INTERNATIONAL MONETARY FUND

IMF Country Report No. 17/223

REPUBLIC OF MADAGASCAR

July 2017

2017 ARTICLE IV CONSULTATION, FIRST REVIEW UNDER THE EXTENDED CREDIT FACILITY ARRANGEMENT, AND REQUESTS FOR WAIVER OF NONOBSERVANCE OF PERFORMANCE CRITERION, MODIFICATION OF PERFORMANCE CRITERION, AND AUGMENTATION OF ACCESS—PRESS RELEASE; STAFF REPORT; INFORMATIONAL ANNEX, DEBT SUSTAINABILITY ANALYSIS, AND STATEMENT BY THE EXECUTIVE DIRECTOR FOR REPUBLIC OF MADAGASCAR

In the context of the 2017 Article IV Consultation, First Review Under the Extended Credit Facility Arrangement, and Requests for Waiver of Nonobservance of Performance Criterion, Modification of Performance Criterion, and Augmentation of Access, 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 and summarizing the views of the Executive Board as expressed during its June 28, 2017 consideration of the staff report on issues related to the Article IV Consultation and the IMF arrangement with the Republic of Madagascar.
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on June 28, following discussions that ended on April 21, 2017, with the officials of Republic of Madagascar on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on June 14.
- An **Informational Annex** prepared by the IMF staff.
- A **Debt Sustainability Analysis** prepared by the staffs of the IMF and the World Bank.
- A **Statement by the Executive Director** for Republic of Madagascar.

The documents listed below have been or 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*
Selected Issues
Economic Development Document
Economic Development Document Assessment Letter by the World Bank

*Also included in Staff Report

Copies of this report are available to the public from

International Monetary Fund • Publication Services
PO Box 92780 • Washington, D.C. 20090
Telephone: (202) 623-7430 • Fax: (202) 623-7201
E-mail: publications@imf.org Web: http://www.imf.org
Price: $18.00 per printed copy

International Monetary Fund
Washington, D.C.

Press Release No. 17/254
FOR IMMEDIATE RELEASE
June 28, 2017

International Monetary Fund
Washington, D.C. 20431 USA

IMF Executive Board Completes First Review under the ECF Arrangement, Increases Access, Approves US$86 Million Disbursement, and Concludes 2017 Article IV Consultation with Madagascar

- The program's success hinges on building investment management capacity while safeguarding macroeconomic stability and debt sustainability.
- Reforms underway to promote the development and soundness of the financial sector, based on the 2016 Financial Sector Assessment Program, will contribute to a more inclusive and robust financial system that is responsive to Madagascar's development needs.
- The authorities' strategy to promote more inclusive and sustained economic growth by increasing investment in infrastructure and human capital, raising social spending, and advancing structural reforms is appropriate.

On June 28, 2017, the Executive Board of the International Monetary Fund (IMF) completed the first review of Madagascar's economic performance under a program supported by an Extended Credit Facility (ECF) arrangement. It also approved the authorities' request to augment access under the program for SDR 30.55 million (about US$42.39 million) or 12.5 percent of the country's quota.

Completion of this review enables the immediate disbursement (including the augmentation) of SDR 61.978 million (about US$86 million). This brings total disbursements under the current arrangement to a total of SDR 93.41 million (about US$129.61 million).

In completing the review, the Executive Board approved the authorities' request for waiver of the nonobservance of the continuous criterion on accumulation of new external payment arrears and the modification of the end-June 2017 performance criterion on the primary domestic balance.

The ECF arrangement for Madagascar was approved on July 27, 2016 (see Press Release No. 16/370).

After the Board meeting, Mr. David Lipton, First Deputy Managing Director and Acting Chair, stated:

“Madagascar’s performance under its economic program supported by the Extended Credit Facility (ECF) has been strong. The authorities’ strategy to promote more inclusive and sustained economic growth by scaling up investment in infrastructure and human capital, raising social spending, and advancing structural reforms—as outlined in the National Development Plan—is appropriate. The program’s success hinges on building investment management capacity while safeguarding macroeconomic stability and debt sustainability.

“Recent developments—particularly a drought, a severe cyclone, and financial weaknesses in state-owned enterprises—have created challenges. Additional resources are needed for relief and reconstruction work, as well as to support the public utility company JIRAMA, whose performance suffered from the drought. While Air Madagascar’s recent strategic partnership is expected to strengthen its operations, it will also require a costly recapitalization to offset past losses.

“Although the authorities have acted to mitigate the impact of these challenges, a temporary increase in the fiscal deficit is reasonable, provided that the deep-rooted problems of JIRAMA and Air Madagascar are addressed. The augmentation of access under the ECF and additional donor support will help offset the balance-of-payments impact of the natural disasters.

“The authorities’ efforts to strengthen governance and fight corruption are critical to their strategy. In addition to reinforcing the legal framework, it is vital to implement it effectively and to enhance judicial independence. Ongoing improvements in public financial management, particularly to improve transparency, also play a key role.

“Reforms underway to promote the development and soundness of the financial sector, based on the 2016 Financial Sector Assessment Program, will contribute to a more inclusive and robust financial system that is responsive to Madagascar’s development needs.”

The Executive Board also completed the 2017 Article IV Consultation with Madagascar.[1]

Madagascar is a fragile low-income country striving to recover from political instability. Madagascar has a long history of weak economic growth—barely keeping up with rapid population growth—and social welfare indicators have deteriorated. Recurrent political crises and natural disasters have aggravated these challenges. As a result, Madagascar has become one of the poorest countries in the world, and some of its education, health, and nutrition indicators rank among the lowest in the world. The government is aiming to break a cycle of

[1] Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board.

low growth and investment by accelerating public investment and structural reforms under its 2014 National Development Plan.

Economic developments were encouraging in 2016. Driven by public investment, increasing textile exports, and accelerating activity in agroindustry, economic growth reached 4.2 percent in 2016—the highest level since 2008. The execution of the 2016 budget was in line with the government's objectives. Fiscal spending was under control, even though the financial performance of the public utility, JIRAMA, weakened toward the end of the year. Reforms continued in revenue administration, and fiscal revenue exceeded targets. Inflation was contained at 7.0 percent at end-2016. The external position strengthened significantly, benefitting from a positive shock to vanilla export prices and strong growth in manufacturing exports.

Budget execution has encountered challenges in 2017 however. In late 2016 and early 2017, Madagascar suffered a serious drought and a major cyclone—the worst in 13 years. The cyclone imposed total economic costs (damage plus lost production) estimated at about $400 million (4 percent of GDP). The drought reduced the supply of cheap hydropower for electricity generation, thereby increasing JIRAMA's needs for government transfers. In addition, the launch of a planned strategic partnership for Air Madagascar, will require a costly one-off recapitalization to offset past losses while it is expected to strengthen operations over the medium term.

In spite of current challenges, the medium term outlook is favorable. Growth is projected to accelerate, driven by the investment scaling up, tourism, garments and other light manufacturing, mining, and productivity gains in agriculture. Partly because of the recent disasters, average inflation is forecast to rise temporarily to about 8.5 percent in 2017, and then to fall back gradually to around 5 percent over the medium-term. Imports should increase with the scaling up of public investment and reconstruction efforts, although rising current account deficits are expected to be financed in a sustainable manner thanks to concessional official sector loans and foreign direct investment.

Executive Board Assessment[2]

Executive Directors welcomed Madagascar's strong performance under its Fund-supported program despite recent challenges, including two weather-related shocks, and noted that while the medium-term outlook appears favorable, downside risks remain. Directors endorsed the authorities' strategy to promote more inclusive and sustained economic growth by scaling up investment in infrastructure and human capital, raising social spending, and advancing structural reforms. They stressed, however, that the strategy's success hinges on

[2] At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities. An explanation of any qualifiers used in summing ups can be found here: http://www.imf.org/external/np/sec/misc/qualifiers.htm.

building investment management capacity and responding promptly to any signs of overheating so as to safeguard macroeconomic stability and debt sustainability.

To maintain progress toward Madagascar's development objectives, Directors concurred that additional fiscal space is temporarily needed in 2017 in light of the costs posed by the impact of recent shocks and the financial weaknesses of state-owned enterprises. In this regard, they welcomed the measures undertaken to mitigate the impact of these shocks, including higher revenue targets for 2017 and reductions in lower-priority spending, and stressed the need to tackle the deep-rooted problems of the public utility company and Air Madagascar.

Directors welcomed the authorities' strong emphasis on improving governance and fighting corruption, which is essential to improve the business climate. In addition to completing the legal framework to fight corruption, including with a new anti-money laundering law, Directors stressed the need for strengthening the framework's implementation and enforcement as well as the independence of the judicial system. They also recommended further improvements in public financial management, particularly measures to enhance transparency.

Directors considered that the central bank's conduct of monetary policy has been appropriate, and supported its efforts to continue upgrading the monetary policy operational framework. They also commended its continued efforts to develop the financial sector and reinforce its stability. Directors encouraged the authorities to continue implementing the recommendations of the 2016 Financial Sector Assessment Program, including to enhance the legal framework and the supervisory function, and to improve financial inclusion.

REPUBLIC OF MADAGASCAR

June 14, 2017

STAFF REPORT FOR THE 2017 ARTICLE IV CONSULTATION, FIRST REVIEW UNDER THE EXTENDED CREDIT FACILITY ARRANGEMENT, AND REQUESTS FOR WAIVER OF NONOBSERVANCE OF PERFORMANCE CRITERION, MODIFICATION OF PERFORMANCE CRITERION, AND AUGMENTATION OF ACCESS

EXECUTIVE SUMMARY

Context. To assist in the economic recovery from a prolonged political crisis, Madagascar launched an ECF-supported program in July 2016. The program aims to break a cycle of low investment and low growth. Macroeconomic policy has faced unexpected challenges in 2016 and early 2017 however, including a cyclone, a drought (that hit hydropower production), and a costly restructuring of the national airline.

Article IV consultations. There was broad agreement on policies for: inclusive growth, especially scaling up investment and social spending; creating fiscal space, especially boosting revenue and cutting low productivity spending; enhancing governance and fighting corruption; and strengthening financial sector development and stability.

Program Performance and Modifications. Despite capacity constraints in this fragile state, program implementation has generally been strong. The authorities have achieved key macroeconomic targets and advanced on structural reforms, although more slowly than planned in a few cases. To respond to the unexpected challenges, the authorities are requesting to modify the fiscal balance target for end-June 2017, to modify the fiscal framework for 2017 to accommodate additional one-off expenditures, and to receive an augmentation in access (12.5 percent of quota or SDR 30.55 million) to counter the balance of payments difficulties from the natural disasters.

Risks. As a fragile, low-income country, Madagascar faces risks associated with weak implementation capacity, fiscal slippages (including losses at the public utility or other SOEs), political instability (particularly ahead of 2018 presidential elections), shifting terms of trade, natural disasters, and a reliance on donor funding and trade preferences.

In light of program performance and commitments, staff supports the authorities' requests for completion of the first review under the ECF arrangement, modification of a performance criterion, waiver for non-observance of performance criterion, and an augmentation of access.

Approved By
David Owen and Zuzana Murgasova

Discussions on the authorities' economic and financial program took place in Antananarivo during March 8-24, 2017 and in Washington DC during April 19-21, 2017. The IMF staff team included Messrs. Mills (head), Engstrom, and Oestreicher (all AFR), Ms. Baum (FAD), Ms. Esquivel Soto (LEG), and Mr. Eugster (SPR). The mission was assisted by Mr. Imam (Resident Representative) and Ms. Rasoamanana (local economist). Mr. Owen (AFR) joined during March 15-17, 2017 to participate in outreach activities and meet the Prime Minister. Messrs. Razafindramanana and Ismael (both 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 and acting Minister of Energy and Hydrocarbons Raveloharison, Central Bank of Madagascar Governor Rasolofondraibe, the Economic Advisor to the President and Commissioner General, Mr. Rajaobelina, and other senior officials, as well as representatives of Parliament, civil society, private sector and development partners.

CONTENTS

TABLES

ANNEXES

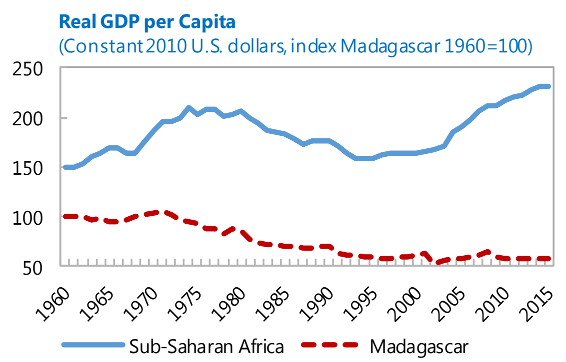
APPENDIX

CONTEXT: A STRATEGY FOR INVESTMENT SCALING UP AND IMPROVED GOVERNANCE

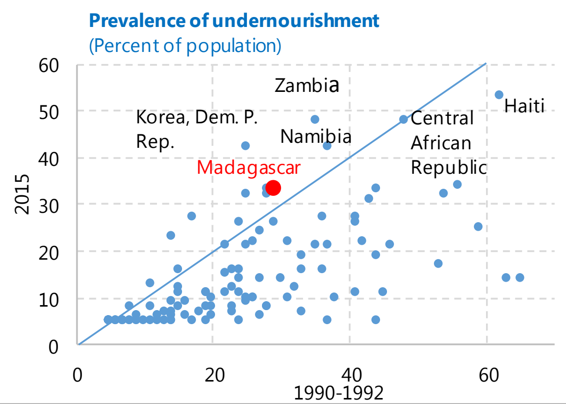
1. **Madagascar has a long history of weak economic growth amid recurrent political instability.** Successive political crises and weak governance have held back revenue collection, public investment, social spending, external donor support, and private investment, especially FDI. As a result, growth has suffered—at best barely keeping up with rapid population growth—and social welfare indicators have deteriorated (Text Figure 1). Madagascar's development has also suffered from its high vulnerability to natural disasters. Madagascar has become one of the poorest countries in the world, with over 80 percent of the population living on less than $1.90 a day.

Text Figure 1. Madagascar: Growth and Poverty

Growth has barely kept up with population growth in Madagascar while living standards are generally improving in Sub-Saharan Africa. As a result, …



…Madagascar's prevalences of undernourishment is one of the highest, with no improvement.



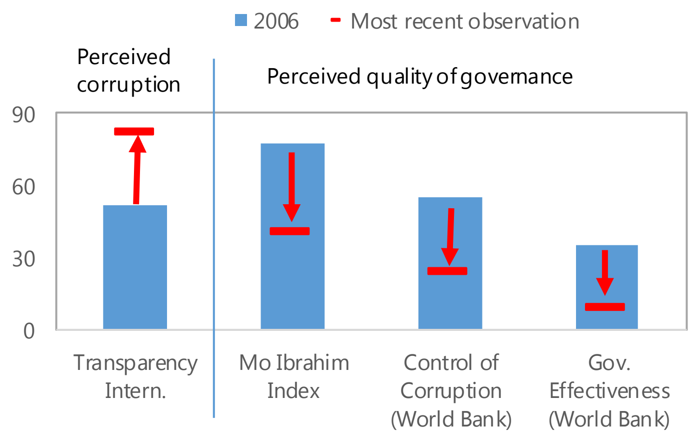
Source: World Development Indicators, the World Bank.

