court cases available online to the general public. We will establish new guidelines for the assignment of court cases to reduce the risk that one party in a pending trial could have undue influence on the selection of the judge. The Supreme Judicial Council (*Conseil Supérieur de la Magistrature*) is critical for the functioning of our judicial system. In our efforts to safeguard the integrity of the judicial system, the governance of the Council

has been revised and a majority of the representatives of the judiciary are now elected by the judges.

43. **The government is committed to take all necessary actions to stem money laundering and the financing of terrorism (ML/FT).** The move toward a risk-based approach in the supervision of banks will be an important tool in developing a complete picture of existing risks in our financial system. In our efforts to identify the main ML/FT risks, we will complete a national risk assessment by end-2016, in cooperation with the World Bank. Once the risks have been identified, we will undertake the necessary measures to effectively address these risks. A World Bank mission on ML/FT risks in 2016 will assist our efforts and review existing legislation, regulations, and supervisory practices.

D. Strengthening Stability and Financial Sector Development

44. **Monetary policy has been complicated by monetary financing of the government and interventions in the foreign exchange market in recent years.** Petroleum subsidies in 2012-13 and uncollected accrued interest on government bonds put pressure on CBM's financial autonomy and restricted monetary policy operations. While within legal limits, CBM extended significant credit to the government through statutory advances in 2014 and 2015. In addition, concerned about potential depreciation of the official exchange rate, the CBM significantly influenced the official foreign exchange rate through buyback operations in 2015. These actions interfered with monetary policy objectives.

45. **We have launched measures to improve the foundation for a more independent decision-making on monetary policy.** The central bank has securitized its claims on the central government by an amount equal of 1.4 percent of GDP in 2015. The buyback operations in the foreign exchange market were discontinued in September 2015. A revised Central Bank Act which strengthens its independence was approved by the Council of Ministers and submitted in June 2016 to the Parliament, which subsequently passed it. The revised Act: (i) includes a phased reduction of the ceiling on statutory advances from the central bank down to 10 percent of ordinary revenues in 2016 and 7 percent of ordinary revenues in 2017 with a ceiling of MGA 301 billion in 2016; (ii) provides an effective mechanism for the automatic transfer of central bank losses and profits to the government; (iii) establishes an Audit Committee of the Board of Directors; and (iv) establishes an Executive Committee (composed of the Governor and two Deputy Governors) that will propose policies to the Board of Directors and will be in charge of the day-to-day operations of the central bank.

46. **The central bank is reinforcing its audit oversight and control environment.** An Audit Committee of the Board of Directors was established in November, 2015. The CBM Board has formalized its external audit policy and updated its internal audit charter to provide for a functional reporting line to the Board. Reports on all forms of credit to government and their compliance with statutory restrictions are now prepared for the CBM Board every six months. The central bank is in the process of implementing a time-bound capacity building plan that includes adoption of risk-based audit methodologies, development of technical competencies, professional internal audit certificates, and establishes a quality assurance program. A bank-wide procurement policy is also under preparation. Starting with the 2018 financial statements, the central bank accounts will be presented in accordance with International Financial Reporting Standards (IFRS, as a proforma). A safeguards assessment will be conducted by the first review.

47. **The central bank will take actions to improve the operational framework for monetary policy implementation, especially liquidity management.** The interbank money market and the market for secondary Treasury Bill trading are inactive. While there is significant excess liquidity in the money market, the seasonal fluctuations are strong and the excess liquidity is unevenly distributed among the banks. To ease the exchange of liquidity among the banks, the CBM's deposit auctions *Appel d'Offres Négatifs* (AONs) will be added to the list of acceptable collateral, and short-term, fine-tuning operations at the initiative of the CBM will be finalized by September 2016. Moreover, the creation of a repo market is important and a legal framework for repo transactions is expected to be in place by mid-2018. The central bank is also planning to establish an interest rate corridor for the interbank market and the central bank will strengthen its capacity to forecast monetary variables with the aim of managing bank liquidity more efficiently. CBM will engage in further technical assistance (TA) with the aim of setting explicit liquidity targets and intervening in the money market to achieve these targets. The reference interest rate will be allowed to fluctuate more and reflect in particular movements in the money market. Treasury Bill auctions are critical for bank liquidity and the Treasury will publish quarterly auction calendars on a rolling basis starting in September 2016. The legal framework regulating the interbank foreign exchange market is also in the process of being updated by June 2017.

48. **More resources will be allocated to strengthen financial supervision.** While the FSAP noted that the banking system has been resilient to past shocks, underlying vulnerabilities could become acute with continued financial sector growth. Our financial supervision, therefore, needs to become more proactive and penetrating. We have started the work to revise the legal framework for financial supervision. The aim is to strengthen: (i) the powers and responsibilities of the supervisory authorities; (ii) the operations of the supervisory authorities by increasing the number of staff,

initiating more on-site inspections, implementing more risk-based supervision, and increasing the co-operation with supervisors in other countries; and (iii) the prudential requirements and regulations by adjusting prudential ratios to international norms and developing new regulations to deal with governance (including related-party lending), risk management, and liquidity. We plan to: (i) continue close monitoring of all financially challenged micro-financial institutions (MFIs) and proceed to resolution by June-2017; (ii) complete the regulatory framework for banking supervision and make operational risk-based supervision by end-2017; and (iii) approve a new banking law strengthening banking supervision and a new law regulating MFIs by end-2018. Resolving problem institutions is also a priority and we plan to establish the legal framework for bank resolution, as part of a review of the banking law by end-2018, drawing on a report on a possible deposit guarantee scheme. In the meantime, we will pursue efforts to strengthen capacity to intervene in institutions in difficulty.

49. **Developing modern payment methods is important to reduce transaction costs and advance financial inclusion.** Three banks are currently authorized to issue electronic money in partnership with mobile telephone operators. Demand for these services is steadily increasing and about 4 percent of the population currently has an active mobile phone account. CBM will play an active role by developing the regulatory environment, participating in the drafting of a coordinated national strategy, and supervising the implementation of the interoperability project between operators to allow transactions across networks. The new law on electronic money, which will establish the rules for accessing and practicing the business of issuing electronic money and the prudential supervision of electronic money institutions, will be submitted to the Cabinet for approval by National Assembly by end-2016. A law regulating the entire national payment system, including the securities settlement systems and retail payments, is planned to be approved by end-2017. Access to reliable credit information is also important for financial development and we plan to approve a new law regulating the credit reporting system by end-2018.

50. **The supervision of non-bank financial institutions (NBFIs) needs to be strengthened.** We are currently reviewing the existing framework for the control and supervision of the NBFIs with the aim of establishing a new, more effective institutional structure. Most NBFIs (insurance, pensions, etc.) are controlled by the State and we aim to make their governing bodies more independent. The roles of the National Savings Fund (CEM) and the postal financial service need to be reviewed. Both institutions are financially challenged and competition is growing from new financial services (microfinance, mobile banking, etc.). To initiate the review, we intend to conduct an independent audit of CEM and the postal financial service (PAOMA), with results expected by end-2017. We are

going to begin preparing the transfer of insurance supervision to the CSFB, by end-2017, including the legal framework by end-2018, with the full transfer of responsibilities planned for end-2019.

E. Improving the Quality of Statistics

51. **The government considers that strengthening the statistical system is an essential part of achieving its development goals.** The government will improve coordination among various institutions and ensure that adequate resources are allocated for the production and dissemination of statistical data, including staffing, equipment, and training. We are currently developing a modern statistics law to govern the operations of statistical organizations, establish professional guidelines for data handlers, and lay out the obligations of individual and institutional data providers, along with sanctions for non-provision of data. The government is also elaborating the second *Stratégie Nationale pour le Développement de la Statistique (SNDS)* covering the period 2016-20. We aim to adopt the strategy in June 2017 and submit the law to the National Assembly in the second half of 2017. To improve coordination among institutions, the government will create the core of the successor to the *Comité de coordination des informations statistique et économique* to reconcile official statistics and improve sharing of information across institutions. The full committee will be operational by the end of 2017. We are also establishing memoranda of understanding first between the different statistical units at INSTAT and the Ministry of Finance and Budget and the Central Bank by end-2016, and subsequently with the other line Ministries and stakeholders by July 2017. With the assistance of our partners, we will continue to strengthen capacity and modernize INSTAT through the provision of additional training, equipment, and financial resources.

52. **The government will improve the compilation and dissemination of statistics.** INSTAT is taking steps, with the help of TA from the Fund and donors, to improve the CPI and National Accounts statistics including: (i) publishing a revised series of national accounts based on the 1993 SNA for 2007 and 2014 by December 2016 and disseminating the data for the intervening years by end-June 2017 (structural benchmark); (ii) publishing quarterly national accounts in June 2017; (iii) continuing the process of integrating natural capital into the national accounts (adjusted net saving and total wealth) by producing satellite accounts on water (2016), mines (2017), and forests (2018); (iv) reweighting the CPI components based on a recent household survey, and introducing the new goods and services into the basket in 2017; and (v) resuming the production of an Industrial Production Index in 2017. The CBM will migrate its balance of payments statistics to *BPM6* by March 2017 and begin producing and disseminating international investment position data. The BCM will also disseminate monetary and financial statistics in the Standardized Report

Forms over the next year. Finally, to strengthen the medium-term expenditure framework and enhance efficiency of public investments, the government will migrate the OGT to the *GFSM2014* methodology beginning in 2018. We have begun the preparation of a population census in 2017, the first in 24 years and intend to complete the physical counting in 2017, with the continuing support of our partners.

IV. PROGRAM MONITORING

53. **The program will be evaluated based on quantitative performance criteria and structural benchmarks (Tables 1 and 2) and semi-annual reviews**. Definitions of key concepts and indicators, as well as reporting requirements, are set out in the accompanying Technical Memorandum of Understanding (TMU). The first, second, and third reviews are scheduled to be completed on or after January 27, 2017, July 27, 2017, and January 27, 2018 respectively, based on test dates for periodic performance criteria of end-December 2016, end-June-2017, and end-December 2017, respectively.

Table 1. Madagascar: Quantitative Performance Criteria and Indicative Targets for the ECF Arrangement, 2016-17

	2016		2017	
	End-Sep.	End-Dec.	End-March	End-June
	Indicative Targets	Performance Criteria	Indicative Targets	Performance Criteria
	(Billions of Ariary; unless otherwise indicated)			
Fiscal				
Floor on primary balance excl. foreign-financed investment (commitment basis) [1]	-126	-184	180	148
External				
Ceiling on accumulation of new external payment arrears (US$ millions) [2]	0	0	0	0
Ceiling on new nonconcessional external debt with original maturity of more than one year, contracted or guaranteed by the central government or BCM (US$ millions) [3]				
Grant element of less than 35 percent	300	300	383	383
Grant element of less than 20 percent	100	100	100	100
Ceiling on new nonconcessional external debt with original maturity of up to and including one year, contracted or guaranteed by the central government or BCM (US$ millions) [2]	0	0	0	0
Central bank				
Floor on net foreign assets (NFA) of BCM (millions of SDRs) [4]	435	477	477	485
Ceiling on net domestic assets (NDA) of BCM [4]	1,524	1,441	1,566	1,678
	End-Sep.	End-Dec.	End-March	End-June
	Indicative Targets	Indicative Targets	Indicative Targets	Indicative Targets
Indicative targets				
Floor on social priority spending [1]	162	235	60	130
Floor on gross tax revenue [1]	2,491	3,587	846	1,875
Memorandum items				
Official external program support (millions of SDRs) [3]	52	127	127	153
Official external program grants (millions of SDRs) [1]	0	0	0	9
New concessional loans, contracted or guaranteed by the central government or BCM (US$ millions)[3]	687	1,055	1,422	1,790
Program exchange rate (MGA/SDR)	4,443.86	4,443.86	4,443.86	4,443.86

Sources: Madagascar authorities; and IMF staff projections.

[1] Cumulative figures from the beginning of each calendar year.

[2] Cumulative ceilings that will be monitored on a continuous basis starting from end-May, 2016.

[3] Cumulative ceilings that will be monitored on a continuous basis starting from January 1, 2016.

[4] The total stock of NFA and NDA measured at the program exchange rate.

Table 2. Madagascar: Prior Actions and Structural Benchmarks through End-June 2017

Action	Tentative Dates
Prior actions	
Submission to Parliament of a supplementary budget with measures outlined in the MEFP. (¶24)	Prior action
Increase in the weighted-average electricity tariffs by 15 percent compared to April 2016. (¶34)	Prior action
Submission to Parliament of draft laws (i) establishing special anti-corruption centers that ensures the operational independence of each center and establishes an independent committee at each center that is responsible for staff recruitment and management, supervision, monitoring, and evaluation of the center activities; and (ii) strengthening asset declarations and their use, as well as expanding the definition of corruption offenses. (¶41)	Prior action
Promoting inclusive growth	
Integrate health and education sectoral spending plans into a medium-term budget framework. (¶12)	End-June 2017
Mobilizing fiscal revenue	
Enforce the collection of outstanding tax arrears by collecting at least MGA 30 billion of tax arrears in 2016 and publish a report on outstanding arrears. (¶30)	End-February 2017
Publish a report that summarizes the tax credits granted and irregular tax credits that will have been cancelled by major companies. (¶30)	End-June 2017
Improving the composition and quality of fiscal spending	
Continued implementation of the automatic pricing formula for maintaining full cost-recovery fuel prices (for diesel, gasoline, and kerosene. (¶23)	Continuous benchmark
Conduct an independent annual audit of the *Autorité de Régulation des Marchés Public's* (ARMP's) activities. (¶37)	End-June 2017
Enhancing economic governance	
The terms and conditions of all PPP contracts will be published within one month of the date of signature on ARMP's web site. (¶20)	Continuous Benchmark
Prior notification of World Bank and IMF staff of any exceptions (such as emergencies) allowing for single source procurement contracts for JIRAMA's purchases of electricity and purchases and rentals of generators. (¶35)	Continuous Benchmark
Make the Council of Budget and Financial Discipline (CDBF) operational by issuing a decree, appointing its staff, and publishing its disciplinary decisions. (¶40)	End-September 2016
Submission to Parliament of the law regulating the collection, administration, and management of assets that have been seized because of investigations related to corruption, embezzlement, money laundering, financing of terrorism, or organized international criminal activities, in line with the relevant FATF recommendations. (¶41)	End-October 2016
Publication and submission of the 2015 financial statements of ten large SOEs to the Court of Auditors: Air Madagascar, FANALAMANGA, CEM, ARO, ADEMA, SOAVOANIO, SPAT, SMMC, SONAPAR, and SEIMAD. (¶39)	End-December 2016
Improving quality of statistics	
Publish revised series of national accounts based on the 1993 System of National Accounts for the period 2007-14. (¶52)	End-June 2017

Attachment II. Technical Memorandum of Understanding, July 2016

1. This technical memorandum of understanding (TMU) contains definitions and adjuster mechanisms that clarify the measurement of quantitative performance criteria and indicative targets in Tables 1 and 2, which are attached to the Memorandum of Economic and Financial Policies for 2016-17. Unless otherwise specified, all quantitative performance criteria and indicative targets will be evaluated in terms of cumulative flows from the beginning of each calendar year.

I. GENERAL DEFINITIONS

2. For purposes of this TMU, **external** and **domestic** shall be defined on a residency basis.

3. **Government** is defined for the purposes of this TMU to comprise the scope of operations of the treasury shown in the *opérations globales du Trésor* (or OGT). The government does not include the operations of state-owned enterprises and sub-national authorities.

4. The program exchange rates for the purposes of this TMU[1] are as follows:

Program Exchange Rates	
Malagasy Ariary (MGA)/SDR	4,443.86
U.S. Dollar/SDR	1.389049
Euro/SDR	1.270538
Australian dollar/SDR	1.903723
Canadian dollar/SDR	1.926401
Japanese Yen/SDR	167.377024
Swiss Franc	1.375855
U.K. Pound Sterling/SDR	0.937470

Foreign currency accounts denominated in currencies other than the SDR will first be valued in SDRs and then be converted to MGA. Amounts in other currencies than those reported in the table above and monetary gold will first be valued in SDRs at the exchange rates and gold prices that prevailed on December 31, 2015, and then be converted to MGA.