2. **The government aims to break the cycle of low growth and political instability by accelerating public investment and structural reforms under its 2014 National Development Plan (NDP).** During the political crisis following the military coup (2009-13), tax collections declined from 12 percent of GDP in 2008 to 9 per cent in 2013, while donor support fell as low as 2 percent of GDP in 2012 (from 14 percent of GDP in 2006).[1] To help finance scaling up investment and social spending, Madagascar's development partners made pledges estimated at $6.4 billion (over 60 percent of GDP) at the donor conference in December 2016.

[1] Madagascar ranked 7th lowest in tax revenue to GDP in Sub-Saharan Africa (IMF) in 2015 and received only $22 in development aid per capita a year (2010-15), less than half the average for Sub-Saharan Africa (OECD DAC).

3. In the face of deteriorating governance indicators, the government has revived the fight against corruption. During the five-year crisis period, Madagascar's governance indicators regressed, while other countries in Sub-Saharan Africa (SSA) advanced (Text Figure 2). Under the National Strategy to Fight Corruption adopted in 2015, the government aims to reverse this adverse trend, starting with bringing the legal framework into compliance with international standards. At the same time, reforms are underway to boost fiscal transparency and controls.

Text Figure 2. Madagascar: Indices of Corruption and Good Governance (Percentile)



Note: A corruption percentile of close to 90 indicates more perceived corruption than in close to 90 percent of the countries included in the survey.

Box 1. Key Recommendations of the 2014 Article IV Consultation and Current Status

Recommendation	Status
Increase fiscal space by broadening the tax base and improving the composition of public spending.	Tax revenue increased from 9.9 percent of GDP in 2014 to 10.9 percent of GDP in 2016 (of which 0.3 percent of GDP in one-off measures). Fuel subsidies were discontinued in 2016, while reforms launched at loss-making SOEs have yet to bear fruit.
Finalize the National Development Plan (NDP), undertake urgent and well-prioritized investment, and seek concessional donor financing.	The NDP has been finalized and substantial concessional financing secured at the donor conference, based on a prioritized investment plan. Capital expenditure grew from 3.9 percent of GDP in 2014 to 5.2 percent in 2016.
Recapitalize the central bank, enhance its independence, and strengthen its oversight mechanism.	The central bank was recapitalized by securitizing its claims on the central government. A new Central Bank Act strengthening independence was adopted in 2016. The central bank is reinforcing its audit oversight and control environment.
Increase international reserves.	Gross official reserves increased substantially, from $775 million (2.5 months import cover) at end-2014 to $1,121 (3.9 months import cover) at end-2016.
Improve banking supervision.	Based on the 2016 FSAP, work is progressing to reform banking supervision and give it more powers.

Source: IMF staff assessment.

4. The authorities have made progress on all recommendations from the 2014 Article IV consultation (the first in 6 years), although most remain relevant. Reforms are advancing in all key areas (Box 1), albeit at different speeds. Nevertheless, most of the recommendations remain relevant given that many structural problems are deep-rooted and require sustained effort (although the National Development Plan and the Central Bank Act were successfully adopted).

RECENT ECONOMIC DEVELOPMENTS, OUTLOOK, AND RISKS

5. The economic recovery following the political crisis gained speed in 2016, although it took longer than expected to emerge. Investment, the anticipated driver of the economy, remained subdued in 2015, and growth was estimated at only 3.1 percent. Public investment grew faster in 2016, which supported construction activity; together with increasing textile exports and accelerating activity in agroindustry, it helped boost growth to 4.2 percent. Inflation remained under control at 7.0 percent at end-2016 (Figures 1-4, Tables 1-8).

6. The execution of the 2016 budget was in line with program objectives. Gross revenue collections over-performed program targets by 0.2 percent of GDP in 2016, reaching the highest tax-to-GDP ratio since 2009. Reforms continued in revenue administration, including: better risk-based and ex-post auditing, the establishment of a unique tax identification number (TIN), clearer litigation rules for tax disputes, and performance-based contracts at customs. Lower-priority transfers remained within budgeted amounts, even though the financial performance of the public utility, JIRAMA, weakened toward the end of the year. The escrow account for VAT reimbursements operated smoothly at both customs and taxes, and the ambitious plans for arrears repayment in 2016 (1.2 percent of GDP) were implemented successfully.

7. In late 2016 and early 2017, Madagascar suffered a serious drought and a major cyclone, the worst in 13 years. Preceding the cyclone, a serious drought afflicted the central plateau region, which includes the capital and is the economy's heartland.[2] The cyclone, which hit in March, imposed economic costs (damage plus lost production) estimated at about $400 million (4 percent of GDP), of which approximately one-third fell on the public sector and two-thirds on households and the private sector. Public spending needs for relief and reconstruction are estimated in the range of $100 million for 2017-18. These two shocks also hit agricultural production and the balance of payments, with an estimated impact in 2017 of $225 million.

[2] In addition, a persistent drought remains a chronic problem in the South, where ninety percent of the population already live under the poverty line, forty percent of the children are malnourished, and nearly one-third of households have pulled their children out of primary school (World Food Programme).

8. Budget execution in 2017 is proving challenging in the face of multiple shocks, and the authorities have submitted a revised budget to Parliament in response.

- In addition to relief assistance provided directly by development partners in the immediate aftermath of the cyclone, the authorities plan to spend $52 million this year for relief and reconstruction. One-third of this amount will be financed through a re-allocation of planned spending.
- The drought has increased JIRAMA's needs for government transfers by reducing the supply of hydropower and necessitating the increased use of expensive thermal generation; this effect was aggravated by delays in switching from diesel to less expensive heavy fuel oil, rising fuel prices, and disadvantageous supply contracts. Total transfers to JIRAMA are now budgeted at 1.3 percent of GDP in 2017, compared with 0.7 percent in the approved budget.
- The planned restructuring of Air Madagascar, while welcome, will require a costly recapitalization costing 0.8 percent of GDP (paragraph 29).
- Adjustment measures partially offset these increased spending needs, as revenue targets have been raised and some lower-priority spending has been reduced.
- While the budget initially adopted was consistent with program projections, the projected overall deficit under the supplementary budget has been revised upward by 1.4 percent of GDP (to 5.9 per cent, cash basis) because of cyclone-related emergency spending (0.3 percent of GDP), increases in transfers to JIRAMA (0.6 percent of GDP), and the recapitalization of Air Madagascar (0.8 percent of GDP). The authorities and staff agree that the resulting fiscal deficit is appropriate under the circumstances and cannot be reduced without jeopardizing program objectives.
- While donors have agreed to provide exceptional financing linked to the Air Madagascar operation, sufficient domestic and external financing is not available to cover the additional spending needs for the impact of the cyclone and drought. The authorities have requested an augmentation of access to offset the balance of payments impact of the disasters. They also envisage on-lending up to $50 million (0.5 percent of GDP) of the IMF disbursement to meet spending needs.

9. The external position strengthened substantially in 2016, although the improvement is expected to be short-lived. The current account recorded a surplus of 0.8 percent of GDP in 2016 (from a deficit of 2.3 percent in 2015). A positive shock to vanilla export prices (nearly 4 times higher than in 2015) and strong growth in the export processing zones more than offset a decline in mining exports. Going forward, growth in import needs should outpace exports. While in the short-run, this trend is driven by reconstruction work and the damaged rice harvest related to the natural disasters, this tendency will continue in the medium-term due to the investment scaling up.

10. These shocks are posing challenges for monetary and exchange rate policy implementation.

- Un-banked small vanilla producers received large cash payments because of the high prices, expanding currency in circulation (by 18 percent between May and September) and draining bank liquidity; banks in turn tightened their lending. In response, the central bank bought large amounts of foreign exchange starting in September—in total, net purchases of $312 million in 2016. As a result, bank liquidity improved and money growth accelerated in late 2016. Although some cash began returning to banks in early 2017, persistently high vanilla prices are generating a second shock and the demand for currency should remain high until end-2017.

- The real effective exchange rate (REER) appreciated by about 3½ percent in 2016 (followed by an additional 2.2 percent through March 2017). The external position in 2016 was assessed to be stronger than implied by fundamentals and optimal policy settings (see Annex I), due in large part to the positive vanilla price shock. Madagascar's current account norm has a high deficit due to long-term development needs—which in turn leads to high external financing needs—and the current account is expected to converge to its norm as temporary terms of trade shocks unwind and imports rise with public investment scaling up.

- Following aggressive purchases by the central bank, gross reserves reached $1,121 million at end 2016, or 3.9 months of current imports (compared to the initial objective of 3.3). However, with the impact of the natural disasters and rising investment spending on the current account, import coverage would fall back to 3.3 months absent an augmentation, below both the recommended range and initial program projections in 2017.

11. The medium-term macroeconomic outlook is favorable but challenges remain. Notwithstanding the negative effects of the natural disasters, growth is expected to remain steady at 4.3 percent in 2017, supported by growing public and private investment, textile exports, tourism, and agroindustry. An expected recovery in private sector credit (9.9 percent growth in real terms) will buoy the expansion in 2017. Driven by the planned scaling up, growth is forecast to peak at 5.9 percent in 2019 and stabilize around 5 percent a year over the long term. In addition to public investment, the main drivers of medium-term growth are expected to be tourism, garments and other light manufacturing, mining, and productivity gains in agriculture, especially the shift from subsistence to export-oriented agribusiness (for example vanilla and cloves). Madagascar's growth is expected to exceed the average for Sub-Saharan African countries over the next few years (Figure 5). Partly because of the recent disasters, inflation is forecast to peak around 8 percent in 2017 before falling gradually to around 5 percent over the medium-term, as the vanilla and natural disaster shocks unwind and monetary policy responds with restrained money growth.

12. As a fragile, low-income country, Madagascar faces significant downside risks (Annex II, Risk Assessment Matrix). Domestic risks are associated with weak implementation capacity and the uncertain growth impact of investment (which could delay increases in public investment and growth), fiscal slippages (including transfers to SOEs), and political instability, particularly ahead of the 2018 presidential elections. The authorities have requested technical assistance (TA) to assist in ongoing efforts to identify and mitigate fiscal risks, including the development of statements to be annexed to the budget. External risks arise from shifting terms of trade, possible reductions in donor funding and concessionality, loss of trade preferences (especially AGOA), and falling FDI. Madagascar is also prone to costly natural disasters, as demonstrated recently.

13. Authorities' views. The authorities broadly concurred with the outlook, as well as the assessment of the risks and external position. On the outlook, while agreeing on the baseline projections, the authorities believed that scaling up public investment could have a stronger than projected impact on growth (see below). Concerning the assessment of risks, the authorities agreed on the downside risks but stressed that there were also significant upside risks; in addition to growth, the projections for private investment, including foreign direct investment, could prove conservative. Finally, on the external assessment, the authorities shared the view that the current account will adjust over the medium-term, while agreeing that exchange rate flexibility is important for the capacity to absorb shocks.

PROGRAM PERFORMANCE

14. Performance on the program's quantitative targets was strong through end-December 2016. The end-September indicative targets and end-December quantitative performance criteria (PCs) on net foreign assets (NFA), net domestic assets (NDA), and the domestic primary balance were all observed, with NFA over-performing by a large margin. The indicative target on social spending was met at end-December, after falling narrowly short at end-September (Table 9). However, the technical barriers[3] to servicing debt to Libya persisted during most of 2016, which led to a missed payment in November and external arrears effective February 2017. These arrears have been cleared since then, and the authorities are seeking a waiver of non-observance of the related continuous PC on the basis of the temporary nature of the arrears accumulation.[4]

15. Structural reforms continued to advance, although implementation of structural benchmarks was mixed. Three (out of seven) structural benchmarks (SBs) were fully met, and the measures in two benchmarks were implemented with a delay (Table 10). The Council of Budget and Financial Discipline became operational only in March 2017 (end-September 2016 benchmark), because the process of staffing and providing equipment took longer than anticipated. The law on asset recovery was submitted to the Parliament in June 2017 (end-October 2016 benchmark), as consideration by the cabinet took more time than expected. One of the three continuous benchmarks was observed, on the publication of any PPP contracts. The fuel pricing formula was not applied automatically (as envisioned in a continuous SB), out of concerns over the social impact of large changes, but there were no costs to the budget, the ultimate objective of the benchmark.

---

[3] A payment attempt to the account specified in the contract was unsuccessful in 2015. By the time the situation was resolved in November 2016, four payments had been missed. While the ones from 2015 were cleared immediately after, the 2016 payments were cleared only during the first semester of 2017.

[4] Madagascar owes external arrears to Angola which continue to be deemed away under the policy on arrears to official bilateral creditors, as the underlying Paris Club agreement is adequately representative and the authorities are making best efforts to resolve the arrears.

JIRAMA signed one single source contract for energy supply without prior notification to Fund and Bank staff, thereby failing to observe a continuous benchmark; the authorities explained that the contract was signed as a matter of urgency to meet a deadline agreed with the investor. Nevertheless, the previously common practice of single source contracts was nearly eliminated.

POLICY DISCUSSIONS

16. Realizing the full potential of scaling up investment and accelerating structural reform will depend critically on also strengthening institutions, governance, and financial sector development. Policy discussions focused on four key objectives and the policy priorities to pursue them: (i) promoting inclusive and sustainable growth, especially through scaling up public investment; (ii) creating more fiscal space, enhancing revenue and containing lower priority spending; (iii) enhancing economic governance, especially fighting corruption; and (iv) strengthening financial sector development and stability (Box 2).

Box 2. Key Topics of Policy Discussions

Areas of discussions	Key topics
Promoting inclusive and sustainable growth	Scaling up and debt management Public-private partnerships Spending on social priorities
Creating more fiscal space	Revenue mobilization Spending prioritization Management of state-owned enterprises
Enhancing economic governance	Legal and institutional framework Control and enforcement Transparency in public financial management
Strengthening financial sector development and stability	Monetary policy operations Financial sector supervision Central bank governance Financial inclusion

A. Promoting Inclusive and Sustainable Growth

17. Only sustained and inclusive growth can reduce poverty and improve living standards in Madagascar. Economic growth strategies must therefore be sustainable and provide broadly distributed benefits. The NDP launched in 2015 emphasizes the need to: (i) *increase economic growth* by improving infrastructure, strengthening public-private dialogue, and enhancing the legal framework for good governance; (ii) *make growth inclusive* by devoting more resources for education, health, and social protection; and (iii) *ensure sustained growth* by managing Madagascar's rich natural resources in a sustainable manner with broad benefits. The Economic Development Document published by the authorities in connection with the ECF arrangement highlights the NDP's efforts for poverty reduction, including progress toward the Sustainable Development Goals.

The elements of the development strategy will also help enhance the inclusiveness of growth, reduce inequality, and promote financial inclusion (paragraph 42 below). While poverty is very high, income inequality—with a Gini coefficient of 42.7 in 2012—is close to the average of Sub-Saharan African countries and fell slightly over 2001–12.