5. Performance criteria included in the program, as defined below, refer to the net foreign assets and net domestic assets of the central bank, external payments arrears, non-concessional external debt owed or guaranteed by the central government and/or the central bank, and the

[1] Data refer to the mid-point reference exchange rates published on the CBM's webpage for December 30, 2015. Data were downloaded June 1, 2016.

primary balance excluding foreign financed investment (commitment basis). Performance criteria will be set for end-December 2016 and end-June 2017 while indicative targets will be set for end-September 2016 and end-March 2017.

II. PROVISION OF DATA TO THE FUND

6. Data with respect to all variables subject to performance criteria and indicative targets will be provided to Fund staff monthly with a lag of no more than four weeks for data on net foreign assets (NFA) and net domestic assets (NDA) of the Central Bank of Madagascar (CBM) and six weeks for other data (Table 1). The authorities will promptly transmit any data revisions to the Fund. For variables assessing performance against program objectives but which are not specifically defined in this memorandum, the authorities will consult with Fund staff as needed on the appropriate way of measuring and reporting.

III. QUANTITATIVE PERFORMANCE CRITERIA

A. Fiscal Aggregates

1. Floor on primary balance excluding foreign financed investment (commitment basis)

7. The primary balance excluding foreign financed investment (commitment basis) is measured as total domestic revenue less spending excluding interest payments and foreign financed investment. Total domestic revenues include tax and non-tax revenues plus current (budgetary) grants. For the purposes of calculating the primary balance, tax revenues are measured on a net basis, i.e., net of the refund of VAT credits. Spending includes expenditures on wages and salaries, goods and services, transfers, and subsidies, treasury operations (net) excluding the refund of VAT credits, and domestically financed capital expenditure. The primary balance excluding foreign financed investment (commitment basis) will be calculated cumulatively from the beginning of the calendar year.[2] For reference, for the year ending December 2015, the domestic primary current balance (commitment basis) was MGA -377 billion, calculated as follows:

Primary balance excluding foreign financed investment (commitment basis)	-377
Total revenue and current grants	2,999
Total revenue	2,959
Net tax revenue	2,878
Non-tax revenue	81
Current grants	40
Less:	
Current expenditures	3,101
Wages and salaries	1,566
Goods and services	157

[2] Projections for domestic taxes and other treasury operations (net) in 2016 include an amount of MGA 90 billion corresponding to tax arrears of Air Madagascar used for its recapitalization.

Transfers and subsidies	966
Treasury operations (net)	412
Domestic financed capital expenditures	275

B. External Debt

1. Ceiling on accumulation of new external payment arrears

8. These arrears consist of overdue debt-service obligations (i.e., payments of principal and interest) related to loans contracted or guaranteed by the government or CBM. Debt service obligations (including unpaid penalties and interest charges) are considered overdue if they have not been paid 90 days after the due date or after the end of grace period agreed with, or unilaterally granted by, each creditor before the due date. They exclude arrears resulting from nonpayment of debt service for which the creditor has accepted in writing to negotiate alternative payment schedules, as well as debt service payments in conformity with contractual obligations that fail to materialize on time for reasons beyond the control of the Malagasy authorities. This monitoring target should be observed on a continuous basis from end-May 2016.

2. Ceilings on new non-concessional external debt

9. For program monitoring purposes, a debt is concessional if it includes a grant element of at least 35 percent, calculated as follows; the grant element of a debt is the difference between the nominal value of debt and its net present value (NPV), expressed as a percentage of the nominal value of the debt. The NPV of debt at the time of its contracting is calculated by discounting the future stream of payments of debt service due on this debt. The discount rate used for this purpose is 5 percent. Debt is considered as semi-concessional if it includes a grant element of at least 20 percent, calculated as described above.

10. Where an external loan agreement contains multiple disbursements and where the interest rate for individual disbursement are linked to the evolution of a reference rate since the date of signature, the interest rate at the time of signature will apply for the calculation of the grant element for all disbursements under the agreement.

11. For program monitoring purposes, the definition of debt is set out in point 9 of the *Guidelines on Performance Criteria with Respect to External Debt in Fund Arrangement adopted by the Decision No. 6230-(79/140) of the Executive Board of the IMF*, as subsequently amended, including by Executive Board Decision No. 15688-(14-107), adopted December 5, 2014 (see Annex 1). External debt is defined by the residency of the creditor.

12. For loans carrying a variable interest rate in the form of a benchmark interest rate plus a fixed spread, the PV of the loan would be calculated using a program reference rate plus the fixed spread (in basis points) specified in the loan contract. The program reference rate for the six-month USD LIBOR is 3.37 percent and will remain fixed for the duration of the program. The spread of six-month Euro LIBOR over six-month USD LIBOR is -249 basis points. The spread of six-month JPY

LIBOR over six-month USD LIBOR is -286 basis points. The spread of six-month GBP LIBOR over six-month USD LIBOR is -108 basis points. For interest rates on currencies other than Euro, JPY, and GDP, the spread over six-month USD LIBOR is -209 basis points.[3] Where the variable rate is linked to a benchmark interest rate other than the six-month USD LIBOR, a spread reflecting the difference between the benchmark rate and the six-month USD LIBOR (rounded to the nearest 50 bps) will be added.

Medium- and Long-Term External Debt

13. Two continuous ceilings apply to new non-concessional external debt with nonresidents with original maturities of more than one year contracted or guaranteed by the government or CBM. The ceilings apply to debt and commitments contracted or guaranteed for which value has not yet been received. They apply to private debt for which official guarantees have been extended and which, therefore, constitutes a contingent liability of the government or CBM. The first ceiling concerns new non-concessional external debt with nonresidents with original maturities of more than one year contracted by the government or CBM with a grant element of less than 35 percent and the second ceiling concerns new non-concessional external debt with nonresidents with original maturities of more than one year contracted by the government or the CBM with a grant element of less than 20 percent. These monitoring targets should be observed on a continuous basis from January 1, 2016.

14. Excluded from the ceiling are (i) the use of IMF resources; (ii) concessional debts; (iii) debts incurred to restructure, refinance, or prepay existing debts, to the extent that such debt is incurred on more favorable terms than the existing debt and up to the amount of the actually restructured/refinanced/prepaid debt; and (iv) debts classified as international reserve liabilities of CBM. If the government has a special need for external non-concessional financing, discussions with IMF staff should take place in advance to consider including the request in the program.

Short-Term External Debt

15. A continuous ceiling applies to new non-concessional external debt with nonresidents with original maturities of up to and including one year contracted or guaranteed by the government or CBM. The ceiling applies to debt and commitments contracted or guaranteed for which value has not yet been received. It applies to private debt for which official guarantees have been extended and which, therefore, constitutes a contingent liability of the government or CBM. This monitoring target should be observed on a continuous basis from end-May 2016.

16. Excluded from the ceiling are (i) concessional debts; (ii) debts incurred to restructure, refinance, or prepay existing debts, to the extent that such debt is incurred on more favorable terms than the existing debt and up to the amount of the actually restructured/refinanced/prepaid debt;

[3] The program reference rate and spreads are based on the "average projected rate" for the six-month USD LIBOR over the following 10 years from the Fall 2015 World Economic Outlook (WEO).

(iii) debts classified as international reserve liabilities of CBM; and (iv) normal import financing. A financing arrangement for imports is considered to be "normal" when the credit is self-liquidating.

C. Monetary Aggregates

1. Floor on Net Foreign Assets of the Central Bank of Madagascar

17. The target floor for NFA of the CBM is evaluated using the end-period stock, calculated at program exchange rates. The NFA of CBM is defined as the difference between CBM's gross foreign assets and total foreign liabilities, including debt owed to the IMF. All foreign assets and foreign liabilities are converted to SDRs at the program exchange rates, as described in paragraph 4. For reference, at end-December 2015, NFA was MGA 1,763 billion, calculated as follows:

Foreign Assets	2,665.623
Cash	0.040
Demand deposits	366.972
Term deposits and securities	2,032.812
Other foreign assets (including SDR holdings)	265.798
Foreign Liabilities	902.863
Of which:	
Non-residents deposits	0.761
Deposits of international organizations	0.278
Use of Fund credit and loans	381.495
Medium-and long-term foreign liabilities *(including SDR allocation)*	520.329
Net Foreign Assets	1,762.760

2. Ceiling on Net Domestic Assets of the Central Bank of Madagascar

18. The target ceiling on NDA of the CBM is evaluated using the end-period stock, calculated at program exchange rates. The NDA of CBM are defined as the difference between reserve money and the NFA of the CBM valued in MGA using the program exchange rates as described in paragraphs 4 and 17. It includes net credit to the government, credit to the economy, claims on banks, liabilities to banks (including the proceeds of CBM deposit auctions—*appels d'offres négatifs,* and open market operations), and other items (net). For reference, at end-December 2015, NDA was MGA 1,304 billion, calculated as follows:

Net Foreign Assets	1,762.760
Base Money	3,066.683
Of which:	
Currency in circulation	2,115.441
Currency in banks	188.180

Bankers' reserves	762.484
Other deposits included in monetary base	0.578
Net Domestic Assets	1,303.923
Of which:	
Net credit to the central government	1,049.296
Credit to the economy	5.865
Net credit to banks	-110.000
Other items (net)	358.762

IV. INDICATIVE TARGETS

A. Floor on priority social spending

19. **Priority social spending** includes domestic spending primarily related to interventions in nutrition, education, health, and the provision of social safety nets. The floor on priority social spending by the central government will be calculated cumulatively from the beginning of the calendar year. The floor is set as the sum of the budget allocations in the *Loi de Finance* to the Ministries of Health, Education, Population and Water, excluding salaries and externally financed investment.

B. Floor on gross tax revenue

20. **Government tax revenue** is measured on a gross basis, that is, before the refund of VAT credits. It comprises all domestic taxes and taxes on foreign trade received by the central government treasury. Tax revenue excludes: (1) the receipts from the local sale of in-kind grants, (2) any gross inflows to the government on account of signature bonus receipts from the auction of hydrocarbon and mining exploration rights, and (3) tax arrears recorded in the context of regularization operations, such as those related to the recapitalization of Air Madagascar in 2016. Revenue will be measured on a cash basis as reported in the table of government financial operations prepared by the Directorate of Budget and the Directorate of Treasury in the Ministry of Finance and Budget. The floor on gross tax revenue will be calculated cumulatively from the beginning of the calendar year. For reference, for the year ending December 2015, gross government tax revenue was MGA 3,012 billion, comprised of net tax revenue of MGA 2,878 billion and VAT refunds of MGA 134 billion.

V. MEMORANDUM ITEMS

21. **Official external program support is defined as grants and loans**, including in-kind aid when the products are sold by the government and the receipts are earmarked for a budgeted spending item, and other exceptional financing provided by foreign official entities and the private sector and incorporated into the budget. Official external support does not include grants and loans earmarked to investment projects. Official external program support is calculated as a cumulative flow from January 1, 2016.

22. **Official external program grants are defined as grants**, including in-kind aid when the products are sold by the government and the receipts are earmarked for a budgeted spending item, and other exceptional financing provided by foreign official entities and incorporated into the budget. Official external program grant support does not include grants earmarked to investment projects. Official external program grants calculated as a cumulative flow from the beginning of the calendar year.

23. **New concessional external debt contracted or guaranteed with original maturity of more than one year by the central government or the CBM** measures such debt with a grant element of at least 35 percent.

VI. USE OF ADJUSTERS

24. The performance criteria on net foreign assets of the CBM and net domestic assets of the CBM will be adjusted in line with deviations from amounts projected in the program for official external program support. These deviations will be calculated cumulatively from January 1, 2016. The following is an explanation of these adjustments:

- The floor on NFA will be adjusted *downward (upward)* by the cumulative deviation downward (upward) of actual from projected budget support (official external program support). This adjustment will be capped at the equivalent of SDR75 million, evaluated at program exchange rates as described in paragraph 4.

- The ceiling on NDA will be adjusted *upward (downward)* by the cumulative deviation downward (upward) of actual from projected budget support (official external program support). This adjustment will be capped at the equivalent of SDR75 million, evaluated at program exchange rates as described in paragraph 4.

25. The performance criteria on the primary balance excluding foreign financed investment (commitment basis) will be adjusted in line with deviations from amounts projected in the program for official external program grants. These deviations will be calculated cumulatively from the end of each calendar year. The following is an explanation of these adjustments:

- The floor on the primary balance excluding foreign financed investment (commitment basis) will be adjusted downward by the cumulative deviation downward of actual from projected official external program grant. This adjustment will be capped at the equivalent of SDR15 million, evaluated at program exchange rates as described in paragraph 4.

Table 1. Madagascar: Data Reporting Requirements

Item	Periodicity
Exchange rate data	
Central Bank of Madagascar (CBM)	
Total daily CBM gross purchases of foreign exchange – break down by currency purchased	Daily, next working day
The weighted average exchange rate of CBM gross purchases, the highest traded exchange rate, and the lowest traded exchange rate –break down by currency purchased	Daily, next working day
Total daily CBM gross sales of foreign exchange – break down by currency purchased	Daily, next working day
The weighted average exchange rate of CBM gross sales, the highest traded exchange rate, and the lowest traded exchange rate – break down by currency purchased	Daily, next working day
Total CBM net purchases/sales of foreign exchange - break down by currency purchased	Daily, next working day
Total interbank foreign exchange transactions (net of CBM transactions) - break down by currency purchased	Daily, next working day
Total interbank and retail foreign exchange transactions (net of CBM transactions) - break down by currency purchased	Daily, next working day
Monetary, interest rate, and financial data	
Central Bank of Madagascar (CBM)	
Foreign exchange cash flow, including foreign debt operations	Monthly
Stock of gross international reserves (GIR) and net foreign assets (NFA), both at program and market exchange rates	Monthly
Detailed data on the composition of gross international reserves (GIR), including currency composition	Monthly
Market results of Treasury bill auctions, including the bid level, bids accepted or rejected, and interest rates	Monthly
Stock of outstanding Treasury bills	Monthly
Data on the secondary market for Treasury bills and other government securities	Monthly
Bank-by-bank data on excess/shortfall of required reserves	Monthly
Money market operations and rates	Monthly
Bank lending by economic sector and term	Monthly
Balance sheet of CBM	Monthly, within two weeks of the end of each month
Balance sheet (aggregate) of deposit money banks	Monthly, within six weeks of the end of each month
Monetary survey	Monthly, within six weeks of the end of each month
Financial soundness indicators of deposit money banks	Quarterly, within eight weeks of the end of the quarter

Table 1. Madagascar: Data Reporting Requirements (Concluded)	
Item	**Periodicity**
Fiscal data	
Ministry of Finance and Budget (MFB)	
Preliminary revenue collections (customs and internal revenue)	Monthly, within three weeks of the end of each month
Treasury operations (OGT)	Monthly, within eight weeks of the end of each month
Stock of domestic arrears, including arrears on expenditure and VAT refunds	Monthly, within eight weeks of the end of each month
Priority social spending as defined by the indicative target	Monthly, within eight weeks of the end of each month
Subsidies to JIRAMA's suppliers	Monthly, within eight weeks of the end of each month
State-owned enterprise data	
Data summarizing the financial position of JIRAMA and Air Madagascar	Quarterly, by the end of the subsequent quarter
Debt data	
Ministry of Finance and Budget (MFB)	
Public and publically-guaranteed debt stock at end of month, including: (i) by creditor (official, commercial domestic, commercial external); (ii) by instrument (Treasury bills, other domestic loans, external official loans, external commercial loans, guarantees); and (iii) in case of new guarantees, the name of the guaranteed individual/institution.	Monthly, within four weeks of the end of each month
External data	
Central Bank of Madagascar (CBM)	
Balance of payments	Quarterly, by the end of the subsequent quarter
Real sector and price data	
INSTAT	
Consumer price index data (provided by INSTAT)	Monthly, within four weeks of the end of each month
Details on tourism	Monthly, within twelve weeks of the end of each month
Electricity and water production and consumption	Monthly, within twelve weeks of the end of each month
Other data - OCH	
Petroleum shipments and consumption	Monthly, within four weeks of the end of each month

Annex I. Guidelines on Performance Criteria with Respect to External Debt

Excerpt from paragraph 8(a) of the Guidelines on Public Debt Conditionality in Fund Arrangements attached to Executive Board Decision No. 15688-(14/107), adopted December 5, 2014.

8. (a) For the purpose of these guidelines, the term "debt" will be understood to mean a current, i.e., not contingent, liability, created under a contractual arrangement through the provision of value in the form of assets (including currency) or services, and which requires the obligor to make one or more payments in the form of assets (including currency) or services, at some future point(s) in time; these payments will discharge the principal and/or interest liabilities incurred under the contract. Debts can take a number of forms, the primary ones being as follows:

i) loans, i.e., advances of money to the obligor by the lender made on the basis of an undertaking that the obligor will repay the funds in the future (including deposits, bonds, debentures, commercial loans and buyers' credits) and temporary exchanges of assets that are equivalent to fully collateralized loans under which the obligor is required to repay the funds, and usually pay interest, by repurchasing the collateral from the buyer in the future (such as repurchase agreements and official swap arrangements);

ii) suppliers' credits, i.e., contracts where the supplier permits the obligor to defer payments until sometime after the date on which the goods are delivered or services are provided; and

iii) leases, i.e., arrangements under which property is provided which the lessee has the right to use for one or more specified period(s) of time that are usually shorter than the total expected service life of the property, while the lessor retains the title to the property. For the purpose of these guidelines, the debt is the present value (at the inception of the lease) of all lease payments expected to be made during the period of the agreement excluding those payments that cover the operation, repair, or maintenance of the property.

(b) Under the definition of debt set out in this paragraph, arrears, penalties, and judicially awarded damages arising from the failure to make payment under a contractual obligation that constitutes debt are debt. Failure to make payment on an obligation that is not considered debt under this definition (e.g., payment on delivery) will not give rise to debt.

INTERNATIONAL MONETARY FUND

REPUBLIC OF MADAGASCAR

July 12, 2016

REQUEST FOR AN ARRANGEMENT UNDER THE EXTENDED CREDIT FACILITY; FIRST REVIEW UNDER THE STAFF MONITORED PROGRAM—INFORMATIONAL ANNEX

Prepared By
African Department

In collaboration with other departments, the World Bank, and the African Development Bank.

CONTENTS

FUND RELATIONS

(As of June 30, 2016)

Membership Status: Joined: September 25, 1963; Article VIII

General Resources Account:	**SDR Million**	**%Quota**
Quota	122.20	100.00
Fund Holdings of currency	122.13	99.94
Reserve Tranche Position	0.07	0.06

SDR Department:	**SDR Million**	**%Allocation**
Net cumulative allocation	117.09	100.00
Holdings	53.72	45.88

Outstanding Purchases and Loans:	**SDR Million**	**%Quota**
RCF Loans	61.10	50.00
ECF Arrangements	19.44	15.91

Latest Financial Arrangements:

Type	Date of Arrangement	Expiration Date	Amount Approved (SDR Million)	Amount Drawn (SDR Million)
ECF[1]	Jul 21, 2006	Jul 20, 2009	73.32	53.03
ECF	Mar 01, 2001	Mar 01, 2005	91.65	91.65
ECF	Nov 27, 1996	Nov 30, 2000	81.36	78.68

[1] Formerly PRGF.

Projected Payments to Fund[2]

(SDR Million; based on existing use of resources and present holdings of SDRs):

	Forthcoming				
	2016	2017	2018	2019	2020
Principal	5.30	8.25	5.89	3.06	6.11
Charges/Interest	0.02	0.04	0.04	0.04	0.04
Total	5.32	8.28	5.93	3.09	6.15

[2]When a member has overdue financial obligation outstanding for more than three months, the amount of such arrears will be shown in this section.

Implementation of HIPC Initiative:

I. Commitment of HIPC assistance	Enhanced Framework
Decision point date	Dec 2000
Assistance committed	
by all creditors (US$ Million)[1]	835.75
Of which: IMF assistance (US$ million)	19.17
(SDR equivalent in millions)	14.73
Completion point date	Oct 2004
II. 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

[1]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. Hence these two amounts cannot be added.

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

Implementation of Multilateral Debt Relief Initiative (MDRI):

I. MDRI – eligible debt (SDR Million)[1]	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]The MDRI provides 100 percent debt relief to eligible member countries that qualified for the assistance. Grant assistance from the MDRI Trust and HIPC resources provide debt relief to cover the full stock of debt owed to the Fund as end-2004 that remains outstanding at the time the member qualifies for such debt relief.

Implementation of Catastrophe Containment and Relief (CCR): Not Applicable.

Safeguards Assessments:

A safeguards assessment for *Banque Centrale de Madagascar* (BCM) was completed in January 2015. Previous assessments were completed in March 2006 and September 2008. The update assessment found that the political crisis in Madagascar during 2009-14 has affected the governance and financial autonomy of the BCM. Capacity building and the development of internal controls have also been interrupted and little progress had been made in implementing the safeguards measures recommended by the 2006 and 2008 assessments. The 2015 assessment updated the recommendations in all areas of the safeguards framework. Most important, oversight of the BCM's audit and operations needs to be established through an audit committee of the BCM Board. The central bank should resume regular publication of its audited financial statements, take steps to improve the external audit quality, and implement International Financial Reporting Standards (IFRS). Some key functions, including internal audit, should be modernized and the BCM legal framework updated to better safeguard its autonomy and strengthen governance.

Exchange Rate Arrangement:

The currency of the Republic of Madagascar is the Malagasy ariary. The de jure exchange rate arrangement is free floating. The exchange rate is determined in the official interbank market. The Central Bank of Madagascar (CBM) intervenes in the interbank market to smooth large exchange rate fluctuations and meet foreign reserve targets. Information on CBM daily interventions is not publicly available. The minimum, maximum, and weighted average daily rates as well as the number and amount of transactions are made available to the public through the CBM official site. The de facto exchange rate arrangement is classified as floating.

The exchange rate followed a pre-determined path until September 2015, and has been free-floating since. In 2015, the central bank undertook buyback operations in the foreign exchange market which artificially maintained the published exchange rate at a more appreciated level of than the market exchange rate. In March 2015, the central bank reduced the scope of the buyback operations and the official exchange rate depreciated by 10 percent against the US Dollar. In early September 2015, the central bank completely discontinued the buyback operations.

The Republic of Madagascar accepted the obligations of Article VIII of the IMF Articles of Agreement with effect from September 18, 1996. The Republic of Madagascar maintains an exchange system free of restrictions on the making of payments and transfers for current international transactions.

Article IV Consultation:

The most recent Article IV consultation was concluded on January 16, 2015 (Country Report No. 15/24).

Financial Sector Assessment Program (FSAP), Reports on Observance of Standards and Codes (ROSCs), and Offshore Financial Center (OFC) Assessments:

FSAP conducted in October 2015. To be concluded in July 2016.

Technical Assistance:

Technical assistance provided to Madagascar following the normalization of relations in March, 2014 are listed below.

Fiscal Affairs Department (FAD)	**Year of delivery**
Diagnostic Mission: Improving Tax and Customs Revenue Collection	2014
PFM Reform Strategy	2014
Medium-Term Fiscal Framework (MTFF)	2014
Energy Subsidy Reform	2014
Tax Policy Review	2014
MTFF and Natural Resources Management	2014
Tax Administration: Review of the legal framework for taxation of mining and petroleum operations	2015
Revenue Mobilization: Transfer pricing	2015

Budget Formulation: Strengthening medium-term macro fiscal and budget frameworks	2015
Customs Administration: Risk management and post clearance audit	2015
Revenue Administration: Action plan to improve tax and customs revenue collection	2015
Public expenditure management: Control and audit on public expenditure	2015
Management of Expenditure Arrears	2015
Medium-Term Budgeting, Budget Classification, and Natural Resource Management	2016
MTEF and Fiscal Strategy Paper	2016
Public Investment Management Assessment	2016

Monetary and Capital Markets Department (MCM)

Technical Assistance Needs Assessment Diagnostic	2014
Introduction of IFRS in Central Bank Accounting	2015
Strengthening Internal Audit and Controls	2015
Transitioning to a Modern Monetary Policy Operational Framework	2015
Set Objectives for Monetary Policy (AFS)	2015
Coherent Approach to Monetary Policy Formulation (AFS)	2015
Liquidity Management and Forecasting (AFS)	2015
Functioning of the Interbank Foreign Exchange Market (AFS)	2015
Strengthening Internal Audit	2015
Inflation Analysis and Forecasting (AFS)	2015
Central Bank Accounting and Auditing	2016

Legal Department (LEG) and Monetary and Capital Markets Department (MCM)

Central Banking Law	2014

Statistics Department (STA)

National Accounts (AFS)	2015
Balance of Payments Statistics	2015
Multisector Statistics	2015
Monetary and Financial Statistics	2015
National Accounts (AFS)	2015
Price Statistics (AFS)	2016
Open Data Initiative	2016

Resident Representative:

Mr. Patrick Imam has been the Resident Representative since September 2014.

RELATIONS WITH THE WORLD BANK GROUP

(As of May, 2016)

1. The Fund and the Bank teams working on Madagascar met to discuss reform priorities and the division of labor. The meeting was chaired by Mr. Mills (IMF) and Ms. Kubota (World Bank).

2. The teams agreed that Madagascar's main economic challenge is to create the foundation for a sustained economic recovery and poverty reduction. To meet this challenge, Madagascar needs to: (i) broaden the tax base and implement tax and customs administration reforms; (ii) improve the allocation and use of public resources to raise the economy's productivity, improve service delivery, and help meet acute social needs of vulnerable groups through reduced subsidies and transfers to public enterprises and civil service reforms, including pension reform; (iii) strengthen public financial management, including: reporting, monitoring and control systems; (iv) advance other policies that support economic growth and improve the business climate, including actions that strengthen governance and create a level playing field for the private sector; (v) proceed with reforms that improve central bank operations and strengthen financial sector stability; and (vi) promote financial access and financial inclusion.

3. Based on this assessment, the teams identified the following structural reform areas as macro-critical:

- **Tax and customs administration reform:** Tax revenues are at historically low levels because of the large informal economy, corruption, and weak administration. Corruption is also widespread in customs with many discretionary and non-transparent customs duty exemptions.

- **Public financial management (PFM) reform:** Actual budget allocations deviate significantly from the original budget. Key reforms include medium-term budgeting, budget execution and expenditure control (including control of SOEs and procurement), developing a risk-based audit strategy, and identifying and auditing existing domestic arrears and devising a strategy for their clearance as well as for avoiding the build-up of new arrears.

- **Economic governance and corruption:** Governance weakened significantly after the unconstitutional change of government in 2009. Corruption undermines sound policy implementation and there is a need to resolve systemic weaknesses in the tax and customs administrations and public expenditure management and sanction people involved in corrupt behavior. Potential actions include: (i) reducing the room for administrative discretion; (ii) firmer sanctioning of non-performing public officials and prosecution of suspected offenders; (iii) strengthening asset declarations and asset recovery legislation; (iv) reducing delays in the trying of commercial cases; and (v) launching a randomized case assignment system.

- **Business environment reform:** In addition to improved governance, reforms creating a level playing field and reducing excessive bureaucratic procedures would be critical to improve the business climate. In this context it is also essential to modernize the mining and petroleum codes to bring them in line with good international practice.

- **Public investment and debt management:** While infrastructure investment is essential to support economic growth, implementation of the priority investment plan must be phased in such a way that debt is maintained at sustainable levels. As the legal and regulatory framework is being established for publicly guaranteed loans and PPP projects, the capacity for risk evaluation and surveillance should be reinforced.

- **Service delivery and social safety nets:** Public spending on health and education is lagging other Sub-Saharan African countries and the gap is growing. Access and use of basic healthcare is not universal, decreasing, and increasingly rationed by money. It will be important to scale up and target fiscal spending in favor of the most vulnerable, through demand side interventions such as cash transfer to households conditional on children attending school, and supply side interventions such as rehabilitation of basic health centers, increased provision of basic vaccines, and repairing and building school buildings.

- **Public enterprise reform:** Public enterprises were established with the objective of providing better services and products at less cost to the consumers. However, in some cases (including the public utility company JIRAMA and Air Madagascar) consumers are now offered poor services from inefficient companies that also need government subsidies to run their operations. The aim of public enterprise reform is to improve services, develop sectoral policies and appropriate regulatory frameworks, and restructure inefficient public enterprises.

- **Central bank operations:** Important to improve the operational framework for monetary policy implementation, especially liquidity management. The interbank money market and the market for secondary T-Bill trading are inactive. While there is significant excess liquidity in the money market, the seasonal fluctuations are strong and the excess liquidity is unevenly distributed among banks.

- **Financial sector stability:** Madagascar's financial system has adapted to a difficult environment, but vulnerabilities are significant and could intensify rapidly. Supervision of banks and nonbanks needs to become more risk-based and assertive and a bank intervention and resolution mechanism must be put in place.

- **Financial access and inclusion:** Micro-financial institutions (MFIs) are still small but growing rapidly. New measures, including stronger supervision, are needed to strengthen consumer protection and financial education.

- **Reform of the statistical system:** Key statistics are provided by the National Institute of Statistics (NIS) and other government agencies, as the central bank and ministries, and NIS regularly undertakes standard economic and social surveys with donor financing. However, quality and timely reporting remains an issue of concern. The last population census was held in 1993 and the national accounts are currently based on the 1968 system of national accounts. The quality of sector statistics must be improved, including through better coordination. While data production has increased in recent years, data access remains challenging.

- **Public expenditure efficiency:** The high share of non-discretionary spending induces significant rigidities in the budget. Going forward, it will be important to rebalance spending in favor of social priorities through revenue growth and reforms that reduce the need for transfers to public enterprises and the pension system.

4. The teams agreed on the following division of labor:

- **Tax and customs administration reform:** Shared responsibility. The Fund will provide TA to improve tax and customs administration. In tax administration it is essential to refocus available resources on real challenges and compliance risks, remove regulatory obstacles and procedures in tax administration, streamline management resources to support change, and give priority to measures that are likely to generate additional tax revenues in 2016. In customs administration it is essential to continue upgrading the risk management system, review the procedures used to control imported and exported goods, and implement targeted actions against fraud. The Bank is preparing a new public sector support project to respond to the government's request to help modernize customs and tax administrations with the aim of improving revenue mobilization.

- **PFM reform:** Shared responsibility. Fund TA aims at developing medium-term fiscal objectives, improving budget execution and public investment management, and developing new procedures for internal control to avoid arrears. The Bank's public sector project will support government's effort in improving social sector PFM efficiency.

- **Economic governance and corruption:** Shared responsibility. The World Bank will send a mission on anti-money laundering/combating the financing of terrorism (AML/CFT) that will review the existing financial regulation and banking supervision practices. Fund TA will focus on reducing administrative discretion in tax and customs administration and public expenditure management.

- **Business environment reform:** The World Bank's Second Integrated Growth Poles project (PIC2) is being implemented to improve commercial justice and increase economic opportunities and access to enabling services in selected regions. At the national level, the project will support a series of investment climate reforms and help strengthen the public-private interface to increase investor confidence and private investment. At the regional level, the project will support the implementation of targeted and integrated interventions to overcome barriers to private investment and job creation in poor regions with high growth potential. The World Bank and the Fund are assisting the authorities in the drafting of the mining and petroleum codes.