18. Madagascar has a severe infrastructure shortfall relative to other countries. For example, of 138 countries surveyed for the World Economic Forum's Global Competitiveness Index in 2016, Madagascar was ranked 138th on road quality, 135th on mobile phone penetration, and 130th on quality of electricity supply.

19. To meet these infrastructure needs, the government has developed plans for prioritized investments and enhancements to its investment management capacity.

- Over the medium-term (2017-22), the plan assumes total public investment of about 9½ percent of GDP a year, peaking at 10½ percent of GDP in 2019.[5] Nearly all the external financing (about 7 percent of GDP a year) was identified following the donor conference in December 2016. Madagascar received external financing commitments that were larger and on better terms than assumed in the original program, which enabled the authorities to increase planned investment spending by a cumulative 6½ percentage points (2017-2020) while maintaining a moderate risk of debt distress.[6]

- The prioritized investment plans—developed in consultation with development partners and representatives outside government—focuses on transportation, energy, agriculture, and social spending.

- The ambitious plans pose numerous challenges, including most immediately for implementation capacity but also for preserving macroeconomic stability (see below). To help monitor and manage these risks, the authorities established an investment coordination unit at the Presidency in February 2017. The unit will closely monitor absorption capacity, which will be reinforced by refining national and sectoral strategies, including an update of the NDP implementation plan. Ongoing efforts to improve medium-term budget planning and execution will support these efforts (with TA from the IMF, World Bank, and US Treasury).

- The authorities are also developing a medium-term strategy to enhance the public investment management capacity (end-December 2017 structural benchmark). The strategy, accompanied by an interim action plan, addresses priorities identified in the Public Investment Management Assessment (PIMA) conducted in 2016, as well as in recent IMF TA: (i) strengthening the

[5] See "Macroeconomic Implications of Scaling Up Public Investment in Madagascar" in the Selected Issues paper accompanying this staff report.

[6] The authorities have identified nearly all planned external borrowing on concessional terms through 2019, and a large majority of unidentified financing in the authorities' investment plans is planned to be grants. If the financing cannot be identified, the planned investments will be postponed.

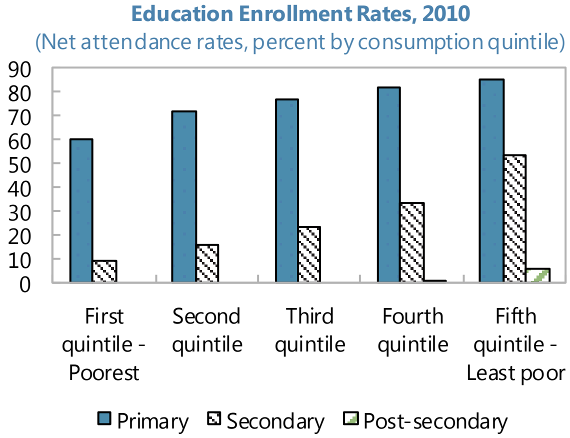
institutional framework for public investment management; (ii) improving project selection and evaluation; (iii) enhancing the supervision of investment; and (iv) improving donor coordination.

20. The scaling up includes increased spending on human capital—health, education, and social protection—that is essential for sustained, inclusive growth. Access to education and healthcare is very low, unequal and rationed by money (Text Figure 3), with negative implications for social welfare and growth potential. Although Madagascar is ranked 158th of 188 countries in the latest UNDP Human Development Index, there has been almost no improvement in the last decade. For some key indicators like infant mortality or literacy, Madagascar is around the average for Sub-Saharan Africa, but outcomes for others are more worrisome. For instance, 33 percent of the population was undernourished in 2015 (ranking Madagascar among the 7 most affected countries in the world), with serious social and economic implications for the future. Government spending on health and education (respectively, about 1.5 and 2 percent of GDP in 2015) is well below the average in Sub-Saharan Africa (about 2.7 and 4.5 percent of GDP). An improved medium-term budget process aims to ensure that more fiscal resources will be set aside for social priorities. In health, the long-term goal is universal health coverage. In education, the government has recruited more than 1,000 new teachers and is strengthening training, extending grants for improved facilities and materials, and providing meals for poor children. With co-financing from its development partners, the government plans to expand the registration for and coverage of social protection programs, like cash transfers (conditional and unconditional) and cash-for-work programs, that currently cover about half a million people in extreme poverty. Responsibility for social protection currently falls across several ministries and agencies, and the government is working to establish a strong legal and institutional framework, in particular by submitting to Parliament the new law on non-contributive social protection to strengthen the coordination function of the Ministry of Population (end-December 2017 SB).

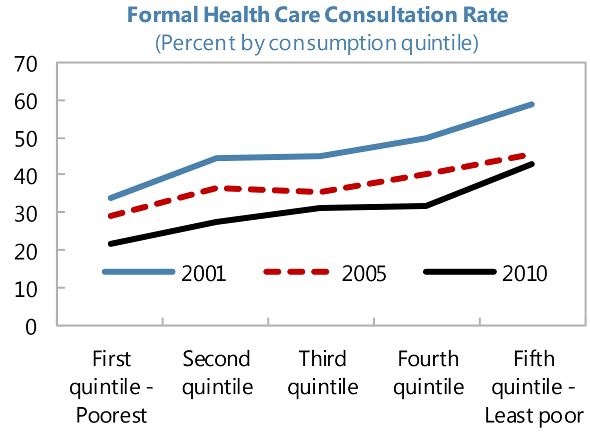
21. With agriculture helping support 80 percent of the population, enhancing productivity in the sector is also central to reducing poverty. Efforts to expand land tenure security, improve infrastructure, and develop skills in modern farming play a central role. Only about 8 percent of household heads hold formal title to their land, which prevents the use of land as collateral and inhibits investment in productivity-enhancing improvements like irrigation and terracing. Inadequate infrastructure increases transport costs and reduces profits from investment in agriculture. The authorities' sectoral policy and investment plans, developed with development partners, address these challenges, including through the shift toward export-oriented agribusiness and more weather-resilient practices in vulnerable regions. Discussions between the authorities and staff also addressed the challenges of improving the coordination of policies for rural development across sectors and increasing the low levels of fertilizer use in a cost-effective and affordable manner.

Text Figure 3. Madagascar: Low and Unequal Access to Education and Health

Access to education is limited and related to income.



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



Source: *Face of Poverty in Madagascar,* World Bank Report No. 78131-MG, March, 2014.

22. The authorities and staff agree that the growth impact of scaling up public investment depends in part on promoting private investment, including FDI. The main impediments to private sector-led growth are weak governance, poor infrastructure (especially transport and electricity), and a shallow financial system with limited access to financial services. The authorities are focused on "quick win" reforms for improving the business climate, while still advancing on fundamental reforms. With support from the Word Bank, the Economic Development Board of Madagascar has a program to improve the country's score in the Doing Business Indicators (it ranked 167th out of 190 countries in 2017, compared to the Sub-Saharan Africa average of 143rd). Already, there were improvements in the 2017 survey in opening a business and ease of international trade. Broader reforms to address key structural weaknesses, such as infrastructure (including roads, ports, and airports), electricity, and access to financing, are also vital but will take longer to yield fruit, despite the ambitious efforts underway (see below). Moreover, the authorities are reviewing and revising commercial law. In March 2017, the decrees implementing the new Public Private Partnerships (PPP) law were adopted, which creates new opportunities with appropriate safeguards for public finances. The authorities are also drafting new or revised laws intended to promote activity related to mining, petroleum, special economic zones, and industrial development (see below).

23. Assuming implementation of policies under the program, the proposed scaling up will be compatible with macroeconomic stability and debt sustainability. The medium-term growth multiplier for investment is hard to estimate and will depend on progress in public investment capacity and efficiency. One immediate challenge will be full and timely execution of plans. The close cooperation with donors[7] in project selection and management, combined with the focus on

[7] Four main donors account for 70 percent of identified external project support to the government.

improving capacity, are reassuring. In some other countries, excessively rapid scaling up has stretched absorption capacities and occasionally led to cost increases, exchange rate pressure, and accelerating inflation. Staff considers that the size of the planned scaling up is reasonable given Madagascar's absorptive capacity, which is supported by model results.[8] Assuming the policies outlined in the program, staff project a moderate growth acceleration peaking just below 6 percent in 2019, inflation that remains in the single digits, and continuing export competitiveness. Nevertheless, the risks that inflationary or exchange rate pressures might be stronger than expected merit careful monitoring, and the authorities are committed to responding to the first signs of any overheating. The risk of debt distress comfortably remains moderate.[9] Even though the public debt to GDP ratio will rise slightly, generous external financing conditions help keep the net present value of debt below 30 percent of GDP.

24. Enhancing resilience to natural disasters is also central to sustained and inclusive growth. Madagascar is highly vulnerable to natural disasters, given its geographical location, low income levels, weak institutional capacity, and heavy reliance on rain-fed agriculture (Annex III). During the period 1990-2014, Madagascar was hit by 55 natural disasters that killed at least 3,561 people and left 10 million people with an urgent need for aid (EM-DAT database). Madagascar also has high average recorded economic damage compared to peers (Figure 1). Staff research shows that frequent disasters hold back growth and poverty alleviation, so enhancing resilience needs to be a priority element of the inclusive growth strategy.[10] Madagascar has made progress in integrating disaster resilience into development plans. The priorities are to implement plans for more resilient physical infrastructure and land planning (especially in the capital), develop small-scale rural investment in resilience (e.g., better water management and more drought-resistant agriculture), and institutional infrastructure for social protection (such as registration for social assistance and access to primary health care for relief efforts).

25. Authorities' views. The authorities recognize the challenges of the planned scaling up, which they are convinced is nevertheless necessary to break a cycle of low investment, low growth, and instability. They are targeting a higher growth rate—6½ percent a year—and believe the scaling up can have a stronger than projected impact on economic growth in the near and medium-term.

B. Creating More Fiscal Space

26. Fiscal policy aims to create space for higher public investment and social spending, while preserving macroeconomic stability and sustainability. The scaling up initially relies on

---

[8] See "Macroeconomic Implications of Scaling Up Public Investment in Madagascar" in the Selected Issues paper accompanying this staff report.

[9] See Debt Sustainability Analysis accompanying this staff report.

[10] See "Enhancing Resilience to Natural Disasters in Sub-Saharan Africa" in Regional Economic Outlook, Sub-Saharan Africa, IMF, October 2016.

external financing, while maintaining a moderate risk of debt distress. Nevertheless, domestic resources devoted to priority spending are projected to increase progressively through enhanced revenue collection and improved composition of spending. The fiscal anchor is a positive primary balance excluding foreign financed investment over the medium term,[11] while maintaining a moderate risk of debt distress, although this year exceptional spending related to the cyclone, JIRAMA, and Air Madagascar will temporarily lower this fiscal balance to negative 0.6 percent of GDP. The overall deficit (commitment basis) will reach 5.0 percent of GDP in 2017 and average 4.3 percent for 2018-20.[12]

27. Strengthening revenue mobilization remains a priority. The authorities are maintaining a goal of improving the tax-to-GDP ratio by ½ percent a year, with encouraging success so far. Customs and tax departments are both undertaking administrative reforms based on medium-term action plans, including improved coordination. The recently established unique TIN has helped these efforts and will be extended to the entire Ministry of Finance by end-September and then to the social security fund, CNAPS, by end-December 2017 (SB). The establishment of a tax policy unit (end-September 2017 SB) will strengthen revenue mobilization and cooperation; it will reconcile data from the tax and customs administrations and improve the analysis of tax policy. The unit will also review tax exemptions (about 0.9 percent of GDP in 2016) to large taxpayers and the *zones franches* (free trade zones), following a first report published in December 2016 with external support (the authorities are developing a new indicator for the reduction of tax expenditures as a percentage of fiscal revenues, with World Bank assistance). In addition, customs will expand the use of performance contracts (which proved highly effective for customs inspectors) to the anti-fraud unit that oversees post-clearance inspections (end-September 2017 SB). The tax authorities also intend to publish an audit of tax credits for investment by major companies (end-June 2017 SB), with the aim of identifying and cancelling tax credits granted without complying with the requirements. More broadly, building a more efficient, fairer, and less corrupt tax system is a central element in enhancing economic governance.[13]

28. Consideration of numerous fiscal incentive regimes raises concerns for future revenue performance. Proposals under consideration relate to mining, petroleum, special economic zones, agriculture, and industrial development. The mining and petroleum laws are under review with the goal of balancing an accurate valuation of natural resource rents with sufficient incentives to invest. Draft laws on special economic zones (SEZs, largely for export), industrial development and agricultural development would also create specific fiscal incentive regimes, which would exist in parallel with the existing tax benefits of the *zones franches*. Mindful of the priority on boosting

[11] The fiscal anchor—a positive primary balance excluding foreign financed investment—helps ensure that the authorities can cover essential spending needs with their own resources, providing protection from potential volatility of foreign financing.

[12] The corresponding deficits on a cash basis are 5.9 percent of GDP in 2017 and an average of 4.6 percent for 2018-20, with arrears clearance accounting for most of the discrepancy with commitment basis.

[13] Once countries cross a tax-to-GDP threshold of around 12¾ percent, real GDP per capita tends to increase in a strong, sustained manner over the following decade (see "Tax Capacity and Growth: Is there a Tipping Point?", IMF Working Paper, WP/16/234).

revenue as well as administrative capacity constraints, staff stressed the importance of keeping fiscal incentives cost-efficient (i.e., attracting additional investment with minimal loss of future revenue) and avoiding excessive complexity; in particular, staff recommended eventually unifying the treatment of SEZs and FTZs. The authorities have requested TA to evaluate the effects across these laws.

29. On the spending side, the government is undertaking fundamental reforms to address the large and unpredictable transfer needs of JIRAMA and Air Madagascar. It is also important to highlight the positive impact these reforms will have on the business climate and growth potential due to improvements in the key logistical industries of electricity and air transport (especially domestically where Air Madagascar nearly has a *de facto* monopoly).

- **JIRAMA**: In January, the government replaced the management and Board of JIRAMA, following mounting losses and increasingly frequent blackouts, and in April, a new CEO was hired following a competitive recruitment process assisted by World Bank. On June 12, 2017, the company's new Board adopted an ambitious business plan (prior action) that aims to eliminate subsidies within four years. Aided by a World Bank project as well as consultations with Bank and Fund staff, the business plan includes: (i) a budget for 2017 that limits transfers needs to the amount in the budget, with concrete measures for cost savings and enhanced revenue collection and monitorable monthly targets; (ii) renegotiation or cancellation of high-cost contracts, where consistent with existing laws; and (iii) full utilization of competitive bidding. The company's financial results benefit from the decision to increase tariffs by 7.5 percent (weighted average) from July 1, as well as the authorities' intention to continue nominal tariff increases, differentiated to protect vulnerable consumers, to at least keep pace with trends in costs. The authorities, with assistance from World Bank and Fund staff, will closely monitor the success of the business plan and intervene promptly in the event of slippages. Under the business plan, transfers fall from 1.3 percent of GDP this year to a projected 0.6 percent next year, and then gradually to zero by 2021.