- **Public investment and debt management:** Shared responsibility. The Bank conducted a Debt Management Performance Assessment (DeMPA) in 2013 and provided follow up assistance in developing a reform program in 2014. The Bank has also provided training on debt sustainability analysis and medium-term debt strategy in the past year, and stands ready to provide any further support that the public debt department may need to implement the reform program. The Bank and the Fund will conduct a joint Public Investment Management Assessment (PIMA) to diagnose the public investment management framework.

- **Service delivery and social safety nets:** The Bank will take the lead. To support the identification of needs and priority actions, the bank published a comprehensive poverty analysis in March 2014. Through the Emergency Food Security and Social Protection Project the Bank is supporting a labor-intensive public works program as well as the design and implementation of a pilot Conditional Cash Transfer program. A Safety Nets Project under implementation will prepare the ground for a more systematic and programmatic approach to social safety nets as part of a larger social protection policy. The Bank has conducted an actuarial assessment of the public pension system.

- **Public enterprise reform:** The Bank's energy sector project provides technical assistance and financial support in developing a strategy to overhaul JIRAMA to improve the company's finances and service delivery. The project will also support emergency repairs of JIRAMA's assets, such as the purchase of parts needed to remobilize the generation capacity that has fallen into disrepair. The Bank is conducting a strategic review of Air Madagascar and is scouting for a strategic collaboration with a foreign airline.

- **Central bank operations:** The IMF will take the lead. The Fund will assist the authorities in strengthening the central bank strategy and its core operations, including internal audit and accounting, and making monetary policy formulation and instruments more effective, including by (i) strengthening the interbank market and the market for short-term T-bills; (ii) improving liquidity management and forecasting; (iii) strengthening monetary policy operations; (iv) strengthening the foreign exchange market; and (iv) producing short- and medium-term inflation forecasts.

- **Financial sector stability:** The Bank Group and the Fund will coordinate in providing support to banking supervision (CSBF) to improve efficiency, including by risk-based supervision and updating the regulatory framework. It is also a priority to develop an orderly framework for the resolution of banks and other financial institutions with problems. In this context, Fund TA will focus on commercial banks and Bank TA will focus on the microfinance sector.

- **Financial access and inclusion:** The Bank will continue to strengthen its engagement in the area of SME finance.

- **Reform of the statistical system:** Shared responsibility. The Fund will offer technical assistance in national accounts and price statistics. The Bank supports NIS in: (i) preparing the general population census; (ii) revising national accounts for 2007-12 using the 1993 system of national accounts and rebasing to 2007; (iii) capacity building; and (iv) updating the National Strategy for the Development of Statistics.

- **Public expenditure efficiency:** The Bank has finalized a public expenditure review in health and education. The results will form the basis of the reform programs that will be supported by the Public Sector project under preparation.

5. The teams agreed to the following sharing of information:

- Following WB missions, the Fund team will be kept informed of progress in the above macrocritical structural reform areas. Fund staff (including the resident representative) would be invited to debriefs of mission conclusions with the authorities and would receive on a timely basis aide-memoires and reports for information.

- Following IMF missions, the Bank team will be kept informed of progress in the above cited areas where the Fund takes the lead as well as on areas of shared responsibility. The Fund will share outputs systematically. Bank staff would be invited to debriefs of mission conclusions with the authorities and would receive on a timely basis aide-memoires and reports for information.

6. The appendix lists the teams' separate and joint work programs during 2016 and 2017.

Table 1. Madagascar: Bank and Fund Planned Activities in Macro-critical Structural Reform Areas, 2016-2017

Title	Products	Provisional Timing of Missions	Expected Delivery Date of Report
Bank Work Program	Procurement reform	Q2 2016	During mission
	Social protection	Q2 2016	Q2 2018
	Employment and poverty analysis	To be determined	Q2 2016
	Extractive industry	To be determined	Q2 2016
	Education	Q2 2016	About one month after the mission
	Health	Q2 2016	About one month after the mission
	Political economy of private sector (analytical work)	To be determined	Q3 2016
	Micro finance	Q2 2016	Q4 2016
	Addressing malnutrition	To be determined	Q4 2016
	AML/CFT	Q3, 2016	Q4, 2016
	Energy resource mapping TA	To be determined	Q4 2016
	Public-private partnership	To be determined	To be determined
	Customs modernization (public sector performance project)	To be determined	To be determined
	Tax administration modernization (public sector performance project)	To be determined	To be determined
	Statistical capacity building	To be determined	To be determined
Fund Work Program	AFS TA in revenue administration	4 missions	About one month after each mission
	MCT TA in internal audit	Q2, 2016	Q3, 2016
	AFS TA in management of arrears and VAT refunds	Q3, 2016	Q3, 2016
	Joint FAD/AFS TA in budget classification and natural resources	Q3, 2016	Q4, 2016
	AFS TA in inflation analysis and forecasting	Q3, 2016	Q4, 2016
	AFS TA in foreign exchange operations	Q3, 2016	Q3, 2016
	AFS TA financial market intelligence and monetary policy communication	Q4, 2016	Q1, 2017
	AFS TA bank liquidity management and forecasting	Q4, 2016	Q1, 2017
	FAD TA in budget classification and natural resources	Q1, 2017	Q2, 2017

Table 1. Madagascar: Bank and Fund Planned Activities in Macro-critical Structural Reform Areas, 2016-2017 (continued)

Title	Products	Provisional Timing of Missions	Expected Delivery Date of Report
Fund Work Program	FAD TA in medium-term fiscal framework	To be determined	To be determined
	AFS TA in payment system legislation	To be determined	To be determined
	MCT TA in central bank accounting	To be determined	To be determined
	MCT TA in internal audit	To be determined	To be determined
Joint Work Program	Debt sustainability analysis	Q2, 2016	Q3, 2016
	Public Investment Management Assessment (inception mission)	Q2, 2016	Q2, 2016
	Public Investment Management Assessment	Q3, 2016	Q3, 2016

RELATIONS WITH THE AFRICAN DEVELOPMENT BANK GROUP

(As of May, 2016)

1. Madagascar (MDG) became a member of the African Development Bank Group (AfDB) in 1977. To date, the AfDB has financed 87 operations in the country, for a total net commitment of UA1.312 billion. This comprises of 77 projects, including institutional support, and 10 studies. The vast majority of these operations were financed through loans.

2. As of May 31, 2016, the AfDB's ongoing portfolio comprised of 8 active projects for a total commitment of UA164.7 million. These are: the Project for Rehabilitation of Agriculture Infrastructure (PRIASO); the Project to Extend the Perimeter of Bas Mangoky (PEPBM); the project for Rural Youth Enterprises in the Mid-West of Madagascar (PROJERMO); the Road Maintenance Project (PAIR); the Project to Support Institutional Governance (PAGI); the Project to Promote Investment (PAPI); a grant to support the fight against the plague; and a grant to provide school meals and food aid to the drought afflicted southern regions (Table 1). The average age of the portfolio is slightly over 2 years, which has drastically declined over the past few years. Such improvement is mainly linked to new projects approved from 2013 onwards. The portfolio's average disbursement rate stands at 13.85 percent. In terms of sector distribution, agriculture contributes a substantial proportion, representing 57 percent of the total value of the portfolio, followed by transport (35 percent), governance (7 percent), and health (1 percent). There are two ongoing private sector projects, the Ambatovy Nickel Project and the Sahanivotry Hydroelectric Power Plant Project.

3. The AfDB's current involvement in Madagascar is guided by the Interim Country Strategy Paper (I-CSP) 2014-16, approved in October 2014. The AfDB is currently preparing a new CSP, which will cover 2017-2021. The new CSP's main objective is to improve the living conditions of the Malagasy people through a strong and inclusive economic growth. The proposed strategy in the new CSP focuses on **Pillar I** – Transport and Energy Infrastructure Development; and **Pillar II** – Improvement of the Business Environment. Both pillars are consistent with the authorities' priorities laid out in the National Development Plan (NDP) as well as with the AfDB's priorities outlined in the 2013-2022 strategy for the continent.

4. As part of its strategy and knowledge products, the AfDB also envisages to undertake the following economic and sector works: (i) a study on the poverty profile, food insecurity, and inequality; (ii) a study on Madagascar's fragility and building resilience; (iii) a general profile of Madagascar; (iv) the development of a renewable energy investment plan; (v) a study to value Madagascar's natural resources; and (vi) a study on the establishment of social safety nets, particularly for the vulnerable women and children of the country. Within the context of its projects, the AfDB will undertake the following studies; (i) a study on investment in renewable energies; (ii) a study on governance in the energy sector; and (iii) a study on growth in the Southern regions. Madagascar reached the Highly Indebted Poor Countries (HIPC) decision and completion points in 2000 and 2004, respectively. To this effect, the country became eligible for the MDRI. The AfDB's total assistance under HICP and the MDRI amounted to US$299.6 million of debt relief in end-2010 present value terms. At the end of December 2010 in present value terms, the AfDB provided US$69.1 in debt relief under HIPC and US$230.5 million under the MDRI.

Table 1. AfDB Ongoing Projects

Sectors	**Projects**	**Approval Date**	**Commitment (Millions of UA)**	**Disbursement Rate (Percent)**
Agriculture	Projet de Réhabilitation des infrastructures agricoles s.o. (PRIASO)	June 19, 2013	28.88	11.13
	Projet d'Extension du Périmètre du Bas Mangoky (PEPBM)	November 11, 2014	40.14	0.53
	Projet Jeunes Enterprises Rurales dans le Moyen Ouest (PROJERMO)	September 24, 2012	24.61	0.00
Transportation	Projet d'Aménagement des infrastructures routières (PAIR)	October 18, 2013	58.20	28.91
Governance	Projet d'Appui à la Governance Institutionnelle (PAGI)	September 17, 2013	4.50	26.41
	Projet d'Appui à Promotion des Investissements (PAPI)	July 9, 2015	7.00	0.00
Health	Don d'urgence pour la lute contre la peste	December 23, 2014	0.66	100.00
	Don d'urgence Assistance alimentaire aux cantines scolaires et supplementation nutritionnelle dans le Grand-Sud	August 24, 2015	0.71	100.00
Total			**UA164.7 million**	**13.85**

REPUBLIC OF MADAGASCAR

July 13, 2016

REQUEST FOR AN ARRANGEMENT UNDER THE EXTENDED CREDIT FACILITY; FIRST REVIEW UNDER THE STAFF MONITORED PROGRAM—DEBT SUSTAINABILITY ANALYSIS[1]

Approved By
David Owen and Rupa Duttagupta (IMF) and John Panzer (IDA)

Prepared by the Staffs of the International Monetary Fund and the International Development Association

Risk of external debt distress:	Moderate
Augmented by significant risks stemming from domestic public and/or private external debt?	No

Madagascar's risk of external debt distress is assessed to be 'moderate,' unchanged from the last DSA of November last year. Debt dynamics remain comparable in the baseline scenario, although a faster scaling up of foreign financed investments, a gradual depreciation, and the projected deterioration of the terms of trade lead to a slightly faster debt accumulation over the medium term. The public DSA suggests that the dynamics of Madagascar's total public and publically-guaranteed (PPG) debt are sustainable, although weak fiscal revenue generation, possible exchange rate shocks, and contingent liabilities related to state-owned enterprises (SOEs) remain sources of vulnerability.

[1] Prepared by IMF and World Bank staff, in consultation with the country authorities, during the mission in May/June 2016. This DSA follows the IMF and World Bank Staff Guidance Note on the Application of the Joint Fund-Bank Debt Sustainability Framework for Low-Income Countries, November 5, 2013 (available at http://www.imf.org/external/pp/longres.aspx?id=4827).

INTRODUCTION

1. **This joint DSA has been prepared by IMF and World Bank staff**. It is based on the framework for LICs 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.[2] The assessment comprises a baseline scenario and a set of alternative scenarios.

2. **This DSA includes public debt and guarantees of the *general* government.** The DSA does not include the debt of local government or SOEs (other than through direct guarantees). The measure of debt is on a *gross* rather than *net* basis. And the *residency* criterion is used to determine the split between external and domestic debt.

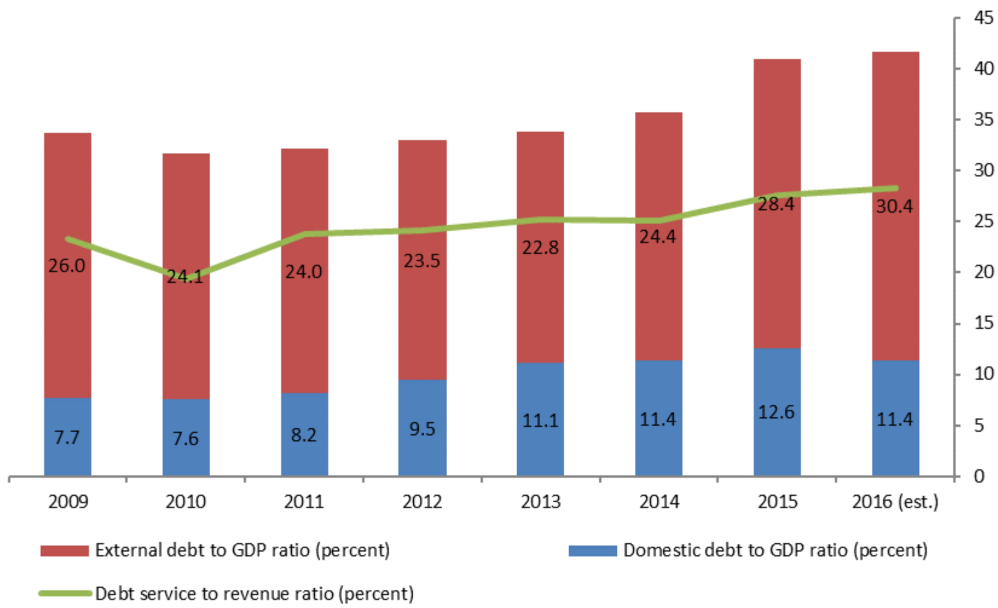
RECENT DEVELOPMENTS AND CURRENT DEBT SITUATION

3. **Re-engagement with the international community has broadened access to external financing sources, reducing the need for domestic borrowing.** Development partners reduced their lending to Madagascar during the 2008-13 crisis and the government relied more on domestic sources to finance budget deficits. Domestic debt, including domestic budgetary arrears, increased from 7.3 percent of GDP in 2008 to 12.6 percent in 2015. With the government re-engaging with the international donor community, external financing has become more readily available. As a result, external PPG debt, on average about 24 percent of GDP over 2008-14, is projected to increase to over 30 percent of GDP by end-2016, while domestic debt is projected to decrease slightly to 11 percent of GDP by end-2016 (Figure 1 and Table 3). The authorities have largely refrained from borrowing externally on non-concessional terms, which helps support debt sustainability. Overall, total public debt rose from around US$2.5 billion (33 percent of GDP) in 2007 to US$3.7 billion (41 percent of GDP) in 2015 (Table 6). Debt still remains substantially below the pre-HIPC peak of 95 percent of GDP. The debt service to revenue ratio is continuing to increase because of the higher indebtedness, the still high reliance on domestic financing, and poor revenue mobilization.

4. **The exchange rate depreciation in 2015 amplified the burden of external debt**. The depreciation of the Ariary, by more than 20 percent relative to the dollar, was the main driver behind a 3.5 percentage point increase in external PPG debt in 2015 (Figure 1 and Table 3). New external loans amounted to about 2½ percent of GDP, which was partially offset by a nominal GDP growth of 10 percent. The current exchange rate remains more depreciated than last year's average; another, though probably more moderate, valuation effect will add to external debt this year.

[2] According to the World Bank Country and Policy Institutional Assessment (CPIA) Index, Madagascar is rated as a 'low' performer, unchanged from the last DSA. The indicative thresholds for external debt applicable for that category of countries are: (i) 30 percent for the PV of debt-to-GDP ratio; (ii) 100 percent for PV of debt-to-exports ratio; (iii) 200 percent for the PV of debt to fiscal revenues ratio; (iv) 15 percent for the debt service to exports ratio; and (v) 18 percent for the debt service to revenue ratio. The indicative threshold for the PV of total PPG debt is 38 percent of GDP.

Figure 1: Debt Level and Service Ratios



5. **Most external debt is owed to multilateral creditors on highly concessional terms** (Table 1). Slightly below one-third of total debt is held by domestic creditors, mainly in the form of Treasury bills and debt to the central bank[3]. Domestic arrears remained relatively high, estimated at around 3½ percent of GDP in 2015. The vast majority of external debt is held by multilateral creditors, in particular the World Bank and African Development Bank.

6. **Private external debt is mainly issued by local subsidiaries of multinational companies.** A number of multinational companies—in mining, banking, and telecommunication—have wholly-owned local subsidiaries with external debt. While the authorities do not have comprehensive data on private-sector obligations, by far the largest of these debtors is the nickel/cobalt mining company *Ambatovy*.[4] This company has external debt just under US$2 billion (20 percent of GDP), which has caused total external debt to increase from 24 percent of GDP in 2007 to 49 percent in 2015 (see Table 3). It is projected that this commercial loan will be fully repaid by around 2030. External debt owed by *domestically* owned companies and households is negligible.

[3] Much of the debt held by the central bank are in marketable debt instruments (*titre de credit negociable*) and relate to past BCM losses to be covered by the government and irregular government financing that have been regularized in various conventions. Statutory advances, about 30 percent of the debt owed to the central bank, will be gradually reduced to 5 percent of ordinary income starting this year.

[4] Ambatovy is a private sector partnership of Sherritt International Corporation (40 percent) from Canada, Sumitomo Corporation (32.5 percent) from Japan, and Korea Resources Corporation (27.5 percent) from Korea.

7. **The government could face some contingent liabilities with respect to SOEs, including the nonbank financial sector, while the banking sector is less likely to generate direct fiscal costs.** The electricity utility, JIRAMA, had long-term debt corresponding to ½ percent of GDP and short-term debt (suppliers' credits, overdrafts etc.) corresponding to 5 percent of GDP at end-2014[5]. Air Madagascar is aiming to restructure its balance sheet in 2016 and is seeking a publicly guaranteed domestic loan of US$25 million (0.3 percent of GDP) as well as a MGA 90 billion (0.3 percent of GDP) public capital injection (through the transformation of outstanding tax liabilities). The postal savings scheme and possibly also the Madagascar Savings Fund (CEM) could need a future recapitalization (likely less than 1 percent of GDP combined). While the government has stakes in several major commercial banks, these banks also mostly have foreign parents. Moreover, bank resources are largely composed of deposits, which exceed loans significantly. Dollarization of deposits (let alone credit) is not pronounced and banks generally maintain foreign assets that are larger than their foreign liabilities.

Table 1: Break-down of Total PPG Debt (end-2015)

Creditor	Amount (US$m)	Percent of GDP	Percent of total
Domestic debt, *of which:*	**1,127**	**12.6**	**30.8**
Treasury bills	370	4.1	10.1
Debt to the Central Bank	386	4.3	10.5
Arrears	319	3.6	8.7
Other inc. loans	51	0.6	1.4
External debt, *of which:*	**2,535**	**28.4**	**69.2**
Multilateral	2,008	22.5	54.8
Paris Club	136	1.5	3.7
Non-Paris Club	366	4.1	10.0
Commercial	17	0.2	0.5
Total PPG debt	**3,662**	**41.0**	**100.0**

[5] Financial statement for 2015 not yet available.

UNDERLYING ASSUMPTIONS

8. **Apart from the increasing current account deficit, most key variables driving debt dynamics are forecasted to improve over the coming years** (Box 1 and Table 2). The DSA projections are consistent with the authorities' plan to scale-up much needed infrastructure investment and social spending. A large part of this investment will be financed through concessional external borrowing and grants, although some semi-concessional and very limited non-concessional borrowing is incorporated in projections throughout the forecast horizon. Consistent with the ceiling in the program, non-concessional borrowing (with an average negative grant element of minus 12 percent[6]) is foreseen at US$100 million over the 2016-19 period. Additionally, the share of the remaining financing gap that is financed by semi-concessional loans (with a grant element in the range of 20 and 35 percent) is set such that disbursements over the 2016-19 period are equivalent to what could be expected if the authorities signed the maximum amounts allowed under the quantitative performance criteria[7]. Over the medium term, the importance of non-concessional borrowing would increase, reducing the average grant element of new borrowing from an average above 40 percent over the next three years to 30 percent in 2036. Apart from the additional amount of short-term non-concessional borrowing, these assumptions are roughly unchanged from the previous DSA.

9. **The main risks to the baseline scenario relate to revenue generation, limited donor grant support, possible exchange rate shocks, and contingent liabilities related to SOEs**. Continued weak revenue performance and limited donor grant support could accelerate the accumulation of new debt, while faster-than-expected depreciation of the Ariary would increase the real value of the existing stock. However, these risks are largely symmetric. The exchange rate may also surprise on the upside (by depreciating more slowly than expected), the potential for higher revenues is significant (given the low starting base), and structural fiscal reforms could stimulate greater donor support. This would increase fiscal space and facilitate a more rapid attainment of development objectives. The risks from SOEs are more asymmetric, however, with little upside. Forceful action to improve their management and control is essential to reduce the need for future transfers.

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[6] Such a grant element is the outcome of conservative assumption regarding borrowing conditions on commercial loans, only part of which would benefit from a guarantee from an external agency; notably 8.5 percent interest, 7- years maturity and a two-year grace period.

[7] This assumes that the signed semi-concessional projects are disbursed over a 5-year period. On average, 83 percent of the financing gap would thus be financed by semi-concessional loans, far above the 45 percent assumed in the previous DSA, which is still used for subsequent years. Semi-concessional borrowing is assumed to have a grant element of 25 percent on average, consistent with such contracts that have recently been negotiated.

Box 1. Baseline Macroeconomic Assumptions

Real GDP growth. Growth is projected to accelerate gradually to about 5.0 percent a year over the forecast horizon. Differences to the 2015 DSA are small; the acceleration is slightly slower this year (mainly due to a more challenging international environment), but more dynamic in the years 2017 to 2019 (due to increased investment expanding production capacity and export potential). Medium-term growth remains driven by improved confidence, further re-engagement of development partners, and increased mining exports.

Current account. The decline in global oil and rice prices led to an improvement in the current account, which was only partially offset by lower than expected mining revenues. In the coming years, imports are projected to increase, as investment and domestic consumption recover. Over the medium term, the non-interest current account deficit is expected to decline gradually after a peak at 3.7 percent of GDP in 2018. The differences relative to the 2015 DSA are due to a slightly faster scaling up of investment related imports and a more persistent deterioration of terms of trade[8].

Grants. Donor grant support has been revised down since the 2015 DSA, based on the currently uncertain outcome of negotiations between the authorities and donors. Grants may increase faster in the medium-term, if the IMF-supported program catalyzes other resources, but will likely decrease in the long-run as the country matures and gains access to alternative sources of financing.

Revenues. Revenues (excluding grants) are projected to evolve similarly as in the previous DSA, increasing by roughly ½ percent of GDP per year over the forecast horizon. Revenue collection is a leading source of vulnerability for the debt sustainability and laying the foundation for the projected increase is a key priority in the authorities' reform program.

Expenditures. Expenditures in 2016 and the medium term are comparable to the 2015 DSA. However, the primary deficit is expected to increase in the near term in order to accommodate the scaling up of capital investment and social spending.

Table 2: Madagascar; Baseline Macroeconomic Assumptions

Table 2. Madagascar: Baseline Macroeconic Assumptions

		2016	2017	2018	2019	2020	2021
Real GDP growth (percent)	2016DSA	4.1	4.5	4.8	5.0	5.0	5.0
	2015DSA	4.3	4.4	4.5	4.7	5.0	
Non-interest CA deficit (percent GDP)	2016DSA	2.0	3.3	3.7	3.7	3.6	3.5
	2015DSA	1.5	1.8	3.1	3.2	3.1	
Primary deficit (percent of GDP)	2016DSA	2.3	3.4	3.3	3.1	2.9	2.7
	2015DSA	1.7	3.6	2.8	2.6	2.5	
Total revenues, excl grants (percent of GDP)	2016DSA	11.0	11.2	11.7	12.2	12.7	13.2
	2015DSA	10.9	11.3	11.8	12.2	12.7	
Grants (percent of GDP)	2016DSA	2.0	2.8	1.7	2.0	2.1	1.8
	2015DSA	3.1	2.7	2.8	2.5	2.6	
Non-Interest Expenditure (percent of GDP)	2016DSA	15.3	17.3	16.6	17.0	17.2	17.3
	2015DSA	15.3	17.5	17.1	17.1	17.3	

Source: IMF staff projections.

[8] Part of the CA deterioration in the years 2017-2018 is due to the cyclicality of clove harvests. According to the authorities, a multi-year cycle consists of two boom years followed by two meager years, during which exports are reduced by roughly 50 percent. Given that cloves make up around 10% of exports in boom years, the cyclicality has noticeable effects on the county's overall external position.

EXTERNAL DSA

Baseline scenario

10. **The level of PPG external debt was just over US$2.5 billion at end-2015 and is projected to grow gradually throughout the forecast horizon**. PPG external debt is forecast to increase from 28½ percent of GDP in 2015 to a peak of 37½ percent of GDP in 2021 (Table 3). A temporarily rising trade deficit and outflows from the mining sector (profit repatriation)[9] are balanced by increasing transfer inflows, relatively strong growth, and a moderate increase in net FDI inflows[10], consistent with the authorities' National Development Plan. As domestic debt markets deepen (see below), PPG external debt is projected to decline as a proportion of GDP to 27 percent of GDP in 2036.

11. **Under the baseline projection, all PPG external debt indicators remain below the policy-dependent debt burden thresholds** (Figure 2). The present value (PV) of the 2015 level of external debt, 15 percent of GDP, is projected to increase to 23 percent by 2021, but then declines again to just below 20 percent in 2036.[11] This projection is broadly consistent with the medium term forecast from the last DSA conducted in 2015.

12. **Private external debt is projected to decline slowly, as the loans related to a major mining project are repaid.** Given the exceptional nature of this project, the DSA does not forecast substantial new external borrowing from the private sector. Furthermore, this debt is not assessed to pose a significant threat to external sustainability, as the ultimate liability of these loans is held by the multinational shareholders, rather than resident entities (such as domestic banks or the government).

Alternative scenarios

13. **The two standard DSA stress test scenarios are applied to the baseline external PPG debt projection.** First, the standard bounds test applies pre-defined shocks to the key macroeconomic variables that drive external debt (summarized in Footnote 1 of Figure 2). Second, a historical scenario, where macroeconomic variables are assumed to equal their average over 2006-15, is imposed on the baseline projection. These shocks are detailed in Table 4.

14. **For the standard bounds tests, two scenarios cause a breach of the thresholds for one or more indicators**. A one-time 30 percent depreciation shock would cause the PV of debt-

[9] The large residual in Table 3 is partly related to mining activity. Mining exports are recorded in full in the balance of payment statistics. However, only a fraction of these receipts actually returns to Madagascar, with the remainder being repatriated to the parent companies.

[10] FDI is assumed to remain substantially below the 2011 and 2012 levels, when major mining projects were being constructed.

[11] The capacity to service public debt is expected to grow faster than GDP considering that fiscal revenues are projected to increase in percent of GDP.

to-GDP to peak at 34 percent, slightly above the 30 percent threshold implied by Madagascar's CPIA rating. Additionally, the PV of debt-to-revenue would peak at 245 percent, compared to a threshold of 200 percent. For this metric, a combination of smaller shocks also causes a significant breach of the threshold (see Table 4). The second scenario that would cause a breach of the thresholds is fixing export growth for 2017-2018 to two standard deviation below the historical average. It would increase the PV of debt-to-export to 117 percent by 2021, above the threshold of 100. However, this scenario should be interpreted with caution, as the coming on stream of large nickel and cobalt plants in 2012 serves to exaggerate the volatility of exports.

15. **The historical scenario[12] projects a rapid increase in all debt metrics and causes a breach for four of the five external debt thresholds.** These scenarios cause a substantial breach in the thresholds, especially for the PV of debt-to-GDP and the PV of debt-to-revenue. But there is reason to place less weight on this scenario—the very large current account deficit in 2008 and 2009 (over 20% of GDP in both years) was mainly driven by substantial imports associated with large mining investments, which were financed through non-debt creating FDI. These deficits did not lead to a build-up of PPG external debt, and this period is not representative of the normal economic environment in Madagascar.

PUBLIC DSA

Baseline scenario

16. **Domestic PPG debt as a proportion of GDP is projected to decline over the next decade**, with the authorities substituting away from local borrowing into concessional financing, as donor relations normalize. The importance of domestic PPG debt is then expected to partially recover, as domestic markets deepen and savings become more abundant.

17. **The *present value* of total PPG debt is projected to remain close to 30 percent of GDP throughout the forecast horizon - below the threshold of 38 percent** (Figure 3 and Table 5)**.** Madagascar's relatively weak revenue-to-GDP ratio leaves the authorities somewhat vulnerable on the debt service-to-revenue measure. This risk could further increase over time if interest payments (associated with less concessional financing) increased at a faster rate than revenue mobilization.

Alternative scenarios

18. **One of the three alternative scenarios used to stress-test the baseline breaches the risk threshold** (Figure 3 and Table 6). The most extreme shock–a one standard deviation reduction of GDP growth in 2017-2018—would lead to persistent breach of the threshold for the PV of debt to GDP, starting in 2021. The historical scenario and the one, where the primary deficit as a proportion of GDP remains unchanged throughout the forecast result in the PV of debt-to-

[12] Key macroeconomic variables (non-interest current account, growth, GDP deflator, growth of exports, current official transfers and net FDI) remain fixed at the average of the 2006-15 period.

GDP ratio converging to the threshold, without significantly breaching it. However, staff and authorities agree that reducing the current gap between revenue and spending is a priority.

CONCLUSION

19. **Breaches of debt thresholds only under stress scenarios result in a moderate risk rating.** While the authorities are expected to be able to service current and future debt obligations, debt sustainability is vulnerable to trade and exchange rate shocks, poor revenue collection, and contingent liabilities related to state-owned enterprises. While measures that can help address this vulnerability have been initiated, further progress is needed. They include enhanced revenue collection, improved budgetary execution, strengthened debt monitoring capacity, and improved policy and institutional performance to help secure favorable financing conditions and increase potential economic growth. It is also important to strengthen the monitoring and management of state-owned enterprises, including by publishing their audited financial statements.

20. **The DSA was discussed with the authorities during the May/June mission.** Staff used the results to illustrate the need for prudence when increasing external borrowing to avoid putting debt sustainability at risk and the need for structural fiscal reforms. Reforms should focus on i) increasing tax revenues to increase the capacity of the state to service debt; ii) ensure that debt continues to be financed on the most concessional terms possible; iii) ensure that investments are carefully prioritized to enhance growth and human capital accumulation; and iv) improve debt monitoring capacity, especially in terms of controlling debt guarantees and potential contingent liabilities.