- **Air Madagascar**: Under the strategic partnership agreement, the partner, Air Austral, will manage the airline and inject $40 million in capital for a 49 percent equity share. As part of the agreement, the government will clean the balance sheet of past net liabilities, accumulated due to past losses, with an estimated net fiscal cost in 2017 of about $88 million (0.8 percent of GDP, excluding tax arrears to be forgiven). The net liabilities will be assumed by the government (accounted for by a one-off transfer in the budget) and financed through a mix of debt write-downs, payment rescheduling (partly through special government securities), and new domestic and external borrowing linked to the operation, estimated at $66 million(Text Table 1). The proposed partnership and business plan have benefitted from advice by separate outside experts, including World Bank-financed advisors to the authorities. Under the business plan, Air Madagascar will benefit from cost savings through synergies and management on a commercial basis by the private sector shareholder with a long-term stake in the company and insulation from political influence. Although the recapitalization has significant one-off costs, the restructured airline will subsequently be financially viable without further government support, according to the business plan.

Text Table 1. Madagascar: Air Madagascar's Debt and Capital Transactions Balance of Payments and Fiscal Impact in 2017

Balance of Payments Impact (US$ million)

Inflows	64.3
Outflows [1]	43.3
Net inflow	**21.0**

[1] Loan amortization, imports, and increases in commercial banks' foreign assets. Part of Air Austral's capital injection is assumed to be deposited in a foreign-currency account at a commercial bank, which will then deposit the equivalent amount abroad with a correspondent bank.

Fiscal Impact

	US$ (million)	Percent of GDP
Revenue		
Tax arrears cancellations	30.2	0.3
Spending		
Transfers	87.7	0.8
Tax arrears cancellations	30.2	0.3
Financing		
Foreign financing	53.6	0.5
Domestic financing	34.0	0.3

30. The authorities are also working to avoid or reduce other lower priority transfers and subsidies.

- **Creating fiscal space depends importantly on continuing to avoid costs in setting fuel prices**. Staff welcomed the avoidance of any budget costs from fuel pricing under the program and urged a fully automatic application of the fuel pricing mechanism, which could include a smoothing formula if desired. The authorities reiterated their commitment to avoid budget costs and explained that discussions are underway with the distributors on the fuel price structure and formula for adjustment, which would likely include a smoothing mechanism to cushion the social impact of sharp movements.

- **Reform of the civil service pension system is also progressively reducing transfer needs from the budget**. The staff team welcomes the reform agenda for the pension system. The authorities expect to save 0.2 percent of GDP this year through an increase in employee contribution rates from 4 to 6 percent and allowing retirement after the age of 60 on a voluntary basis. All beneficiary records will be verified by July 1, 2017, enabling the authorities to estimate the number of fraudulent records. Staff notes that realizing planned savings in 2018 and beyond (totaling 0.3 percent of GDP) will require additional measures; recent World Bank TA made further recommendations, including changing the base for setting retirement payments to several years (from currently the last year's salary only).

31. Domestic arrears clearance is scheduled to progress further in 2017, and efforts are underway to reduce the risk of new arrears due to public financial management (PFM) weaknesses. Plans are on track to clear domestic arrears equivalent to 0.7 percent of GDP in 2017. Staff recommends the continuation of the practice of a new comprehensive accounting of arrears and (separately) accounts payable at the beginning of each year. The authorities are also strengthening accounting, improving budget forecasting, and reforming JIRAMA (the source of many arrears and unpredictable cash needs). Treasury cash flow plans also need to mitigate periods of stress that could increase the risks of domestic arrears.

32. Authorities' views. The authorities stressed their firm commitment to enhancing revenue and reducing transfers. On tax incentives to promote investment, the authorities point to incentives in competing destinations as they seek to balance attracting new investment and enhancing revenue. Importantly, the actions being taken at JIRAMA (new management and business plan) and Air Madagascar (launch of a strategic partnership) are critical turning points in tackling these problems. At the same time, expectations for results should take into account capacity constraints and the magnitude of the problems accumulated over years.

C. Enhancing Economic Governance

33. After the democratic elections in 2014, the government recommitted to efforts to address governance weaknesses and fight corruption. Weak governance and corruption adversely impact Madagascar's economic performance through several channels, including most notably by: diverting public resources for private gain; undermining institutions; reducing government legitimacy; weakening the business climate; lowering the quantity and quality of investment; and eroding tax collections.

34. The economic impact of weaker governance is likely to be significant. Indicators of the perception of governance in Madagascar have moved from the average of middle-income countries in Sub-Saharan Africa to the average of the region's low-income fragile countries during the last ten years. Based on empirical studies on other countries, this perceived deterioration in governance is likely to be reducing Madagascar's economic growth by ½ percent or more a year and tax revenues by at least 3 percent of GDP annually.[14]

35. In response, the authorities are taking steps to strengthen the legal and institutional framework to combat corruption. Following the adoption of the national anti-corruption strategy in 2015, key actions include: (i) the law adopted in 2015 to combat the traffic of precious woods (associated with significant corruption); (ii) the anti-corruption law enacted in August 2016 that criminalizes offences contained in the United Nations Convention against Corruption (UNCAC) and expands the obligation to disclose assets to a wider range of public officials (submission to Parliament was a prior action for the program request); (iii) the first specialized anti-corruption centers (*pole anti-corruption*) envisioned under the law, which will become operational in July 2017; (iv) the law that strengthens powers to confiscate the proceeds of crime (i.e., asset recovery) was submitted to the Parliament in June 2017 (end-October 2016 SB and prior action); and (v) the Council of Budget and Financial Discipline that launched its first inquiries in March 2017 (end-September 2016 SB). In addition, the legal framework will become comprehensive with

[14] See "Governance and Corruption" in the Selected Issues paper accompanying this staff report.

enactment of two draft laws under preparation: the new anti-money laundering law, which should adhere to the revised FATF standards to be fully effective; and a law on mutual legal assistance in criminal matters, which will allow Madagascar to provide and receive mutual legal assistance from other countries in corruption investigations.

36. Looking forward, the focus of reforms is shifting towards effective implementation of the new legal framework. In this context, enforcement and transparency are essential. The authorities' commitment to work progressively towards the publication of comprehensive asset declarations of high-level officials is a welcome step towards increased transparency. Together with the enactment of the bills currently in parliament, this would assist the work of the financial intelligence unit and law enforcement agencies. Ensuring that high-level cases of corruption are prosecuted and adequately judged is critical for effective enforcement. In this regard, the authorities have plans to strengthen judicial independence, including by (i) increasing the number, independence and resources of anti-corruption centers; (ii) regularly publishing statistics on prosecutions and convictions of cases of corruption; and (iii) publishing all court decisions by the anti-corruption centers.

37. Strengthening the transparency and integrity of public financial management (PFM) is also essential to enhancing economic governance. Access to information protects results and empowers civil society to maintain an effective oversight of government functions. A new PFM reform strategy for 2016-19 was adopted last year, and the authorities aim to develop an updated action plan by July 2017. While fiscal reporting has improved, budget documents could provide more analysis on budget execution, financial assets, and the impact of new revenue and expenditure measures. More information and data on multinationals and SOEs active in extractive industries would also be valuable. There is scope to strengthen the control of public spending, including by stricter implementation of public procurement legislation, more efficient supervision of SOEs, and improved public investment management.

38. Authorities' views. The implementation of the national strategy to fight corruption is advancing. While demanding, bringing the legal framework up to international standards will represent a significant achievement. Steps are also underway to reinforce existing institutions and establish new ones, such as the anti-corruption centers, but these efforts take time and resources to bear fruit.

D. Strengthening Financial Sector Development and Stability

39. The central bank's conduct of monetary and financial sector policy has been appropriate in the face of several shocks, most notably the vanilla price shock. The central bank is committed to keeping inflation in single digits through money targeting, using its domestic assets, and aims to steer inflation toward 5 percent over the medium-term. It has kept inflation within the targeted range during the last ten years. In light of the multiple shocks recently, staff considers the current stance appropriate, despite money growth and inflation that are temporarily higher than previously targeted. Inflation is expected to fall in the medium-term thanks in part to the unwinding of the vanilla and food price shocks. At the same time, the authorities and staff agree that monetary policy will need to be appropriately tight over the medium-term to ensure it remains consistent with money growth and inflation objectives. The central bank's control of its assets and other balance sheet items has improved following the adoption of the new central bank law (effective in November 2016) that strengthens independence, including by tightening limits on central bank lending to government and mandating timely recapitalization in the event of losses.

40. The monetary policy framework is in evolution as the central bank seeks to develop the policy instruments and markets through which it transmits monetary policy. Key reforms under preparation are focused on: (i) improving the central bank's internal organization; (ii) strengthening of interbank money and foreign exchange markets (with TA requested); (iii) reaching agreement by end-2017 with banks and other market participants on a strategy to develop the government securities market; (iv) submitting to Parliament draft legislation promoting repo transactions (end-December 2018 SB); and (v) introducing an overnight deposit facility that will help create the basis for an interest rate corridor. Staff supported these changes but noted that successful introduction of the interest rate corridor would require market participants trusting that the repo transactions and deposit facility would always be available on demand. Staff also encouraged the authorities to phase out the partial surrender requirement on export proceeds, which limits capital outflows and is considered a capital flow management measure (CFM) under the IMF's Institutional View; while agreeing on this goal for the long-term, the authorities considered that the surrender requirement helped support liquidity in the shallow foreign exchange market. Over the next few years, the central bank's monetary policy framework will evolve further with the gradual introduction of these new policy instruments, as well as the reinforcement of its analytical capacity, especially in liquidity forecasting (including with TA from the IMF's Monetary and Capital Markets Department and AFRITAC South).

41. Improvements in banking sector oversight and the resolution framework will bolster the stability of the financial sector as it evolves. The 2016 Financial Sector Assessment Program (FSAP) found a generally sound and resilient sector (Box 3 and Table 8), but also identified major gaps in financial oversight and significant risks, which need to be addressed. The FSAP recommended measures to ensure the sector's development and soundness as it expanded, which form the basis of reform plans (Box 3). Key actions planned for the next few years include the following: (i) audits of the savings fund (*Caisse d'Epargne de Madagascar, CEM*) and the postal service, to be completed by end-2017; (ii) action plan for the effective implementation of risk-based supervision adopted by December 2017, including addressing the shortage of supervisory staff; (iii) submission to Parliament of legislative amendments to strengthen the recovery and resolution system for microfinance institutions by end-2017 and for banks by October 2018; (iv) strengthening supervision through improved compliance with the Basel core principles, issuance of new prudential regulations, and reinforcement of existing regulations by December 2018; (v) enhanced supervision of insurance companies, which will be moved to the financial sector supervisor (*Commission de Supervision Bancaire et Financière, CSBF*) by 2019; (vi) increasing the independence of the *CSBF*, including legal protections for its staff; and (vii) a functioning credit bureau and collateral registry to be established by 2019.

Box 3. Summary of FSAP Recommendations and Follow Up

The authorities have made progress in addressing the shortcomings noted in the 2016 FSAP report. The report noted that Madagascar's financial system was underdeveloped, banking supervision needed significant improvement, and that the financial system was characterized by low levels of financial inclusion, segmented and dominated by two to three foreign-owned banks. Banking supervision underperformed against the Basel core principles, while many non-bank financial institutions (assets of 6-7 percent of GDP) operated with minimal supervision. The report also concluded that the legislative and regulatory frameworks governing banks needed updating to reflect international best practice in internal controls, governance, and risk management (for credit, liquidity, operational, market, concentration and interest rate risk), regulatory staff would benefit from further training, and on-site supervision needed to be more frequent and risk-based.

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, in related-party lending).	Financial supervision to receive more resources and powers, with a risk-based approach (more on-site inspections). Key actions include: (i) new regulations on internal controls, risk management and risk control, and corporate governance to entry into force in January 2018; (ii) approval of new law on supervision by end-2018; (iii) new regulations on prudential supervision issued by end-2018; and (iv) effective implementation of risk-based supervision by 2019.
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 anticorruption efforts to reduce corruption.	Building on a national risk assessment following World Bank TA, an action plan to be developed by end-June 2017.
Establish a legal and operational framework to intervene in and eventually resolve problem institutions to help contain moral hazard, limit government's contingent liabilities, and protect savers.	Approval of new law on resolution of banks and micro-financial institutions expected by end-2018.
All government-owned non-bank financial institutions (NBFIs) need to (i) undergo a detailed operational and financial audit and (ii) be covered by independent prudential oversight, and according to international best practice, many should eventually be privatized.	Independent financial audits of the savings fund (CEM) and the postal financial services on track for completion 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 electronic money—to help reduce transaction costs and facilitate financial inclusion.	New law on electronic money promulgated in February 2017 and a law regulating the national payment system planned 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-2017.

42. The authorities are also taking steps to improve financial inclusion. At present, only about 9 percent of the population have a bank account, while only 10 percent have access to mobile money, which has the potential to boost inclusion rapidly. Passage of the law on electronic money in February 2017 strengthened the legal framework, and the associated implementing decrees and regulations for mobile money will be issued by end-December 2017 (SB). The laws on banking and microfinance are also being redrafted, and access to banking sector loans is likely to improve with establishment of better functioning credit and collateral registries that is underway with World Bank support. In addition, the authorities and the World Bank are preparing a new financial inclusion project that will focus on the digitalization of transactions and on access to credit.

43. Authorities' views. The authorities are committed to continuing to improve the effectiveness of their monetary policy framework and financial sector supervision, and view this as requiring actions on many interconnected fronts, including the legal framework, the supervisory function, and the monetary policy operational framework. They emphasized the importance of developing financial markets, policy instruments, and competition, stressing that they are taking a long-term view of this process. Development of some of the complex reforms, like the legal framework for repo transactions and the development of supervision capacity, takes considerable time. Major long-term goals include both gradually moving towards a more effective, interest-rate based monetary policy framework and developing a more inclusive and prudentially sound financial system that is responsive to Madagascar's development needs.

E. Statistics

44. Although the provision of economic data has some shortcomings, it is broadly adequate for surveillance. The government is committed to strengthening the statistical system. Key actions include: (i) publication of a revised series of annual national accounts (with the base year updated to 2007 from 1984) by end-June 2017; (ii) a new statistics law modernizing and regulating data collection, to be submitted to the Parliament by end-2017 (SB); and (iii) publication of a reweighted consumer price index in 2018. Moreover, a census is scheduled to start in November 2017, which should enhance evidence-based policy making.

PROGRAM ISSUES, SAFEGUARDS, AND RISKS

45. The authorities have requested some modifications of the program to respond to developments.

- **The authorities request to modify the end-June 2017 performance criterion (floor) on the primary domestic balance to accommodate the need for higher transfers to JIRAMA and cyclone-related spending**. At the same time, the indicative target on the floor on gross tax revenue has been raised to reflect the authorities' adjustment measures. Staff supports this request since it responds to high priority needs, is partially offset by adjustment measures, and reflects one-off increases in spending that are related to plans to reduce or eliminate similar needs in the future.