Table 3. Madagascar: External Debt Sustainability Framework, Baseline Scenario, 2013-36[1]

(In percent of GDP; unless otherwise indicated)

	Actual			Historical Average 6/	Standard Deviation 6/	Projections									
	2013	2014	2015			2016	2017	2018	2019	2020	2021	2016-2021 Average	2026	2036	2022-2036 Average
External debt (nominal) 1/	**43.8**	**45.0**	**48.6**	**41.0**	**8.4**	**48.8**	**48.6**	**48.4**	**47.7**	**47.1**	**46.1**	**47.8**	**40.0**	**35.4**	**38.1**
of which: public and publicly guaranteed (PPG)	22.8	24.4	28.4	24.7	1.8	30.4	32.6	34.5	35.8	36.9	37.4	34.6	36.8	27.4	33.6
Change in external debt	-0.5	1.2	3.7	3.1	16.3	0.2	-0.2	-0.2	-0.7	-0.7	-1.0	-0.4	-1.5	0.4	-0.7
Identified net debt-creating flows	-2.2	-2.9	1.7			-4.7	-3.4	-3.3	-3.2	-3.2	-3.3		-4.9	-6.0	
Non-interest current account deficit	**5.6**	**0.1**	**1.6**	**8.7**	**7.2**	**2.0**	**3.3**	**3.7**	**3.7**	**3.6**	**3.5**	**3.3**	**2.3**	**0.9**	**1.9**
Deficit in balance of goods and services	8.7	4.4	3.5	12.7	7.1	3.9	5.5	5.9	5.9	5.8	5.9	5.5	4.8	3.6	4.5
Exports	30.0	32.8	32.1			33.0	32.2	32.0	32.0	32.1	31.8		31.8	31.3	31.6
Imports	38.7	37.2	35.5			36.9	37.7	37.9	37.9	38.0	37.8		36.6	35.0	36.1
Net current transfers (negative = inflow)	-6.0	-6.9	-5.4	-5.7	1.8	-5.6	-5.8	-5.8	-5.8	-5.8	-5.9	-5.8	-5.9	-5.9	-5.9
of which: official	0.0	-0.8	-1.5	-1.7	1.9	-2.0	-2.7	-1.5	-1.3	-1.2	-1.1	-1.6	-1.0	-0.8	-1.0
Other current account flows (negative = net inflow)	2.9	2.5	3.6	1.7	1.2	3.7	3.7	3.6	3.6	3.5	3.5	3.6	3.5	3.2	3.3
Net FDI (negative = inflow)	**-5.2**	**-2.9**	**-4.5**	**-5.6**	**1.9**	**-5.0**	**-5.1**	**-5.2**	**-5.1**	**-5.1**	**-5.1**	**-5.1**	**-5.1**	**-5.1**	**-5.1**
Endogenous debt dynamics 2/	**-2.6**	**0.0**	**4.6**	**-1.7**	**3.8**	**-1.7**	**-1.7**	**-1.7**	**-1.7**	**-1.7**	**-1.6**	**-1.7**	**-2.2**	**-1.8**	**-2.0**
Contribution from nominal interest rate	0.3	0.3	0.3	0.3	0.1	0.3	0.4	0.5	0.5	0.5	0.6	0.5	0.6	0.5	0.5
Contribution from real GDP growth	-0.9	-1.4	-1.5	-1.1	1.3	-2.0	-2.1	-2.2	-2.3	-2.2	-2.2	-2.2	-1.9	-1.6	-1.8
Contribution from price and exchange rate changes	-1.9	1.1	5.8			...	...	...	...	...	...		...	...	
Residual (3-4) 3/	**1.7**	**4.1**	**1.9**	**-4.1**	**14.1**	**4.8**	**3.2**	**3.1**	**2.5**	**2.5**	**2.3**	**3.1**	**3.5**	**6.3**	**4.5**
of which: exceptional financing	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
PV of external debt 4/	...	...	35.3			35.3	34.4	33.8	33.1	32.5	31.6		27.1	26.4	
In percent of exports	...	...	110.2			107.0	106.9	105.5	103.3	101.1	99.2		85.1	84.4	
PV of PPG external debt	**...**	**...**	**15.1**			**16.9**	**18.4**	**19.9**	**21.2**	**22.3**	**22.9**		**23.9**	**18.4**	
In percent of exports	**...**	**...**	**47.0**			**51.1**	**57.1**	**62.2**	**66.3**	**69.3**	**72.0**		**75.2**	**58.7**	
In percent of government revenues	**...**	**...**	**146**			**153**	**164**	**171**	**174**	**176**	**174**		**158**	**123**	
Debt service-to-exports ratio (in percent)	**1.8**	**2.3**	**2.1**			**3.1**	**3.4**	**3.6**	**3.9**	**4.0**	**4.3**		**5.2**	**5.7**	
PPG debt service-to-exports ratio (in percent)	**1.8**	**2.3**	**2.1**			**3.1**	**3.4**	**3.6**	**3.9**	**4.0**	**4.3**		**5.2**	**5.7**	
PPG debt service-to-revenue ratio (in percent)	**5.5**	**7.4**	**6.5**			**9.3**	**9.7**	**9.9**	**10.2**	**10.2**	**10.5**		**10.9**	**11.7**	
Total gross financing need (Millions of U.S. dollars)	98.7	-227.5	-211.0			-189.8	-68.7	-38.5	-25.0	-31.8	-34.1		-212.3	-891.3	
Non-interest current account deficit that stabilizes debt ratio	6.1	-1.1	-2.0			1.8	3.6	3.9	4.3	4.2	4.5		3.8	0.6	
Key macroeconomic assumptions															
Real GDP growth (in percent)	2.3	3.3	3.1	2.8	3.4	4.1	4.5	4.8	5.0	5.0	5.0	4.7	5.0	5.0	5.0
GDP deflator in US dollar terms (change in percent)	4.5	-2.6	-11.5	4.5	11.3	-4.0	1.9	1.4	2.1	2.1	2.3	1.0	1.9	1.9	1.9
Effective interest rate (percent) 5/	0.6	0.6	0.6	0.9	0.4	0.6	0.8	1.0	1.1	1.2	1.3	1.0	1.5	1.6	1.5
Growth of exports of G&S (US dollar terms, in percent)	10.7	9.8	-10.7	10.0	17.0	2.9	3.9	5.6	7.4	7.5	6.4	5.6	6.9	7.5	6.9
Growth of imports of G&S (US dollar terms, in percent)	6.9	-3.4	-12.7	7.2	22.4	3.8	8.8	6.8	7.2	7.4	6.8	6.8	6.4	6.6	6.5
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	32.6	39.6	37.5	31.6	33.8	34.9	35.0	33.6	31.3	32.7
Government revenues (excluding grants, in percent of GDP)	9.6	10.1	10.4	10.6	1.0	11.0	11.2	11.7	12.2	12.7	13.2	12.0	15.2	14.0	15.0
Aid flows (in Millions of US dollars) 7/	134	246	144			351	522	439	363	484	466		434	480	
of which: Grants	134	246	144			195	281	177	200	214	198		216	292	
of which: Concessional loans	0.0	0.0	0.0			156.0	241.5	262.1	162.9	269.3	267.9		218.1	188.0	
Grant-equivalent financing (in percent of GDP) 8/	...	...	...			3.4	4.5	3.4	3.1	3.1	2.8	3.4	2.1	1.5	1.9
Grant-equivalent financing (in percent of external financing) 8/	...	...	...			54.2	61.9	53.3	50.5	52.9	52.6	54.2	52.3	49.1	51.3
Memorandum items:															
Nominal GDP (Millions of US dollars)	10602	10674	9744			9740	10372	11021	11817	12668	13601		19095	37634	
Nominal dollar GDP growth	6.9	0.7	-8.7			0.0	6.5	6.3	7.2	7.2	7.4	5.7	7.0	7.0	7.0
PV of PPG external debt (in Millions of US dollars)			1347.4			1599.2	1857.2	2149.4	2467.9	2778.0	3073.8		4502.1	6819.9	
(PVt-PVt-1)/GDPt-1 (in percent)						2.6	2.6	2.8	2.9	2.6	2.3	2.6	1.5	0.6	1.2
Gross workers' remittances (Millions of US dollars)	...	...	...			...	...	...	...	...	...		...	...	
PV of PPG external debt (in percent of GDP + remittances)	...	...	15.1			16.9	18.4	19.9	21.2	22.3	22.9		23.9	18.4	
PV of PPG external debt (in percent of exports + remittances)	...	...	47.0			51.1	57.1	62.2	66.3	69.3	72.0		75.2	58.7	
Debt service of PPG external debt (in percent of exports + remittances)	...	...	2.1			3.1	3.4	3.6	3.9	4.0	4.3		5.2	5.7	

Sources: Country authorities; and staff estimates and projections.

1/ Includes both public and private sector external debt.

2/ Derived as [r - g - ρ(1+g)]/(1+g+ρ+gρ) times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate, and ρ = 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 PV of private sector debt is equivalent to its face value.

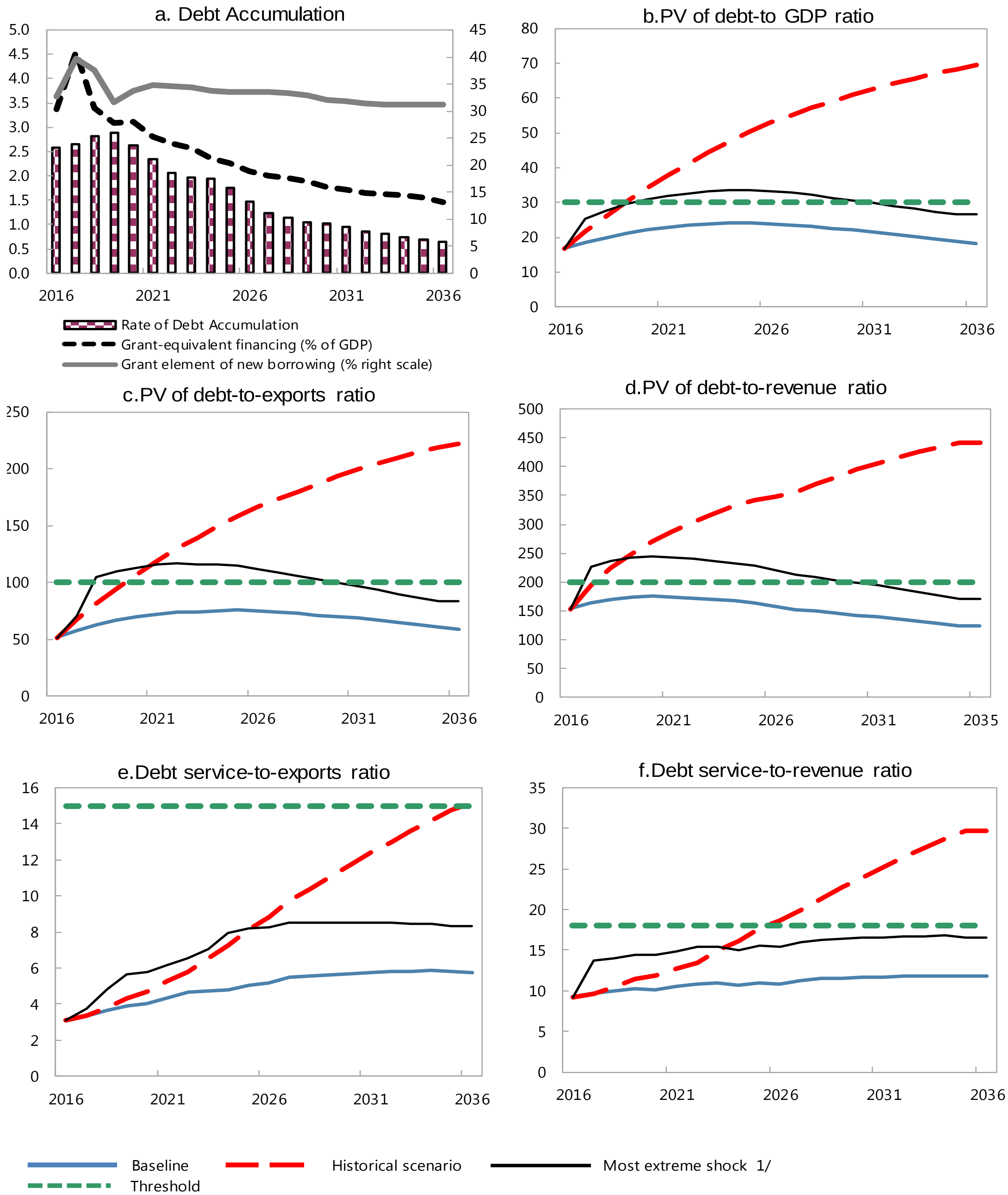
5/ Current-year interest payments divided by previous period debt stock.

6/ Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability.

7/ Defined as grants, concessional loans, and debt relief.

8/ Grant-equivalent financing includes grants provided directly to the government and through new borrowing (difference between the face value and the PV of new debt).

Figure 2. Madagascar: Indicators of Public and Publicly Guaranteed External Debt under Alternatives Scenarios, 2016-2036 1/



Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio on or before 2026. In figure b. it corresponds to a One-time depreciation shock; in c. to a Exports shock; in d. to a One-time depreciation shock; in e. to a Exports shock and in figure f. to a One-time depreciation shock

Table 4. Madagascar: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2016-36
(In percent)

	Projections																				
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	**2026**	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
PV of debt-to GDP ratio																					
Baseline	17	18	20	21	22	23	23	24	24	24	**24**	24	23	23	22	21	21	20	20	19	18
A. Alternative Scenarios																					
A1. Key variables at their historical averages in 2016-2036 1/	17	22	26	30	34	38	41	44	48	50	**53**	55	57	59	61	63	64	66	67	68	69
A2. New public sector loans on less favorable terms in 2016-2036 2	17	20	22	25	27	28	29	30	31	32	**32**	32	32	32	32	31	31	31	30	30	30
B. Bound Tests																					
B1. Real GDP growth at historical average minus one standard deviation in 2017-2018	17	19	22	23	25	25	26	26	27	27	**27**	26	26	25	24	24	23	22	22	21	20
B2. Export value growth at historical average minus one standard deviation in 2017-2018 3/	17	20	26	28	29	29	29	29	29	29	**28**	27	26	26	25	24	23	22	21	20	20
B3. US dollar GDP deflator at historical average minus one standard deviation in 2017-2018	17	20	23	25	26	27	27	28	28	28	**28**	28	27	26	26	25	24	24	23	22	21
B4. Net non-debt creating flows at historical average minus one standard deviation in 2017-2018 4/	17	20	24	25	26	27	27	27	27	27	**27**	26	25	24	24	23	22	21	21	20	19
B5. Combination of B1-B4 using one-half standard deviation shocks	17	21	28	30	31	31	32	32	32	31	**31**	30	29	28	27	26	26	25	24	23	22
B6. One-time 30 percent nominal depreciation relative to the baseline in 2017 5/	17	25	28	30	31	32	33	33	33	34	**33**	33	32	31	31	30	29	28	27	26	26
PV of debt-to-exports ratio																					
Baseline	51	57	62	66	69	72	74	74	75	76	**75**	74	73	71	70	68	67	65	63	61	59
A. Alternative Scenarios																					
A1. Key variables at their historical averages in 2016-2036 1/	51	67	82	95	107	119	130	139	149	158	**166**	173	180	186	193	199	205	210	214	219	222
A2. New public sector loans on less favorable terms in 2016-2036 2	51	61	70	77	83	89	93	95	98	100	**101**	101	101	100	100	100	99	98	97	96	95
B. Bound Tests																					
B1. Real GDP growth at historical average minus one standard deviation in 2017-2018	51	56	61	65	68	71	73	73	74	74	**74**	73	71	70	69	67	65	64	62	60	58
B2. Export value growth at historical average minus one standard deviation in 2017-2018 3/	51	70	105	110	113	115	117	116	116	114	**112**	109	106	102	99	96	93	90	86	83	79
B3. US dollar GDP deflator at historical average minus one standard deviation in 2017-2018	51	56	61	65	68	71	73	73	74	74	**74**	73	71	70	69	67	65	64	62	60	58
B4. Net non-debt creating flows at historical average minus one standard deviation in 2017-2018 4/	51	63	75	79	82	84	86	85	85	85	**83**	81	79	77	75	73	71	68	66	64	61
B5. Combination of B1-B4 using one-half standard deviation shocks	51	63	82	86	89	91	93	92	92	91	**90**	88	85	83	81	78	76	73	71	68	65
B6. One-time 30 percent nominal depreciation relative to the baseline in 2017 5/	51	56	61	65	68	71	73	73	74	74	**74**	73	71	70	69	67	65	64	62	60	58
PV of debt-to-revenue ratio																					
Baseline	153	164	171	174	176	174	173	170	167	163	**158**	152	149	146	143	139	135	131	127	123	123
A. Alternative Scenarios																					
A1. Key variables at their historical averages in 2016-2036 1/	153	194	224	249	270	288	303	318	331	341	**349**	356	370	382	395	406	416	425	434	442	495
A2. New public sector loans on less favorable terms in 2016-2036 2	153	176	192	202	211	215	217	218	218	216	**212**	208	207	206	205	203	201	199	197	194	211
B. Bound Tests																					
B1. Real GDP growth at historical average minus one standard deviation in 2017-2018	153	169	188	192	194	193	191	188	185	181	**175**	169	165	161	158	154	150	145	141	136	145
B2. Export value growth at historical average minus one standard deviation in 2017-2018 3/	153	181	227	226	225	220	216	210	203	195	**185**	177	171	166	160	155	149	143	138	132	139
B3. US dollar GDP deflator at historical average minus one standard deviation in 2017-2018	153	175	199	203	205	204	202	199	196	191	**185**	178	174	170	167	162	158	153	149	144	153
B4. Net non-debt creating flows at historical average minus one standard deviation in 2017-2018 4/	153	181	207	208	207	204	200	195	190	183	**175**	167	163	158	153	148	143	138	133	128	136
B5. Combination of B1-B4 using one-half standard deviation shocks	153	190	241	242	241	237	232	227	220	212	**203**	194	188	182	177	171	165	159	153	147	156
B6. One-time 30 percent nominal depreciation relative to the baseline in 2017 5/	153	227	237	242	245	243	241	237	233	228	**220**	212	208	203	199	194	188	183	177	171	183