- The authorities request an augmentation of access of 12.5 percent of quota (SDR 30.55 million) to help offset the impact of the natural disasters on the balance of payments. Staff supports the request because it helps meet additional external financing needs arising from external shocks (¶7 and 8), which are estimated at 1.1 percent of GDP in 2017. Nearly two-thirds of these needs will be covered by additional budget support committed by development partners and the remainder by the proposed augmentation (Text Table 2). The resources are needed to support reserves; with the augmentation, import coverage will remain at the lower end of the recommended range and at the level initially targeted in the program.

Text Table 2. Madagascar: External Financing Needs and Sources of Financing in 2017 and First Half of 2018

	2017		2018 (H1)
	$ Million	*% of GDP*	$ Million
1. Total financing requirements	**1362**	***12.9***	**646**
Current account deficit	489	*4.6*	206
Net repayment of private sector debt	193	*1.8*	102
Repayment of government debt	86	*0.8*	34
Gross reserves accumulation (+ = increase)	83	*0.8*	31
IMF repayments	5	*0.1*	5
Other (inc. unrepatriated export revenues)	504	*4.8*	268
2. Available financing	**1248**	***11.8***	**646**
Foreign direct and portfolio investment	463	*4.4*	247
Project support	634	*6.0*	356
Planned budgetary support[1]	67	*0.6*	0
Planned IMF disbursements under ECF[1]	85	*0.8*	43
3. Residual external financing needs (1-2)	**114**	***1.1***	**0**
4. Additional financing	**114**	***1.1***	
Additional budgetary support	73	*0.7*	
Proposed augmentation of access under ECF	41	*0.4*	

[1] *Country report No. 16/273*

Sources: Malagasy authorities; and IMF staff estimates.

- **The authorities envisage that the central bank on-lend up to $50 million of the IMF disbursement**. Staff supports this plan given the inability to reduce the fiscal deficit without jeopardizing program objectives and the non-availability of additional financing.

46. In line with program objectives, new program targets have been established through end-June 2018 and new structural benchmarks through end-December 2018 (Appendix I, MEFP Tables 1 and 2). The program's structural reform agenda continues to focus on macro-critical measures to support the objective of sustainable and inclusive growth. Structural benchmarks for the next 18 months include measures to increase fiscal revenue, improve the quality of spending (including by improving investment capacity and containing transfers), to enhance economic governance, and promote financial sector development (MEFP, Table 2).

47. The program is fully financed through June 2018 and Madagascar's capacity to repay the Fund is strong (Tables 3-5 and 13). Madagascar's obligations remain small relative to exports and reserves. The Economic Development Document prepared by the authorities will support and facilitate NDP implementation.

48. The updated safeguards assessment, completed in March 2017, found that progress had been made in implementing recommendations from the 2015 assessment. In particular, the legal framework was strengthened and an Audit Committee was established to oversee the internal and external audit process. The BCM also improved the timeliness of audit completion and publication of the financial statements, notwithstanding that the BCM's outdated accounting framework continues to weaken transparency. The assessment also noted that foreign exchange investment practices required improvement, and that currency procurement practices and controls over note processing and destruction needed strengthening. The central bank is committed to addressing these issues.

STAFF APPRAISAL

49. Staff welcomes the authorities' strategy and determination to break Madagascar's pattern of low growth by scaling up investment spending and advancing structural reforms. To make the best use of available resources, it will be crucial to continue building investment management capacity and to respond promptly to any overheating pressures that might emerge. Growth enhancing policies need to incorporate strategies to expand education and health services, share the benefits of growth broadly within the society, and build resilience to natural disasters. Governance challenges call for continued progress in strengthening the legal and institutional framework to combat corruption.

50. Madagascar's economic performance has improved recently and the medium-term outlook is encouraging. GDP growth accelerated in 2016, while the balance of payments strengthened, enabling the central bank to enhance resilience by boosting its foreign exchange reserves significantly to $1.12 billion (3.9 months import cover) at end-2016. Strong implementation of the ECF-supported program has played an important role in this performance, and continued implementation will be critical to sustain it. Supported by the scaling up of public investment and stronger private sector activity, medium-term growth is expected to be around 5 percent, surpassing the average for Sub-Saharan Africa and raising per capita income. The external position at end-2016 was stronger than implied by fundamentals and the desirable policy setting, although the current account is expected to converge to its norm as terms of trade return to historical levels and imports rise with public investment scaling up. Notwithstanding the positive outlook, as a fragile country, Madagascar faces several downside risks, and the authorities are advised to prepare for timely corrective actions if needed.

51. The immediate outlook in 2017 poses some challenges, however, due to several shocks. The worst cyclone in 13 years hit Madagascar in early March, following a serious drought in the capital region. The natural disasters had a total estimated impact on the current account of $225 million. Because of the drought, the electricity utility JIRAMA had to rely on more expensive diesel power generation rather than hydro power, increasing its transfer needs. The authorities need to spend at least an additional $50 million on emergency relief and reconstruction work and an additional $60 million in transfers to JIRAMA in 2017. Finally, the launch of Air Madagascar's strategic partnership will require a costly one-off recapitalization. In light of these challenges, staff considers the authorities' moderate relaxation of fiscal and monetary targets to be appropriate, provided it is temporary and used to tackle the deep-rooted problems of JIRAMA and Air Madagascar.

52. Given priority spending needs, additional fiscal space is needed this year to maintain progress toward development objectives. Staff commends the measures taken by the authorities to effectively manage the impact of the current shocks and limit the need for additional financing. Supported by ongoing reforms, revenue targets for 2017 have been raised, and resources have been reallocated from some lower-priority spending to pressing needs. To contain JIRAMA's losses, management was changed and an ambitious business plan adopted, with the goal of progressively eliminating subsidies over four years. Under its strategic partnership planned for signature in July 2017, Air Madagascar is expected to be financially viable without the need for further government support. Moreover, the authorities' plans for JIRAMA and Air Madagascar represent a serious commitment to tackle long-standing and fundamental problems holding back economic development. Notwithstanding adjustment measures, an increase in the projected fiscal deficit and the corresponding borrowing needs is a reasonable response under these circumstances. The natural disasters will weaken the balance of payments and would lower reserve import coverage below the recommended range and initial program targets. For these reasons, staff supports the authorities' request for modification of a performance criterion on the fiscal balance and an augmentation of access, as well as on-lending of a portion of the disbursement.

53. Staff welcomes the renewed commitment to improve governance and stress the need to strengthen implementation and enforcement going forward. The authorities have taken important steps to strengthen the legal and institutional framework to combat corruption. Going forward it will be important to complete the legal framework, focus on implementation, and strengthen judicial independence. Improvements in the PFM system, particularly for transparency and integrity, are also essential to this effort.

54. Staff commends the authorities' continued efforts to develop the financial sector and reinforce financial sector stability. The long-term goal of a more inclusive and prudentially sound financial system that is responsive to Madagascar's development needs is appropriate, and planned reforms are well-adapted. Based on the recommendations of the 2016 Financial Sector Assessment Program (FSAP), reforms are continuing in many interconnected areas, including the legal framework, the supervisory function, and the monetary policy operational framework. Staff encourages the authorities to seek opportunities to accelerate the implementation of these reforms where feasible.

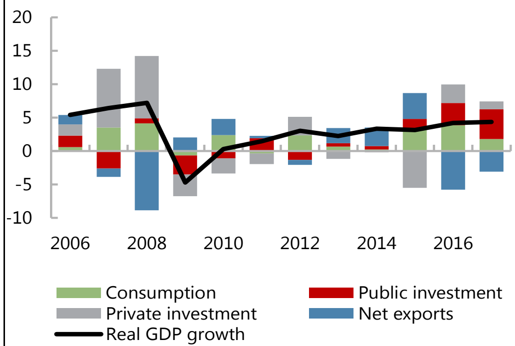
55. Based on Madagascar's performance under the program and the authorities' actions to respond to the fiscal pressures, staff recommends the completion of the first review. Staff also supports the authorities' requests for an augmentation of access, for modification of performance criterion, and for waiver of the nonobservance of one continuous performance criterion on the basis of a temporary deviation.

56. It is proposed that the next Article IV Consultation be held on a 24-month cycle, in accordance with the Decision on Article IV Consultation Cycles (Decision No. 14747- (10/96), as amended).

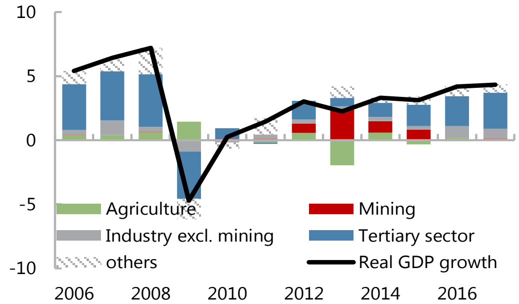
Figure 1. Madagascar: Real Sector Developments, 2006-17

For several years, mining was the main driver of growth first through investment in 2007-08 and then through exports. Public investment has contributed to economic growth in recent years.

Real GDP growth and Demand Contribution to Growth (Percent)

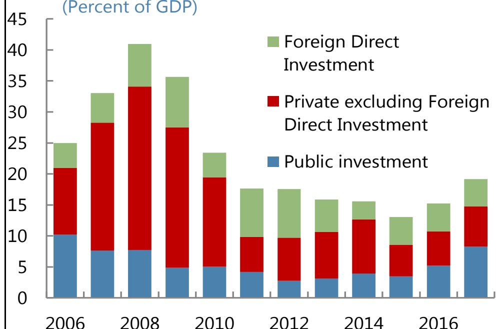


Real GDP growth and Sector Contribution to Growth (Percent)



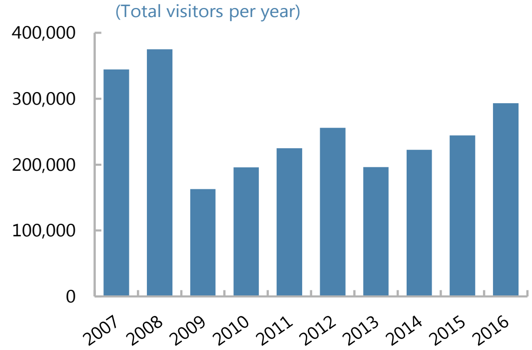
Growth is held back by weakness in private and foreign direct investment and…

Investment (Public - Private) (Percent of GDP)



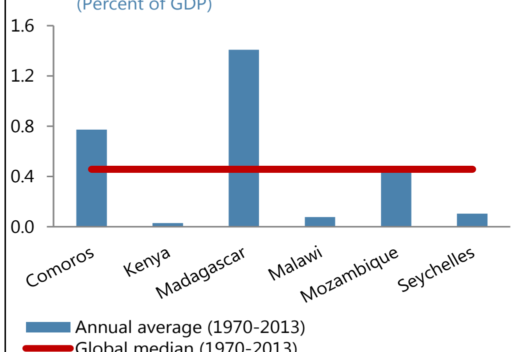
…the slow post-crisis recovery in tourism, partially due to problems at Air Madagascar.

Tourism (Total visitors per year)



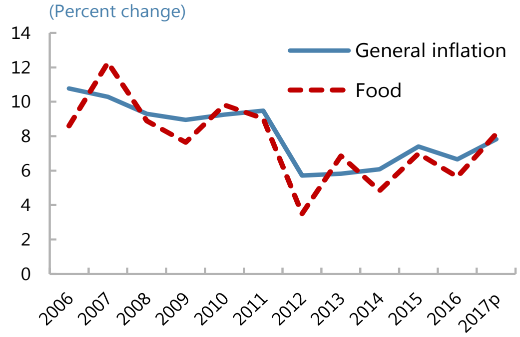
Madagascar is prone to costly natural disasters.

Damage by Natural Disasters (Percent of GDP)



Inflation is projected to increase in 2017 partly because of the effect of natural disasters.

CPI average (Percent change)



Sources: Malagasy authorities; and IMF staff estimates.

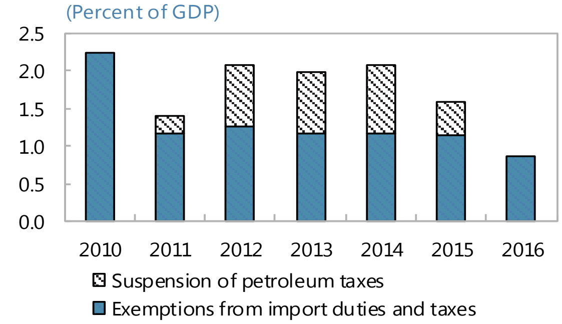
Figure 2. Madagascar: Fiscal Developments, 2006-17

The mobilization of fiscal revenue remains challenging...

Gross Tax collections
(Percent of GDP)

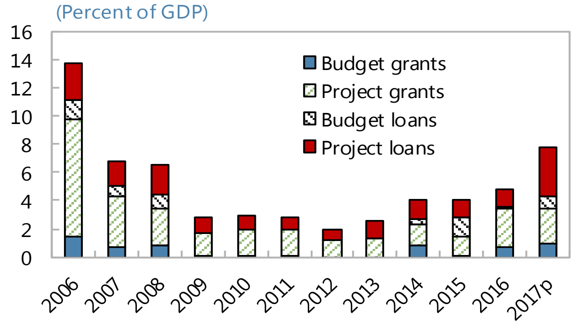
...even though tax exemptions and suspensions have been declining.

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



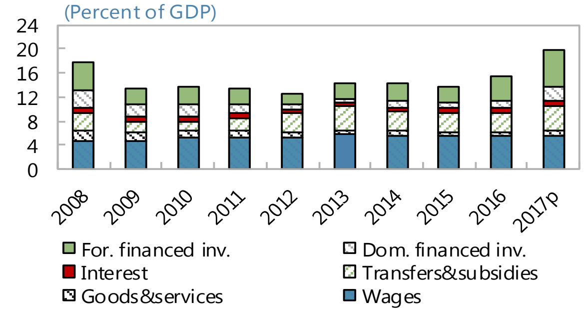
Donor flows have started to increase but are less than levels reached in 2006.

Donor Flows
(Percent of GDP)



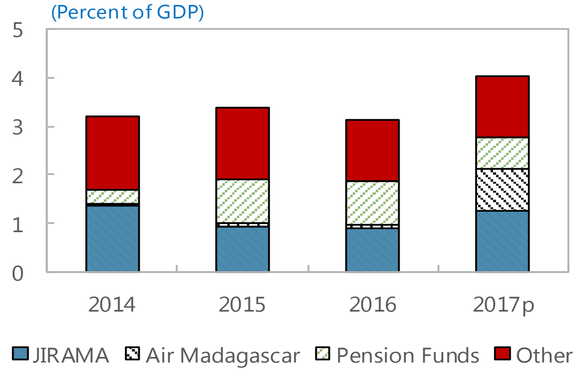
Subsidies and transfers continue to absorb a large share of spending...

Budgetary Spending
(Percent of GDP)



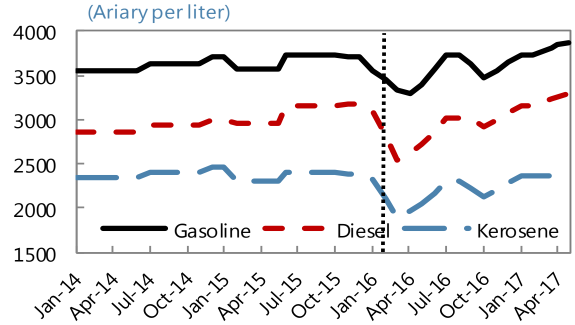
...mainly driven by transfers to SOEs and pensions.

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.

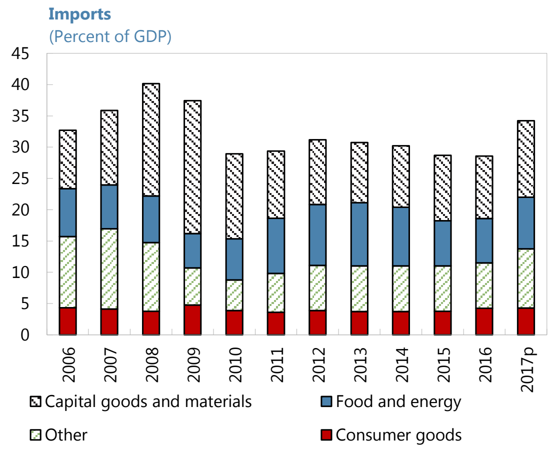
Fuel Prices
(Ariary per liter)



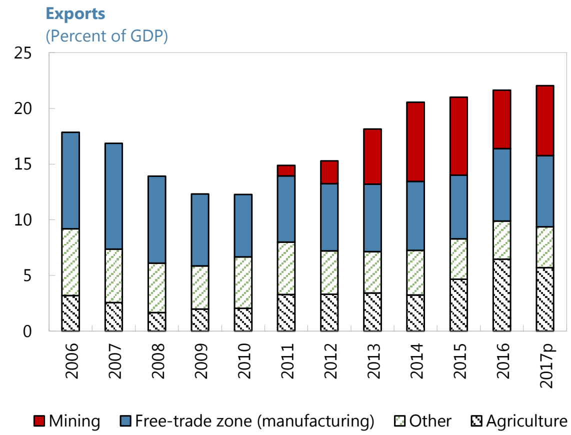
Sources: Malagasy authorities; and IMF staff estimates.

Figure 3. Madagascar: External Sector Developments, 2006-17

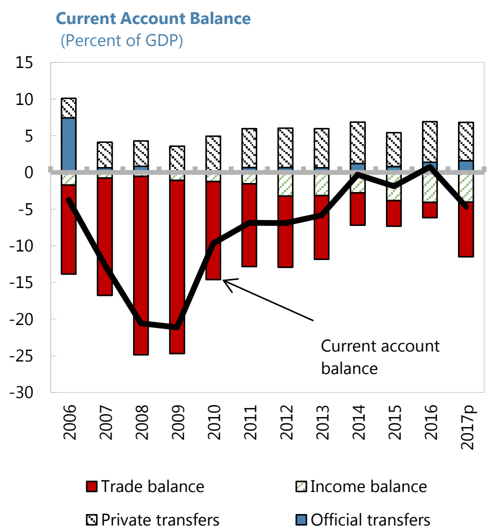
Investment scaling up and cyclone-related rehabilitation work are projected to increase imports significantly in 2017.



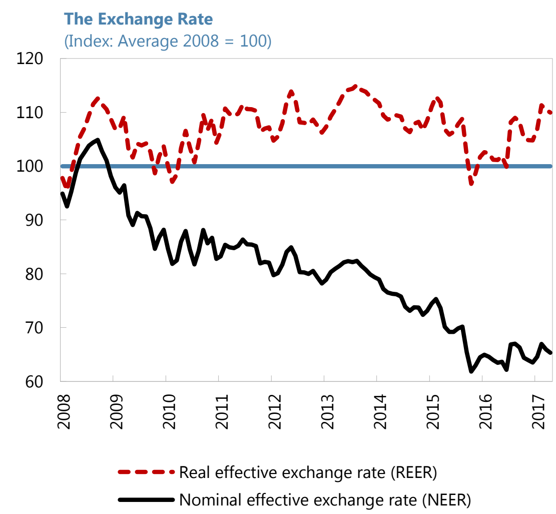
Madagascar's export earnings are based on the free-trade zone, mining, and agriculture.



The current account will weaken because of growing imports.



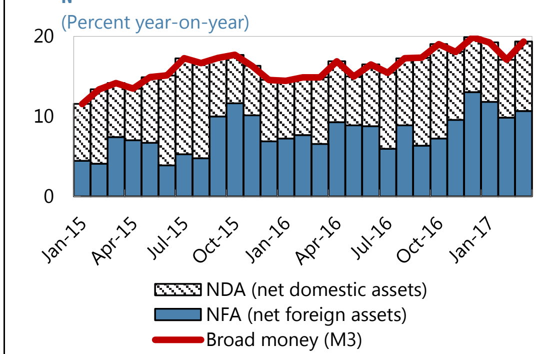
While the NEER is depreciating, higher inflation than in its trading partners has kept the REER relatively stable.

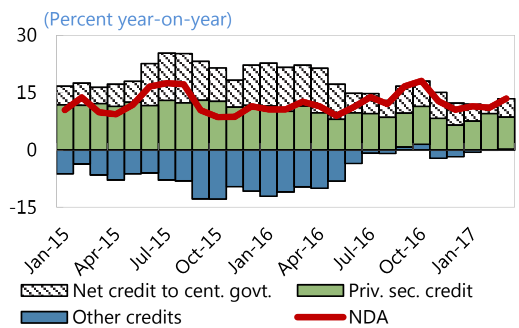


Sources: Malagasy authorities; and IMF staff estimates.

Figure 4. Madagascar: Monetary Developments, 2015-17

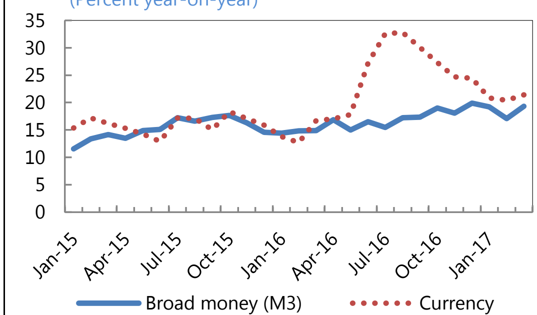
Broad money growth is driven by growing net foreign assets, private sector credit growth (about 11 percent year-on-year in March 2017), and net lending to the central government.





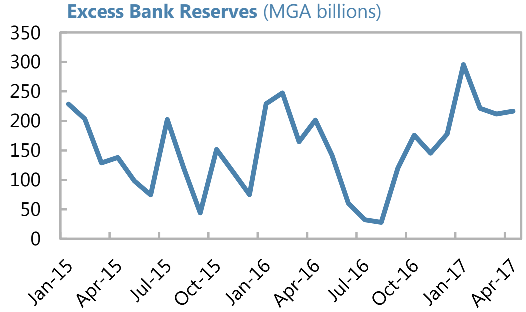
Higher vanilla prices favored small farmers who wanted currency and as a result …

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



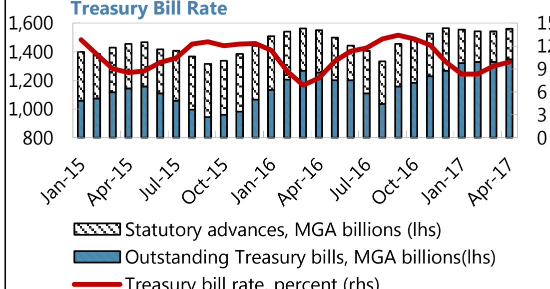
… bank reserves fell until the central bank started to intervene in the foreign exchange and money markets in September 2016.

Excess Bank Reserves (MGA billions)



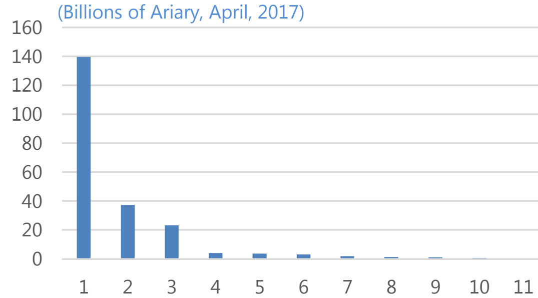
Interest rates follow a strong seasonal pattern with low levels early in the year when banks are the most liquid.

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



Even when banks are liquid, two or three large banks hold most of the excess reserves.

Distribution of Excess Reserves among Banks
(Billions of Ariary, April, 2017)

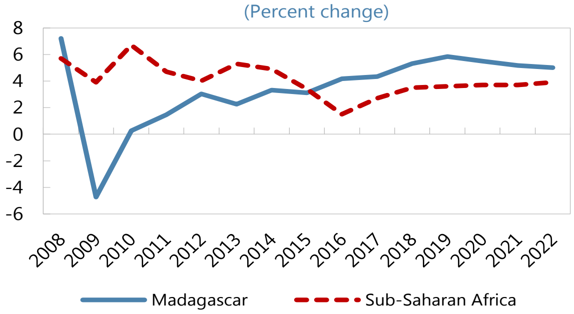


Sources: Malagasy authorities; and IMF staff estimates.

Figure 5. Madagascar: Medium-Term Macroeconomic Prospects, 2008-22

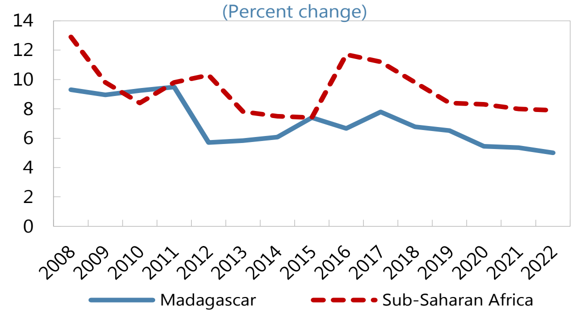
Reforms and scaled-up public and private investment are projected to sustain growth.

Real GDP
(Percent change)



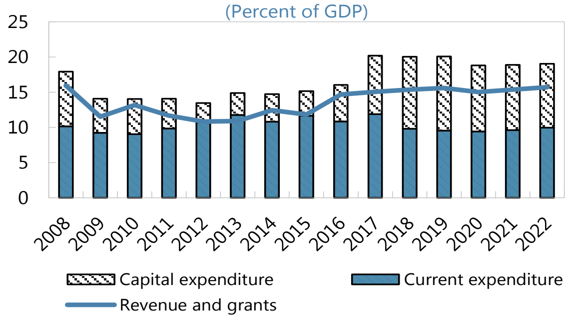
Inflation is projected to approach 5 percent a year over the medium term.

CPI average
(Percent change)



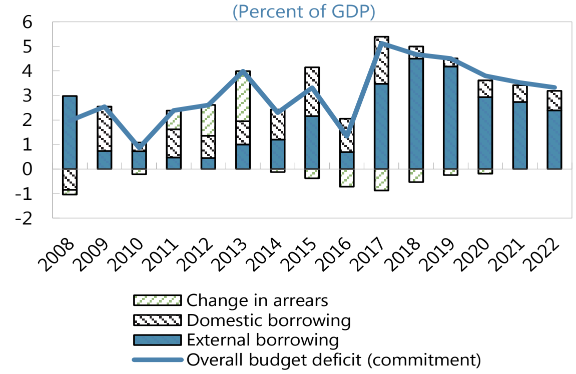
Scaling-up of public investment is increasing medium-term fiscal spending.

Government Revenue and Spending
(Percent of GDP)



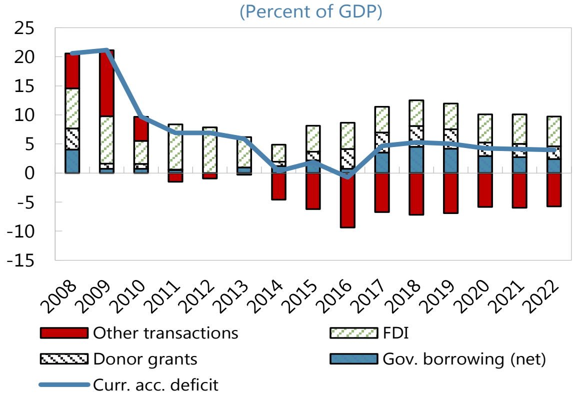
Following new donor pledges, nearly all financing needs have been covered.

Financing of the Budget Deficit
(Percent of GDP)



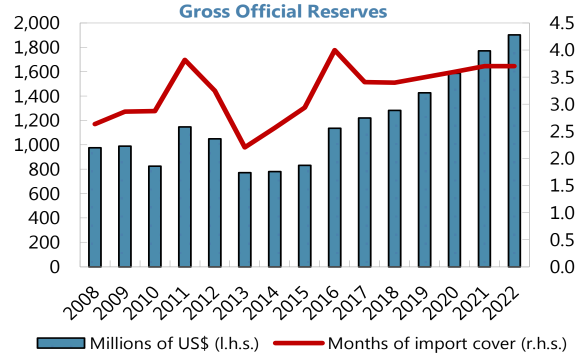
Profit repatriation (shown in other transactions) is creating significant balance of payment outflows over the medium term.

Financing of the Current Account Deficit
(Percent of GDP)



Following significant reserve accumulation in 2016, the import cover is projected to remain 3.5 to 4 months over the medium term.

Gross Official Reserves



Sources: Malagasy authorities; and IMF staff estimates.