Table 4. Madagascar: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2016-36 (concluded)

(In percent)

						Projections															
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	**2026**	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Debt service-to-exports ratio																					
Baseline	3	3	4	4	4	4	5	5	5	5	**5**	5	6	6	6	6	6	6	6	6	6
A. Alternative Scenarios																					
A1. Key variables at their historical averages in 2016-2036 1/	3	3	4	4	5	5	6	7	7	8	**9**	10	10	11	12	12	13	14	14	15	15
A2. New public sector loans on less favorable terms in 2016-2036 2	3	3	4	4	4	4	5	6	6	7	**7**	7	8	8	8	8	8	8	9	9	9
B. Bound Tests																					
B1. Real GDP growth at historical average minus one standard deviation in 2017-2018	3	3	4	4	4	4	5	5	5	5	**5**	5	6	6	6	6	6	6	6	6	6
B2. Export value growth at historical average minus one standard deviation in 2017-2018 3/	3	4	5	6	6	6	7	7	8	8	**8**	8	9	9	9	9	9	8	8	8	8
B3. US dollar GDP deflator at historical average minus one standard deviation in 2017-2018	3	3	4	4	4	4	5	5	5	5	**5**	5	6	6	6	6	6	6	6	6	6
B4. Net non-debt creating flows at historical average minus one standard deviation in 2017-2018 4/	3	3	4	4	4	5	5	5	6	6	**6**	6	6	6	6	6	6	6	6	6	6
B5. Combination of B1-B4 using one-half standard deviation shocks	3	3	4	5	5	5	5	6	6	6	**7**	7	7	7	7	7	7	7	7	7	7
B6. One-time 30 percent nominal depreciation relative to the baseline in 2017 5/	3	3	4	4	4	4	5	5	5	5	**5**	5	6	6	6	6	6	6	6	6	6
Debt service-to-revenue ratio																					
Baseline	9	10	10	10	10	10	11	11	11	11	**11**	11	11	12	12	12	12	12	12	12	12
A. Alternative Scenarios																					
A1. Key variables at their historical averages in 2016-2036 1/	9	10	10	11	12	13	13	15	16	18	**19**	20	21	23	24	25	26	28	29	30	34
A2. New public sector loans on less favorable terms in 2016-2036 2	9	10	10	9	10	10	12	13	14	15	**15**	15	16	16	16	17	17	17	17	17	19
B. Bound Tests																					
B1. Real GDP growth at historical average minus one standard deviation in 2017-2018	9	10	11	11	11	12	12	12	12	12	**12**	13	13	13	13	13	13	13	13	13	14
B2. Export value growth at historical average minus one standard deviation in 2017-2018 3/	9	10	10	12	12	12	12	13	14	14	**14**	14	14	14	14	14	14	14	13	13	14
B3. US dollar GDP deflator at historical average minus one standard deviation in 2017-2018	9	11	12	12	12	12	13	13	13	13	**13**	13	14	14	14	14	14	14	14	14	15
B4. Net non-debt creating flows at historical average minus one standard deviation in 2017-2018 4/	9	10	10	11	11	11	12	12	13	13	**13**	13	13	13	13	13	13	13	13	13	14
B5. Combination of B1-B4 using one-half standard deviation shocks	9	10	12	13	13	13	13	14	15	15	**15**	15	15	15	15	15	15	15	15	15	16
B6. One-time 30 percent nominal depreciation relative to the baseline in 2017 5/	9	14	14	14	14	15	15	15	15	15	**15**	16	16	16	16	17	17	17	17	17	18
Memorandum item:																					
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	31	31	31	31	31	31	31	31	31	31	**31**	31	31	31	31	31	31	31	31	31	31

Sources: Country authorities; and staff estimates and projections.

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.

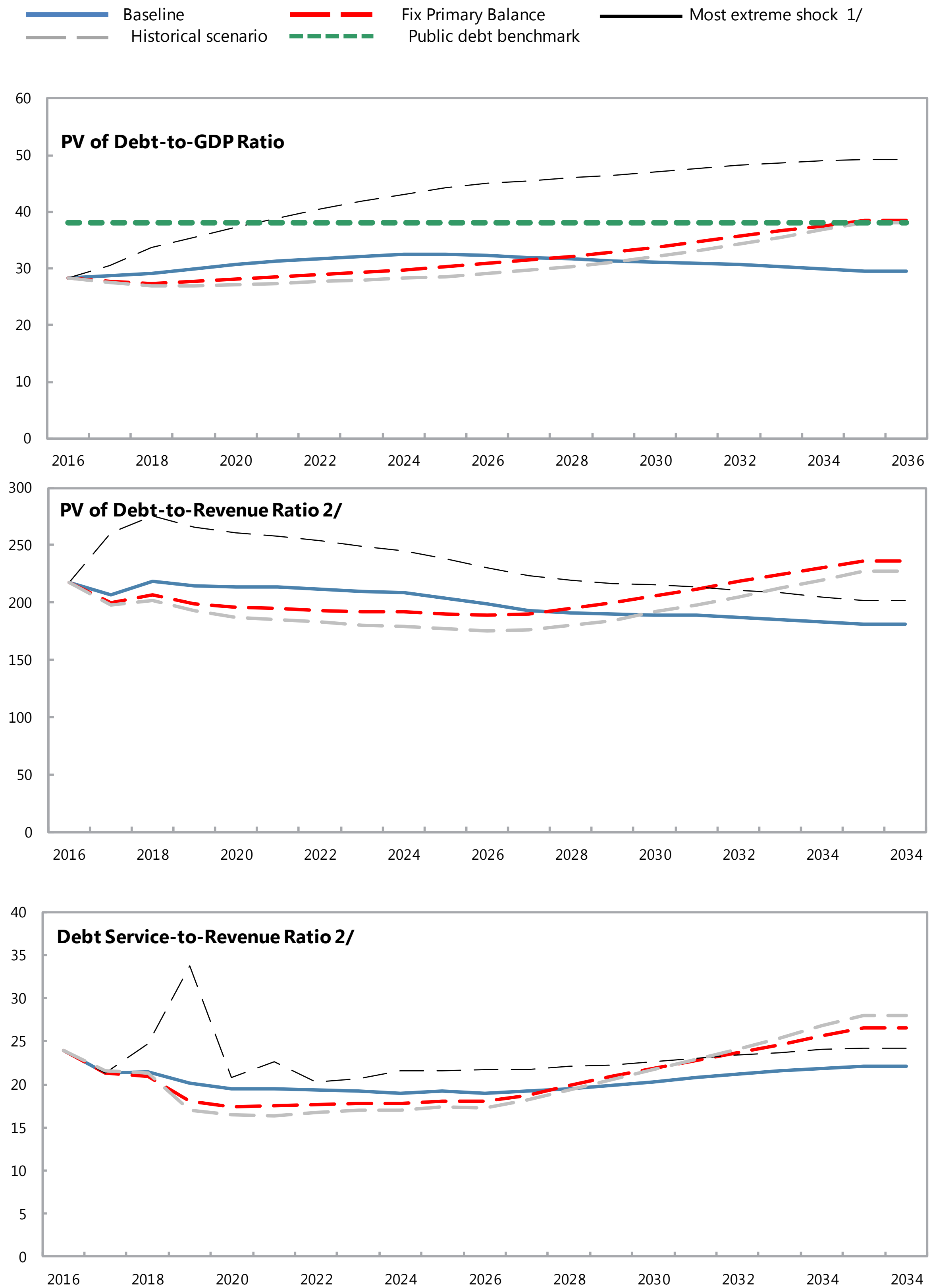
3/ Exports values are assumed to remain permanently at the lower level, but the current account as a share of GDP is assumed to return to its baseline level after the shock (implicitly assuming an offsetting adjustment in import levels).

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 3.Madagascar: Indicators of Public Debt Under Alternative Scenarios, 2016-2036



Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio on or before 2026.

2/ Revenues are defined inclusive of grants.

Table 5. Madagascar: Public Sector Debt Sustainability Framework, Baseline Scenario, 2013-36
(In percent of GDP, unless otherwise indicated)

	Actual			Average 5/	Standard Deviation 5/	Projections									
	2013	2014	2015			2016	2017	2018	2019	2020	2021	2016-21 Average	2026	2036	2022-36 Average
Public sector debt 1/	33.9	35.8	41.0	34.3	3.0	41.8	42.8	43.7	44.5	45.2	45.7	44.0	45.3	36.9	42.7
of which: foreign-currency denominated	22.8	24.4	28.4	24.9	1.8	30.4	32.6	34.5	35.8	36.9	37.4	34.6	36.8	27.4	33.6
Change in public sector debt	0.9	1.9	5.2			0.8	1.1	0.8	0.8	0.7	0.5		-0.6	-1.9	
Identified debt-creating flows	3.6	1.8	4.4			-0.9	0.7	0.6	0.4	0.4	0.3		-0.9	-1.8	
Primary deficit	3.2	1.7	2.4	1.3	1.4	2.3	3.4	3.3	3.1	2.9	2.7	2.9	1.4	0.1	1.0
Revenue and grants	10.9	12.4	11.8	13.5	3.2	13.0	13.9	13.3	13.9	14.4	14.6	13.8	16.3	14.8	16.0
of which: grants	1.3	2.3	1.5	2.9	2.6	2.0	2.7	1.6	1.7	1.7	1.5	1.9	1.1	0.8	1.0
Primary (noninterest) expenditure	14.1	14.1	14.3	14.8	2.2	15.3	17.3	16.6	17.0	17.2	17.3	16.8	17.7	14.9	17.1
Automatic debt dynamics	-1.9	0.9	2.5			-1.9	-2.1	-2.2	-2.4	-2.3	-2.4		-2.3	-1.9	
Contribution from interest rate/growth differential	-0.8	-1.4	-1.4			-2.0	-2.1	-2.2	-2.3	-2.4	-2.4		-2.5	-2.0	
of which: contribution from average real interest rate	-0.1	-0.3	-0.3			-0.3	-0.3	-0.2	-0.2	-0.3	-0.3		-0.3	-0.2	
of which: contribution from real GDP growth	-0.7	-1.1	-1.1			-1.6	-1.8	-2.0	-2.1	-2.1	-2.2		-2.2	-1.8	
Contribution from real exchange rate depreciation	-1.1	2.3	3.9			0.0	0.1	0.0	-0.1	0.1	0.1		...	...	
Other identified debt-creating flows	2.2	-0.7	-0.5			-1.2	-0.7	-0.5	-0.3	-0.2	0.0		0.0	0.0	
Privatization receipts (negative)	0.0	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)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Reduction of domestic arrears	2.2	-0.7	-0.5			-1.2	-0.7	-0.5	-0.3	-0.2	0.0		0.0	0.0	
Residual, including asset changes	-2.7	0.1	0.8	-0.3	1.9	1.7	0.4	0.3	0.4	0.4	0.1	0.5	0.3	-0.1	0.5
Other Sustainability Indicators															
PV of public sector debt	...	...	27.7			28.3	28.7	29.0	29.9	30.6	31.2		32.4	28.0	
of which: foreign-currency denominated	...	...	15.1			16.9	18.4	19.9	21.2	22.3	22.9		23.9	18.4	
of which: external	...	...	15.1			16.9	18.4	19.9	21.2	22.3	22.9		23.9	18.4	
Gross financing need 2/	10.1	9.3	10.4	12.4	13.8	11.0	11.5	10.8	10.0	9.6	9.3	10.4	8.3	8.3	8.4
PV of public sector debt-to-revenue and grants ratio (in percent)	...	...	234.1			217.2	206.4	218.7	215.0	213.2	213.6		198.7	188.9	
PV of public sector debt-to-revenue ratio (in percent)	...	...	267.5			256.7	256.3	248.8	244.7	241.6	237.3		213.6	199.4	
of which: external 3/	...	...	145.7			153.2	164.5	170.6	173.8	175.5	174.2		157.8	131.1	
Debt service-to-revenue and grants ratio (in percent) 4/	22.3	20.5	24.2	40.7	67.8	23.9	21.3	21.4	20.1	19.5	19.5	21.0	18.9	23.2	20.3
Debt service-to-revenue ratio (in percent) 4/	25.3	25.2	27.6	64.4	131.0	28.3	26.4	24.3	22.9	22.1	21.7	24.3	20.4	24.5	21.8
Primary deficit that stabilizes the debt-to-GDP ratio	2.4	-0.2	-2.8	-0.2	2.6	1.5	2.3	2.5	2.3	2.1	2.2	2.2	2.0	2.0	1.6
Key macroeconomic and fiscal assumptions															
Real GDP growth (in percent)	2.3	3.3	3.1	2.8	3.4	4.1	4.5	4.8	5.0	5.0	5.0	4.7	5.0	5.0	5.0
Average nominal interest rate on forex debt (in percent)	1.2	1.1	1.1	1.2	0.2	1.2	1.4	1.5	1.6	1.6	1.6	1.5	1.6	2.0	1.7
Average real interest rate on domestic debt (in percent)	0.7	-2.7	-1.5	1.0	3.4	-0.8	-1.1	-0.5	-0.3	0.4	0.4	-0.3	0.0	-0.4	0.0
Real exchange rate depreciation (in percent, + indicates depreciation)	-4.6	10.4	16.4	3.2	8.4	0.2	...	...	...	...	...	...	...	...	...
Inflation rate (GDP deflator, in percent)	5.1	6.6	7.6	8.0	1.9	6.7	6.9	6.4	6.1	5.5	5.4	6.2	5.0	5.0	5.0
Growth of real primary spending (deflated by GDP deflator, in percent)	14.3	3.2	4.3	2.2	4.5	11.6	18.6	0.4	7.6	6.4	5.5	8.3	4.2	-5.1	4.0
Grant element of new external borrowing (in percent)	...	...	...	...	...	32.6	39.6	37.5	31.6	33.8	34.9	35.0	33.6	31.3	32.7

Sources: Country authorities; and staff estimates and projections.
1/ General government gross 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 excluding 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 6. Madagascar: Sensitivity Analysis for Key Indicators of Public Debt 2016-36

(In percent)