Table 1. Madagascar: Selected Economic Indicators, 2015-22

	2015	2016		2017		2018	2019	2020	2021	2022
	Actuals	EBS 16/68	Proj.	EBS 16/68	Proj.	Projections				
					(Percent change; unless otherwise indicated)					
National account and prices										
GDP at constant prices	3.1	4.1	4.2	4.5	4.3	5.3	5.9	5.5	5.2	5.0
GDP deflator	7.6	6.7	6.7	6.9	7.8	6.8	6.5	5.5	5.4	5.0
Consumer prices (end of period)	7.6	7.1	7.0	7.1	7.7	6.8	6.0	5.4	5.4	5.0
Money and credit										
Reserve money	9.6	16.0	25.4	12.7	14.0	7.5	10.5	14.2	14.8	13.0
Broad money (M3)	14.6	17.9	19.9	12.7	15.0	10.4	12.3	16.2	16.7	14.9
					(Growth in percent of beginning of period money stock (M3))					
Net foreign assets	6.9	7.5	13.0	3.3	1.5	1.5	3.6	6.2	6.7	5.0
Net domestic assets	7.7	10.4	6.9	9.4	13.5	8.9	8.7	9.9	10.0	9.8
of which: Credit to the private sector	8.2	4.6	4.1	6.6	8.0	7.7	8.1	8.3	7.7	7.2
					(Percent of GDP)					
Public finance										
Total revenue (excluding grants)	10.4	11.0	11.2	11.2	11.6	11.8	12.2	12.7	13.1	13.5
of which: Tax revenue	10.1	10.8	10.9	11.0	11.4	11.5	12.0	12.5	12.9	13.2
Grants	1.5	2.0	3.4	2.7	3.5	3.6	3.3	2.3	2.3	2.2
of which: budget grants	0.1	0.0	0.7	0.1	0.9	0.9	0.5	0.0	0.0	0.0
Total expenditures	15.1	16.2	16.0	18.3	20.2	20.0	20.1	18.8	18.9	19.0
Current expenditure	11.7	11.0	10.8	10.3	12.0	9.8	9.5	9.4	9.6	9.9
Wages and salaries	5.5	5.7	5.6	5.6	5.5	5.3	5.2	5.0	5.1	5.4
Interest payments	0.8	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0
Other	3.9	3.8	3.7	3.6	4.9	3.3	3.2	3.2	3.3	3.4
Goods and Services	0.5	0.7	0.6	0.8	0.9	1.1	1.2	1.3	1.3	1.5
Transfers and Subsidies	3.4	3.2	3.1	2.7	4.0	2.2	2.0	1.9	1.9	1.9
Treasury operations (net)	1.4	0.5	0.6	0.2	0.6	0.2	0.2	0.2	0.2	0.2
Capital expenditure	3.5	5.3	5.2	8.0	8.3	10.2	10.5	9.4	9.3	9.1
Domestic financed	1.0	1.5	1.2	1.9	2.3	2.5	3.1	3.4	3.5	3.6
Foreign financed	2.5	3.7	4.0	6.1	6.0	7.7	7.4	6.0	5.8	5.5
Overall balance (commitment basis)	-3.3	-3.2	-1.3	-4.4	-5.1	-4.7	-4.5	-3.8	-3.5	-3.3
Float (variation of accounts payable, + = increase)	0.1	0.0	0.5	0.0	-0.2	0.0	0.0	0.0	0.0	0.0
Variation of domestic arrears (+ = increase)	-0.5	-1.2	-1.2	-0.7	-0.7	-0.5	-0.2	-0.2	0.0	0.0
Overall balance (cash basis)	-3.7	-4.5	-2.1	-5.1	-6.0	-5.2	-4.8	-4.0	-3.5	-3.3
Primary balance [1]	-1.3	-0.6	0.8	0.1	-0.7	1.3	1.1	0.9	1.0	0.9
Total financing	3.7	4.5	2.1	4.7	6.0	4.9	4.4	3.6	3.4	3.2
Foreign borrowing (net)	2.2	2.9	0.7	3.6	4.0	4.5	4.2	2.9	2.7	2.4
Domestic financing	2.0	1.6	1.4	1.1	2.0	0.4	0.3	0.7	0.7	0.8
Prospective financing	0.0	0.0	0.0	-0.4	0.0	-1.6	-1.4	-2.2	-2.6	-2.9
of which: budget support needs	0.0	0.0	0.0	-0.4	0.0	-0.3	-0.3	-0.4	-0.1	-0.1
Savings and investment										
Investment	13.1	15.3	15.2	18.2	19.2	21.5	21.4	20.4	20.3	20.0
Gross national savings	11.2	13.0	16.0	14.5	14.5	16.2	16.4	16.2	16.1	16.1
External sector										
Exports of goods, f.o.b.	21.0	21.5	21.6	20.8	22.3	21.5	22.2	23.8	24.5	25.0
Imports of goods, c.i.f.	28.7	30.2	28.6	31.2	34.6	34.4	34.8	35.5	36.3	36.9
Current account balance (exc. grants)	-3.4	-4.3	-2.7	-6.4	-8.1	-8.9	-8.4	-6.5	-6.4	-6.2
Current account balance (inc. grants)	-1.9	-2.3	0.8	-3.7	-4.7	-5.3	-5.0	-4.2	-4.1	-4.0
Public debt	41.3	41.7	38.7	42.8	41.3	42.2	43.1	43.4	43.9	44.3
External	28.4	30.4	27.0	32.6	29.6	31.9	33.9	34.8	35.4	35.8
Domestic	12.9	11.3	11.7	10.2	11.8	10.4	9.2	8.6	8.5	8.5
					(Units as indicated)					
Gross official reserves (millions of SDRs)	600	701	834	782	896	942	1,045	1,161	1,296	1,394
Months of imports of goods and services	2.9	3.3	3.9	3.4	3.4	3.4	3.5	3.6	3.7	3.7
Real effective exchange rate	-0.5	4.0	0.3	...	...	...	...	...	...	...
Terms of trade (percent change, deterioration -)	1.3	6.6	23.2	-4.6	-5.1	-3.2	2.2	0.3	-1.8	-2.3
Memorandum items										
GDP per capita (U.S. dollars)	402	391	401	405	412	424	444	464	485	503
Nominal GDP at market prices (billions of ariary)	28,585	31,773	31,769	35,507	35,731	40,183	45,304	50,398	55,846	61,570

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

[1] Primary balance excl. foreign-financed investment. Commitment basis.

Table 2. Madagascar: National Accounts, 2015-22

	2015	2016		2017		2018	2019	2020	2021	2022
	Actuals	EBS 16/68	Prel. Est.	EBS 16/68	Proj.	Projections				
					(Percent change)					
Real supply side growth										
Primary sector	-0.7	2.2	1.6	2.8	0.8	2.6	2.7	2.7	2.2	2.2
Agriculture	-2.4	2.8	1.4	3.5	-0.3	3.5	3.7	3.7	2.7	2.7
Cattle and fishing	0.8	1.9	1.9	2.5	2.0	2.0	2.0	2.0	2.0	2.0
Forestry	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Secondary sector	7.3	4.9	5.5	5.0	5.7	6.1	7.7	7.3	7.0	7.0
Food and drink	3.8	3.8	6.4	3.8	5.6	5.6	5.7	5.7	5.8	5.8
Export processing zone	-0.3	9.4	24.7	10.0	15.6	12.5	12.5	10.5	10.5	10.5
Energy	4.1	5.5	8.3	5.5	6.5	8.4	13.5	11.5	9.5	9.5
Extractive industry	19.5	5.0	-1.6	5.0	2.3	3.5	6.5	6.5	6.5	6.5
Other	1.2	4.5	5.8	4.8	5.5	6.1	6.4	6.3	5.7	5.7
Tertiary sector	3.3	4.8	4.8	5.3	5.8	6.5	6.9	6.4	6.0	5.6
Transportation	2.0	4.9	2.1	6.4	5.8	7.3	8.8	7.7	7.9	8.0
Services	5.3	5.1	5.2	5.1	5.2	5.3	5.0	5.1	4.3	4.3
Trade	1.0	3.1	3.1	3.0	3.0	3.0	2.1	3.0	3.0	3.0
Public administration	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Public works/construction	9.4	10.0	18.6	10.0	15.3	16.5	17.0	13.0	11.0	7.6
Indirect taxes	5.7	4.8	5.7	4.8	4.8	5.4	5.7	5.0	5.0	5.0
Real GDP at market prices	3.1	4.1	4.2	4.5	4.3	5.3	5.9	5.5	5.2	5.0
Nominal demand side composition					(Percent of GDP)					
Resource balance	-3.5	-3.9	-2.1	-5.5	-7.4	-8.1	-7.6	-6.4	-6.2	-6.1
Imports of goods and nonfactor services	35.5	36.8	35.6	37.7	40.3	40.6	40.7	41.0	41.5	41.8
Exports of goods and nonfactor services	32.1	32.9	33.5	32.2	32.9	32.4	33.1	34.6	35.3	35.7
Current account balance (including grants) = (S-I)	-1.9	-2.3	0.8	-3.7	-4.6	-5.3	-5.0	-4.2	-4.1	-4.0
Consumption	90.4	88.5	86.8	87.3	88.2	86.6	86.2	86.0	86.0	86.1
Government	10.8	10.0	9.9	9.3	11.0	8.8	8.5	8.4	8.6	9.0
Nongovernment	79.6	78.5	76.9	78.0	77.2	77.8	77.7	77.5	77.3	77.1
Investment (I)	13.1	15.3	15.2	18.2	19.2	21.5	21.4	20.4	20.3	20.0
Government	3.5	5.3	5.2	8.0	8.3	10.2	10.5	9.4	9.3	9.1
Nongovernment	9.6	10.0	10.0	10.2	10.9	11.3	10.9	11.1	11.0	11.0
Of which: foreign direct investment	4.5	4.9	4.5	5.1	4.4	4.4	4.4	4.8	5.1	5.1
National savings (S)	11.2	13.0	16.0	14.5	14.5	16.2	16.4	16.2	16.1	16.1
Government	0.2	2.1	3.9	3.6	3.2	5.5	6.0	5.6	5.8	5.7
Nongovernment	11.0	11.0	12.1	10.9	11.4	10.7	10.4	10.7	10.4	10.3
Memoranda items:										
Nominal GDP (at market prices)	28,585	31,773	31,769	35,507	35,731	40,183	45,304	50,398	55,846	61,570
Net factor income	-3.9	-4.0	-4.1	-4.0	-4.0	-4.0	-4.0	-3.9	-4.0	-3.9
Transfers	5.4	5.6	6.9	5.8	6.8	6.9	6.6	6.1	6.1	6.1
Nominal GNP	28,586	31,775	31,772	35,509	35,734	40,186	45,306	50,400	55,848	61,572

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

Table 3. Madagascar: Fiscal Operations of the Central Government, 2015-22

(Billions of Ariary)

	2015	2016		2017							2018			2019	2020	2021	2022
	Dec	Dec		March		June		Sep	Dec		March	June	Dec	Dec	Dec	Dec	Dec
	Estimations	EBS 16/68	Prel. Est.	EBS 16/68	Proj.	EBS 16/68	Proj.	Proj.	EBS 16/68	Proj.	Projections			Projections			
Total revenue and grants	3,381	4,135	4,664	907	1,051	1,985	2,252	3,772	4,918	5,398	1,191	2,691	6,168	7,051	7,554	8,577	9,654
Total revenue	2,959	3,499	3,573	820	937	1,837	1,942	2,951	3,974	4,158	1,010	2,184	4,727	5,535	6,389	7,309	8,288
Tax revenue [1]	2,878	3,431	3,471	809	917	1,801	1,906	2,885	3,898	4,081	988	2,144	4,641	5,438	6,281	7,189	8,156
Domestic taxes	1,420	806	1,905	191	452	439	996	1,471	2,000	2,129	546	1,192	2,469	3,069	3,682	4,364	5,107
Taxes on international trade and transactions	1,458	1,669	1,664	384	465	826	910	1,414	1,898	2,001	441	951	2,171	2,359	2,579	2,796	3,010
Non-tax revenue	81	68	102	11	20	36	36	66	77	77	22	40	86	97	108	120	132
Grants	422	636	1,091	87	114	148	310	820	944	1,240	181	506	1,441	1,515	1,165	1,268	1,365
Current grants	40	0	226	0	0	0	0	190	43	329	0	143	342	227	0	0	0
Capital grants	382	636	864	87	114	148	310	630	901	911	181	364	1,099	1,288	1,165	1,268	1,365
Total expenditure and lending minus repayments	4,328	5,162	5,088	1,031	1,359	2,467	3,264	5,193	6,494	7,233	1,476	3,647	8,050	9,093	9,476	10,552	11,707
of which: Social priority spending	193	235	259	60	62	130	130	174	...	298	84	175	401	542	713	847	932
Current expenditure	3,331	3,481	3,439	669	917	1,633	1,944	2,994	3,647	4,272	801	1,882	3,940	4,317	4,754	5,365	6,126
Wages and salaries	1,566	1,809	1,789	421	474	1,006	976	1,478	1,972	1,977	516	1,061	2,149	2,333	2,535	2,860	3,325
Interest payments	230	290	278	62	53	145	130	194	334	339	60	161	400	462	502	555	605
Foreign	57	76	65	20	19	60	46	61	125	107	22	69	143	180	216	248	281
Domestic	173	214	213	42	34	84	83	133	209	232	38	92	257	282	286	307	324
Other	1,122	1,217	1,185	157	350	472	753	1,231	1,264	1,750	213	641	1,316	1,437	1,621	1,837	2,069
Goods and services	157	210	189	40	52	130	140	214	301	313	73	199	446	536	658	751	916
Transfers and subsidies	966	1,007	996	116	298	342	613	1,017	964	1,437	139	441	871	901	963	1,086	1,153
of which: disaster relief	0	...	0	...	0	...	4	8	...	8	0	0	0	0	0	0	0
of which: Air Madagascar	28	...	0		0	...	53	53	...	301	0	0	0	0	0	0	0
of which: JIRAMA	265	...	281		117	...	200	353	...	450	50	100	200	150	100	50	0
Treasury operations (net) [1]	412	166	187	30	40	10	85	91	76	206	12	19	75	85	96	113	127
Capital expenditure	997	1,680	1,650	362	442	835	1,321	2,200	2,847	2,961	675	1,764	4,109	4,776	4,721	5,187	5,581
Domestic financed	275	492	394	33	37	200	403	635	675	807	46	501	1,002	1,412	1,697	1,955	2,217
Disaster relief	0	...	0	...	0	...	60	120	...	120	0	0	0	0	0	0	0
Foreign financed	722	1,189	1,256	329	405	634	917	1,564	2,173	2,155	629	1,263	3,107	3,364	3,024	3,232	3,364
Identified financing	2,155	1,189	1,256	...	405	...	917	1,564	2,173	2,155	629	1,263	2,562	2,866	2,092	1,836	1,640
Unidentified financing	...	0	0	...	0	...	0	0	0	0	0	0	544	498	932	1,396	1,724
Overall balance (commitment basis) [2]	-947	-1,026	-425	-124	-308	-483	-1,012	-1,422	-1,576	-1,835	-285	-956	-1,882	-2,042	-1,922	-1,975	-2,053
Float (variation of accounts payable, + = increase)	42	0	163	-99	-75	-110	38	79	0	-71	82	59	0	0	0	0	0
Variation of domestic arrears (+ = increase)	-149	-389	-390	-98	-147	-120	-163	-168	-235	-235	-134	-148	-214	-113	-94	0	0
Overall balance (including grants, cash basis) [2]	-1,053	-1,415	-652	-322	-531	-713	-1,138	-1,510	-1,811	-2,142	-337	-1,045	-2,095	-2,155	-2,015	-1,975	-2,053
Primary balance excl. foreign-financed investment [3]	-377	-184	245	180	35	148	-275	-294	30	-253	223	105	526	496	439	544	551
Total financing	1,053	1,415	651	322	530	713	1,138	1,510	1,659	2,142	337	1,045	1,977	2,012	1,821	1,911	1,965
Foreign borrowing (residency principle)	618	915	222	193	256	453	711	986	1,261	1,426	391	778	1,808	1,895	1,478	1,525	1,472
External borrowing, Gross	733	1,142	445	242	352	571	849	1,175	1,511	1,719	448	900	2,057	2,127	1,859	1,964	1,999
Budget support loans	394	589	53	0	61	85	242	242	239	475	0	0	50	51	0	0	0
Project loans	340	553	392	242	291	486	608	934	1,271	1,244	448	900	2,007	2,076	1,859	1,964	1,999
Amortization on a due basis (-)	-115	-227	-223	-49	-96	-118	-138	-189	-250	-293	-57	-121	-250	-232	-380	-439	-527
Domestic borrowing (residency principle)	568	500	429	129	274	261	427	524	399	715	-54	267	169	117	342	385	493
Monetary sector	470	375	226	34	137	138	290	407	249	490	-133	187	80	68	302	335	431
of which: Air Madagascar	0	...	0	...	0	...	53	53	...	53	0	0	0	0	0	0	0
Non-monetary sector	98	125	274	95	137	123	137	117	150	225	79	80	89	49	40	50	62
of which: Air Madagascar	0	...	0	...	0	...	0	0	...	63	0	0	-31	-31	0	0	0
Treasury correspondent accounts (net)	-135	0	-70	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Excess financing [4]	0	0	0	...	0	...	0	0	-152	0	0	0	-663	-642	-1,127	-1,461	-1,812
of which: budget support needs	0	0	0	...	0	...	0	0	0	0	0	0	-118	-143	-194	-64	-88
of which: Air Madagascar	0	...	0	...	0	...	0	0	...	0	0	0	-31	-31	0	0	0

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

[1] Estimates of domestic taxes and other treasury operations net include an amount of MGA 90bn (0.3 percent of GDP) in 2016 and MGA 72 bn (0.2 procent of GDP) in 2017 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.