	Projections																				
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
PV of Debt-to-GDP Ratio																					
Baseline	28	29	29	30	31	31	32	32	32	33	32	32	32	31	31	31	31	30	30	30	28
A. Alternative scenarios																					
A1. Real GDP growth and primary balance are at historical averages	28	28	27	27	27	27	28	28	28	29	29	30	30	31	32	33	34	36	37	38	38
A2. Primary balance is unchanged from 2016	28	28	27	28	28	28	29	29	30	30	31	31	32	33	34	35	36	37	38	39	38
A3. Permanently lower GDP growth 1/	28	29	30	31	32	33	35	36	37	38	39	39	40	41	42	43	44	45	46	47	47
B. Bound tests																					
B1. Real GDP growth is at historical average minus one standard deviations in 2017-2018	28	31	34	36	37	39	40	42	43	44	45	46	46	47	47	48	48	49	49	49	48
B2. Primary balance is at historical average minus one standard deviations in 2017-2018	28	28	28	29	30	30	31	31	32	32	32	31	31	31	30	30	30	30	29	29	27
B3. Combination of B1-B2 using one half standard deviation shocks	28	29	29	30	32	33	35	36	37	38	38	39	39	39	40	40	40	41	41	41	40
B4. One-time 30 percent real depreciation in 2017	28	36	35	35	35	36	36	36	36	36	36	36	36	35	35	35	35	35	35	34	33
B5. 10 percent of GDP increase in other debt-creating flows in 2017	28	36	37	37	37	38	38	38	38	38	38	37	36	36	35	35	35	34	34	33	31
PV of Debt-to-Revenue Ratio 2/																					
Baseline	217	206	219	215	213	214	212	209	208	204	199	193	191	190	190	189	187	185	183	181	189
A. Alternative scenarios																					
A1. Real GDP growth and primary balance are at historical averages	217	197	201	193	188	185	183	180	179	177	176	176	180	184	192	198	205	212	220	228	247
A2. Primary balance is unchanged from 2016	217	200	206	199	196	195	193	192	192	190	189	190	194	199	206	212	218	224	230	236	258
A3. Permanently lower GDP growth 1/	217	208	223	222	223	227	230	231	235	236	236	236	241	246	254	261	268	275	282	289	315
B. Bound tests																					
B1. Real GDP growth is at historical average minus one standard deviations in 2017-2018	217	218	250	252	256	263	267	270	275	275	274	273	276	280	285	289	293	296	298	300	322
B2. Primary balance is at historical average minus one standard deviations in 2017-2018	217	202	211	208	207	208	206	204	203	199	194	189	187	186	186	185	184	182	180	178	186
B3. Combination of B1-B2 using one half standard deviation shocks	217	204	215	217	221	227	230	232	235	235	234	232	234	236	240	243	245	247	248	249	266
B4. One-time 30 percent real depreciation in 2017	217	256	263	253	246	243	239	235	232	227	222	216	215	214	215	215	214	213	212	210	222
B5. 10 percent of GDP increase in other debt-creating flows in 2017	217	261	276	265	260	258	254	249	245	239	231	223	220	217	216	214	211	208	205	202	211
Debt Service-to-Revenue Ratio 2/																					
Baseline	24	21	21	20	19	20	19	19	19	19	19	19	20	20	20	21	21	22	22	22	23
A. Alternative scenarios																					
A1. Real GDP growth and primary balance are at historical averages	24	22	21	17	16	16	17	17	17	17	17	18	19	21	22	23	24	25	27	28	30
A2. Primary balance is unchanged from 2016	24	21	21	18	17	17	18	18	18	18	18	19	20	21	22	23	24	25	26	26	29
A3. Permanently lower GDP growth 1/	24	21	22	21	20	21	21	21	21	22	22	23	24	25	26	27	29	30	31	32	35
B. Bound tests																					
B1. Real GDP growth is at historical average minus one standard deviations in 2017-2018	24	22	24	23	24	24	24	25	25	25	26	26	27	28	29	30	31	32	33	33	36
B2. Primary balance is at historical average minus one standard deviations in 2017-2018	24	21	21	19	18	19	19	19	19	19	19	19	19	19	20	20	21	21	22	22	23
B3. Combination of B1-B2 using one half standard deviation shocks	24	22	22	18	18	21	21	22	22	22	22	23	23	24	25	26	26	27	28	28	30
B4. One-time 30 percent real depreciation in 2017	24	23	25	25	25	25	25	25	25	26	26	26	27	28	28	29	30	30	31	31	34
B5. 10 percent of GDP increase in other debt-creating flows in 2017	24	21	25	34	21	23	20	21	22	22	22	22	22	22	23	23	23	24	24	24	25

Sources: Country authorities; and staff estimates and projections.

1/ Assumes that real GDP growth is at baseline minus one standard deviation divided by the square root of the length of the projection period.

2/ Revenues are defined inclusive of grants.

Statement by the Staff Representative on Republic of Madagascar
July 27, 2016

1. This statement reports on new developments since the staff report was issued. The additional information does not change the thrust of the staff appraisal:

- The authorities have completed all prior actions: (i) the supplementary budget, with measures outlined in the MEFP, was submitted to the Parliament in June and adopted by the National Assembly on June 29 and the Senate on June 30; (ii) the weighted-average electricity tariffs have been increased by 15 percent following a 10 percent tariff increase announced in June and a 5 percent tariff increase announced in July; and (iii) the draft laws establishing anti-corruption centers and strengthening asset declarations and their use were submitted to the Parliament in June and adopted by the National Assembly on June 30 and the Senate on July 1.

- Madagascar's terms of trade have improved in recent months because of higher-than-expected world-market prices for vanilla, for which Madagascar is the world's leading producer. As a result, the exchange rate has appreciated against the dollar in both nominal and real terms.

Statement by Mr. Yambaye and Mr. Ismael on Republic of Madagascar
July 27, 2016

On behalf of our Malagasy authorities, we would like to thank management and staff for their continued support to the Republic of Madagascar. The authorities are highly appreciative of staff's constructive and candid dialogue and the Fund's continued engagement in their country. Through comprehensive technical assistance, two RCFs and an SMP, this engagement has been decisive in supporting the country's recovery from the severe shocks related to the political crisis and the cut-off of most external assistance from 2009 to 2013. Over the past two years, progress has been accelerating, building a good track record and developing the capacity to implement a strong medium term program.

With Fund staff's close assistance, the authorities have put in place a medium term economic and financial program anchored on their National Development Plan (NDP). The program aims at strengthening macroeconomic stability, developing the economy's potential, enhancing its resilience to shocks, and addressing the deep-seated poverty issues. In support of their program, our Malagasy authorities are requesting Fund's assistance in the form of an arrangement under the Extended Credit Facility (ECF) in an amount of 180 per cent of quota, or SDR 220 million. The authorities are strongly committed to the set of measures agreed under the program. They are also in broad agreement with staff's assessment, notably on the challenges facing the country.

Recent Developments and Progress under the SMP

Economic and financial conditions have been improving since early last year with Fund's assistance, and satisfactory performance was achieved under the SMP. The authorities have been taking measures that have helped to strengthen macroeconomic stability, notably by boosting revenue mobilization, enhancing the quality of fiscal spending, strengthening central bank independence and operations, and improving the functioning of the foreign exchange market. Fuel subsidies were eliminated with the introduction of an automatic pricing mechanism. A substantial portion of arrears were paid, and an escrow account was created at the central bank to ensure the refund of VAT.

Economic growth, however, at 3.1 percent was slightly lower than projected as the economy was negatively affected by lower agricultural output due to adverse weather conditions, falling mining prices, and lower tourist arrivals due to challenges facing Air Madagascar. Inflation was kept under control. Both the fiscal and external current account deficits increased, but the level of international reserves at the central bank increased substantially.

The Medium-Term Program

While progress is being achieved, important challenges remain, and the reforms started need to be strengthened. It is in this context that the authorities are requesting Fund assistance under a 40-month ECF arrangement. The Memorandum of Economic and Financial Policies covers well all the policy measures and reforms to be implemented. We will highlight the most important aspects of the program.

Policies and Objectives under the ECF-supported Program

The ECF-supported program represents an intensification of reform efforts. The main objectives are the reversal of the deterioration in development indicators. These will be achieved by strengthening macroeconomic policies (notably raising domestic revenue and containing current expenditure), increasing capital expenditure, improving the financial performance of the state-owned enterprises, addressing the issues of governance and increasing social expenditure. The program also includes measures aimed at encouraging private sector development and catalyzing increased support from development partners.

Under the program, economic growth is projected to accelerate steadily from 4.1 percent in 2016 to 5 percent by 2019 driven by investment in and expansion of agriculture, tourism, manufacturing and mining. The inflation rate is projected to moderate and fall towards 5 - 6 percent. Fiscal revenue is projected to increase to over 12 percent of GDP over the medium term with an increase in capital investment. The external current account deficit will remain relatively large due to high imports of capital goods related to investments. However, the authorities expect increasing inflows of FDI which should help to finance the deficit. Building on recent progress, international reserves are projected to increase gradually throughout the program period to reach an amount equivalent to about 3 ½ months of imports by 2019.

Fiscal Sector

Increased revenue collection and enhancing the quality of public spending is central to the program. Revenue measures are aimed at expanding the tax base by integrating the large informal sector through more effective inspections and audits, stricter control of tax credits and exemptions, and increased cooperation between the tax and customs administrations. The program also includes measures to improve the quality of public spending. This will involve improving pubic financial management, cleaning the government's payrolls, taking measures to reduce government transfers to public pension funds and state enterprises, as well as ensuring full cost recovery prices for fuel. The authorities have also started discussions with oil distributors to review the fuel price structure, including the distributors' margins and taxes levied. Additional administrative and fiscal measures have also been introduced in the 2016 supplementary budget which has been approved by the National Assembly.

The authorities are taking additional measures to strengthen tax and customs administration, based on IMF TA. These include collection of tax arrears, and the introduction of a unique tax identification number (TIN) for corporations and individuals, as well as the withholding of 5 percent of invoice by suppliers that are without a TIN. An added effort is being made to strengthen the monitoring and control of tax expenditures, and reports on tax expenditure will be produced annually. There will be an audit of tax credits granted for investment together with other measures to strengthen control of exemption at customs. As a result, the tax ratio (excluding one-off measures) is projected to increase from 10.5 percent of GDP in 2016 to about 12 percent by 2019. Total expenditures on the other hand are expected to increase from 16.2 percent of GDP in 2016 to about 18 percent in 2019 as a result of an increase in public investment spending and spending on social services. Similarly, the fiscal deficit is projected to increase modestly from 3.2 percent of GDP in 2016 to about 4.4 percent in 2019. It is to be noted that a major share of the public investment is expected to be foreign financed (grants and concessional loans). The efforts to clear current domestic arrears are ongoing, and it is the authorities' firm intention to avoid accumulating arrears in the future. Some technical difficulties developed as regards some external arrears, but the authorities are working diligently and in good faith to resolve them.

Monetary and Financial Policies

Under the program, the implementation of monetary policy will be strengthened. In this regard, decisive measures have been taken to enhance the independence of the Central Bank, including through a new Central Bank Act which has been approved by the National Assembly. The audit oversight and control environment is being reinforced with the central bank presenting its accounts in accordance with International Financial Reporting Standards (IFRS) starting in 2018. The Central Bank authorities will also implement monetary and exchange rate policies aimed at keeping inflation in single digits while building an adequate reserve buffer.

The government and the Central Bank will work to develop the financial system and improve access by implementing the action plan and recommendations identified by the Financial Sector Assessment Program (FSAP). In this context, measures are being taken to enhance prudential supervision of banks and non-banks, the mobilization of savings, and the bank recovery and resolution mechanisms.

State-Owned-Enterprises

An important part of the reform program is focused on the rehabilitation of the state owned enterprises and in particular **JIRAMA**, the water and electricity public enterprise. Besides the restructuring being undertaken with the support of the World Bank, the authorities have raised tariffs by a weighted average of 15 percent, in two steps. Under the rehabilitation program, there will be a focus on both cost reductions and revenue enhancement, with the objective of achieving full operational cost recovery and the elimination of all transfers from the central government.

Other measures underway include installing smart meters for the largest customers, intensifying on-site inspections and introducing better techniques to reduce total electricity losses. A wide number of administrative measures are also under consideration in the context of the restructuring program. This includes, in particular, the requirement that all of JIRAMA's contracts be awarded competitively through open bidding, with any exceptions limited to clearly justified reasons, such as emergencies. In addition, all tender offers and final contracts will be published on their web site. There will also be an independent annual audit of the contracts within six months of the company's fiscal year.

The restructuring of **Air Madagascar** will be steadfastly pursued. Measures already taken, such as the replacement of Management and the Board, and those underway are expected to restore the airline to operational profitability by end-2016. In this regard, flight schedules are being restructured with a focus on profitable routes. Staff and maintenance and distribution costs are being reduced. It is the intention of the authorities to renegotiate contracts and to replace existing airplanes with more fuel efficient ones. But most importantly, the EU approval to allow Air Madagascar to fly to Europe with its own crews and a Malagasy registration will greatly help the finances of the company.

Additional measures are under consideration to improve the overall transparency of state-owned-enterprises. As a start, the largest SOEs have been requested to publish and submit their 2015 financial statements to the Courts of Auditors.

Governance

Improving economic governance is another important objective of the program. In this regard, a national strategy to fight corruption at all levels has been put in place and new and stronger laws are being drafted, and are aimed at strengthening the anti-corruption legislation, enhancing the independence and resources of BIANCO (the public anti-corruption agency), and establishing anti-corruption units at all agencies. The government will also reform the legal system, including judicial reform to address the current excessive delays in trying court cases. The MEFP gives full details of the comprehensive measures being implemented.

Public Financial Management (PFM) is being strengthened, with the development of more standardized procedures, computerization of critical process, and modernization and centralization of public finance systems. Audit systems and expenditure management will be strengthened with the implementation of open and competitive procurement procedures and publication of tenders. Moreover, the government is developing a medium-term PFM strategy with the assistance of development partners and the IMF.

Structural Program

The program has an important structural agenda aimed at addressing weaknesses in many sectors and creating the conditions for sustainable, inclusive growth. Besides measures that are focused directly at improving and broadening access to health and education, the program also includes specific measures to encourage private investment, especially in agriculture and improving the business environment. As regards the latter, measures envisaged include simplification and reduction in the number of rules and regulations. The authorities also intend to complete the legislative process which will allow Madagascar to join OHADA, the Organization for the Harmonization of African Business Law, to support the transparency and predictability of the business environment. Moreover, the codes governing mining and petroleum will be revised and brought in line with international best practices, and the authorities are also developing a law on Special Economic Zones (SEZ) so as to attract investment in these zones.

However, to attract private investment, both domestic and international, and to develop the economy, the country needs to develop its infrastructure which is either inadequate or inexistent. Investments are needed in almost all critical developmental areas such as roads, railways, seaports, airports, communications and energy, and will require large financing. The authorities understand well that the investments have to be prioritized with careful consideration being given to debt sustainability and fiscal risks. In this regard, they intend to rely mostly on grants and borrowing on concessional terms. Moreover, they intend to present their investments plan at a Donors' Meeting later in the year. They will also make use of private-public partnerships (PPPs) where appropriate, with due consideration of the fiscal implications. A new PPP law has been enacted, to that effect, and has benefitted from cooperation from an international legal expert as well as comments from development partners. To assure full transparency and minimize fiscal costs, all new contracts will be attributed through open and transparent tenders and the terms and conditions will be published within one month of the date of the signature. In cases of non-concessional borrowing, but for high-yield investment projects, the authorities will consult with IMF and World Bank staff.

Conclusion

Overall, our authorities view the program as well balanced and takes into consideration the fragile situation of Madagascar and the unique challenges the country faces. It is consistent with the objectives of the National Development Plan and the Sustainable Development Goals. The authorities are very appreciative of the close collaboration with staff and the efforts made to understand these unique challenges. Our Malagasy authorities, at the highest level, are committed to the program which they view as critical to supporting their efforts to address the country's vulnerabilities and its balance of payments difficulties and at the same time, the program contains critical measures that will help the development of the economy's potential and raise living standards. We would, therefore, greatly appreciate Directors' support to the request of our Malagasy authorities.