[4] A negative value indicates financing that has not yet been identified.

Table 4. Madagascar: Fiscal Operations of the Central Government, 2015-22

(Percent of GDP)

	2015	2016[1]		2017		2018	2019	2020	2021	2022
	Actuals	EBS 16/68	Prel. Est.	EBS 16/68	Proj.	Projections				
Total revenue and grants	11.8	13.0	14.7	13.9	15.1	15.3	15.6	15.0	15.4	15.7
Total revenue	10.4	11.0	11.2	11.2	11.6	11.8	12.2	12.7	13.1	13.5
Tax revenue [1]	10.1	10.8	10.9	11.0	11.4	11.5	12.0	12.5	12.9	13.2
Domestic taxes	5.0	5.5	6.0	5.6	6.0	6.1	6.8	7.3	7.8	8.3
Taxes on international trade and transactions	5.1	5.3	5.2	5.3	5.6	5.4	5.2	5.1	5.0	4.9
Non-tax revenue	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Grants	1.5	2.0	3.4	2.7	3.5	3.6	3.3	2.3	2.3	2.2
Current grants	0.1	0.0	0.7	0.1	0.9	0.9	0.5	0.0	0.0	0.0
Capital grants	1.3	2.0	2.7	2.5	2.5	2.7	2.8	2.3	2.3	2.2
Total expenditure and lending minus repayments	15.1	16.2	16.0	18.3	20.2	20.0	20.1	18.8	18.9	19.0
of which: Social priority spending	0.7	…	0.8	…	0.8	1.0	1.2	1.4	1.5	1.5
Current expenditure	11.7	11.0	10.8	10.3	12.0	9.8	9.5	9.4	9.6	9.9
Wages and salaries	5.5	5.7	5.6	5.6	5.5	5.3	5.2	5.0	5.1	5.4
Interest payments	0.8	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0
Foreign	0.2	0.2	0.2	0.4	0.3	0.4	0.4	0.4	0.4	0.5
Domestic	0.6	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.5	0.5
Other	3.9	3.8	3.7	3.6	4.9	3.3	3.2	3.2	3.3	3.4
Goods and services	0.5	0.7	0.6	0.8	0.9	1.1	1.2	1.3	1.3	1.5
Transfers and Subsidies	3.4	3.2	3.1	2.7	4.0	2.2	2.0	1.9	1.9	1.9
of which: disaster relief	0.0	…	0.0	…	0.0	0.0	0.0	0.0	0.0	0.0
of which: Air Madagascar	0.1	…	0.0	…	0.8	0.0	0.0	0.0	0.0	0.0
of which: JIRAMA	0.9	…	0.9	…	1.3	0.5	0.3	0.2	0.1	0.0
Treasury operations (net) [1]	1.4	0.5	0.6	0.2	0.6	0.2	0.2	0.2	0.2	0.2
Capital expenditure	3.5	5.3	5.2	8.0	8.3	10.2	10.5	9.4	9.3	9.1
Domestic financed	1.0	1.5	1.2	1.9	2.3	2.5	3.1	3.4	3.5	3.6
Disaster relief	0.0	…	0.0	…	0.3	0.0	0.0	0.0	0.0	0.0
Foreign financed	2.5	3.7	4.0	6.1	6.0	7.7	7.4	6.0	5.8	5.5
Identified financing	7.5	3.7	4.0	6.1	6.0	6.4	6.3	4.2	3.3	2.7
Unidentified financing	…	0.0	0.0	0.0	0.0	1.4	1.1	1.9	2.5	2.8
Overall balance (commitment basis)[2]	-3.3	-3.2	-1.3	-4.4	-5.1	-4.7	-4.5	-3.8	-3.5	-3.3
Float (variation of accounts payable, + = increase)	0.1	0.0	0.5	0.0	-0.2	0.0	0.0	0.0	0.0	0.0
Variation of domestic arrears (+ = increase)	-0.5	-1.2	-1.2	-0.7	-0.7	-0.5	-0.2	-0.2	0.0	0.0
Overall balance (including grants, cash basis)[2]	-3.7	-4.5	-2.1	-5.1	-6.0	-5.2	-4.8	-4.0	-3.5	-3.3
Primary balance excl. foreign-financed investment [3]	-1.3	-0.6	0.8	0.1	-0.7	1.3	1.1	0.9	1.0	0.9
Total financing	3.7	4.5	2.1	4.7	6.0	4.9	4.4	3.6	3.4	3.2
Foreign borrowing (residency principle)	2.2	2.9	0.7	3.6	4.0	4.5	4.2	2.9	2.7	2.4
External borrowing, gross	2.6	3.6	1.4	4.3	4.8	5.1	4.7	3.7	3.5	3.2
Budget support loans	1.4	1.9	0.2	0.7	1.3	0.1	0.1	0.0	0.0	0.0
Project loans	1.2	1.7	1.2	3.6	3.5	5.0	4.6	3.7	3.5	3.2
Amortization on a due basis (-)	-0.4	-0.7	-0.7	-0.7	-0.8	-0.6	-0.5	-0.8	-0.8	-0.9
Domestic borrowing (residency principle)	2.0	1.6	1.4	1.1	2.0	0.4	0.3	0.7	0.7	0.8
Monetary sector	1.6	1.2	0.7	0.7	1.4	0.2	0.2	0.6	0.6	0.7
Non-monetary sector	0.3	0.4	0.9	0.4	0.6	0.2	0.1	0.1	0.1	0.1
Treasury correspondent accounts (net)	-0.5	0.0	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Excess financing [4]	0.0	0.0	0.0	-0.4	0.0	-1.6	-1.4	-2.2	-2.6	-2.9
of which: budget support needs	0.0	0.0	0.0	-0.4	0.0	-0.3	-0.3	-0.4	-0.1	-0.1
of which: Air Madagascar	…	…	…	…	0.0	0.0	0.0	0.0	0.0	0.0

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

[1] Projections for domestic taxes and other treasury operations net include an amount of MGA 90bn (0.3 percent of GDP) in 2016 and MGA 72 bn (0.2 procent of GDP) in 2017 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.

[4] A negative value indicates financing that has not been identified

Table 5. Madagascar: Balance of Payments, 2015-22

	2015	2016		2017		2018	2019	2020	2021	2022
	Actuals	EBS 16/68	Proj.	EBS 16/68	Proj.	Projections				
	(Millions of SDRs)									
Current account	-131.6	-158.8	54.0	-273.3	-363.1	-433.7	-442.4	-399.5	-417.5	-428.8
Goods and services	-241.5	-269.6	-149.7	-404.1	-580.0	-665.2	-672.4	-606.0	-630.2	-660.5
Trade balance of goods	-235.1	-287.3	-190.0	-419.7	-552.2	-631.7	-643.3	-598.0	-635.1	-686.9
Exports, f.o.b.	1,463.1	1,493.3	1,556.4	1,527.7	1,727.1	1,766.3	1,957.6	2,249.0	2,487.4	2,704.1
Of which: Mining	487.6	391.5	376.6	449.5	493.5	579.4	588.1	603.6	619.8	624.0
Imports, f.o.b.	-1,698.2	-1,780.6	-1,746.4	-1,947.5	-2,279.3	-2,398.0	-2,600.9	-2,847.1	-3,122.5	-3,391.0
Of which: Petroleum products	-256.9	-189.2	-241.6	-228.3	-317.5	-353.2	-387.8	-412.2	-442.9	-477.0
Of which: Food	-170.4	-171.2	-191.2	-179.9	-231.0	-210.3	-219.6	-227.9	-236.8	-247.5
Of which: Intermediate goods and capital	-618.1	-702.1	-609.5	-762.2	-816.1	-903.5	-921.2	-972.9	-1,081.9	-1,194.5
Services (net)	-6.5	17.7	40.3	15.7	-27.8	-33.5	-29.2	-8.0	5.0	26.4
Receipts	770.6	796.1	854.0	838.5	849.1	893.7	954.1	1,016.2	1,085.5	1,156.2
Payments	-777.0	-778.4	-813.7	-822.8	-876.9	-927.2	-983.2	-1,024.2	-1,080.6	-1,129.8
Income (net)	-268.8	-278.2	-293.1	-296.4	-313.0	-330.2	-349.4	-367.6	-403.5	-425.7
Receipts	11.8	15.4	24.3	16.5	26.8	28.9	31.8	35.1	22.8	24.3
Payments	-280.6	-293.6	-317.4	-312.9	-339.8	-359.2	-381.2	-402.7	-426.3	-450.0
Of which: interest on public debt	-13.8	-16.6	-14.7	-26.0	-23.5	-29.1	-34.9	-40.5	-45.1	-49.3
Current transfers (net)	378.7	388.9	496.9	427.2	529.8	561.8	579.4	574.1	616.2	657.4
Official transfers	55.0	46.5	100.3	58.0	123.9	126.1	104.5	64.8	69.6	74.2
Of which: Budget aid [1]	10.3	0.0	50.4	8.8	70.6	69.8	44.1	0.0	0.0	0.0
Of which: Other (net)	44.7	46.5	49.9	49.1	53.2	56.3	60.4	64.8	69.6	74.2
Private transfers	323.7	342.5	396.6	369.3	406.0	435.7	474.9	509.3	546.6	583.2
Capital and financial account	202.9	259.5	156.8	322.9	335.2	398.9	458.3	485.4	552.9	530.1
Capital account	93.1	139.2	195.8	186.6	197.6	224.3	250.4	218.3	230.1	239.8
Of which: Project grant [1]	93.1	139.2	195.8	186.6	197.6	224.3	250.4	218.3	230.1	239.8
Financial account	86.2	120.3	-9.4	136.3	137.6	174.6	207.9	267.1	322.8	290.4
Foreign direct and portfolio investment	297.6	343.5	324.2	373.7	343.2	363.0	389.8	455.4	517.5	552.1
Other investment	-211.4	-223.3	-333.6	-237.5	-205.6	-188.4	-181.8	-188.3	-194.7	-261.7
Government	150.6	198.1	50.6	261.0	312.1	368.1	368.2	277.0	276.8	258.5
Drawing	178.7	247.7	101.1	312.7	376.2	419.1	413.4	348.2	356.4	350.9
Project drawings [1]	82.8	121.0	88.7	263.1	272.7	409.1	403.4	348.2	356.4	350.9
Budgetary support [1]	96.0	126.7	12.4	49.6	103.6	10.0	10.0	0.0	0.0	0.0
Amortization	-28.1	-49.6	-50.5	-51.7	-64.2	-50.9	-45.2	-71.3	-79.6	-92.5
Monetary authority and private sector	-123.6	-118.5	-147.4	-118.1	-143.5	-150.2	-142.6	-141.4	-151.8	-161.9
Banks	14.0	-4.3	-5.1	0.0	-2.6	-5.3	-2.6	0.0	0.0	0.0
Other (inc. unrepatriated export revenues)	-252.4	-298.5	-231.7	-380.4	-371.6	-401.0	-404.8	-323.8	-319.7	-358.3
Errors and omissions	23.6	0.0	-29.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overall balance	71.3	100.7	210.8	49.6	-27.9	-34.8	15.9	86.0	135.4	101.3
Financing	-71.3	-100.7	-210.8	-80.9	27.9	10.7	-43.7	-122.4	-147.1	-116.8
Central bank (net; increase = –)	-71.3	-100.7	-210.8	-80.9	27.9	10.7	-43.7	-122.4	-147.1	-116.8
Use of IMF credit (net)	18.8	20.8	20.9	54.6	89.4	56.7	59.5	-6.4	-12.5	-18.8
Other assets, net (increase = –)	-90.1	-80.0	-231.7	-26.4	-61.5	-46.0	-103.2	-116.0	-134.6	-98.0
Debt relief and cancellation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financing gap [2]	0.0	0.1	0.0	31.4	0.0	24.2	27.8	36.4	11.7	15.5
	(Percent of GDP; unless otherwise indicated)									
Memorandum items:										
Grants	1.5	2.0	3.4	2.7	3.5	3.6	3.3	2.3	2.3	2.2
Loans	2.6	3.6	1.4	4.3	4.9	5.1	4.7	3.7	3.5	3.2
Direct investment	4.5	5.0	4.5	5.1	4.4	4.4	4.4	4.8	5.1	5.1
Current account										
Excluding net official transfers	-3.4	-4.3	-2.7	-6.4	-8.1	-8.9	-8.4	-6.5	-6.4	-6.2
Including net official transfers	-1.9	-2.3	0.8	-3.7	-4.7	-5.3	-5.0	-4.2	-4.1	-4.0
Debt service (percent of exports of goods)	33.4	32.0	30.8	29.7	27.7	24.9	21.0	18.6	16.2	14.6
Export of goods volume (percent change)	7.1	3.6	6.4	4.2	-0.5	4.5	7.6	13.6	11.8	10.3
Import of goods volume (percent change)	-7.8	13.4	26.7	6.3	11.1	4.0	7.6	8.6	8.9	7.6
Gross official reserves (millions of SDR)	600	701	834	782	896	942	1,045	1,161	1,296	1,394
Months of imports of goods and nonfactor services	2.9	3.3	3.9	3.4	3.4	3.4	3.5	3.6	3.7	3.7
Terms of Trade (estimated)	1.3	6.6	23.2	-4.6	-5.1	-3.2	2.2	0.3	-1.8	-2.3

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

[1] Only includes external financial support that has been identified by the authorities.

[2] Consists of unidentified project, budget, and balance of payment support. The proposed augmentation of the ECF-supported program in 2017 is included under Use of IMF credit (net).

Table 6. Madagascar: Monetary Accounts, 2015-22

(Billions of Ariary; unless otherwise indicated)

	2015	2016			2017					2018			2019	2020	2021	2022
	Dec	Sep	Dec		March	June	Sep	Dec		March	June	Dec	Dec	Dec	Dec	Dec
	Actuals	Actuals	EBS 16/68	Actuals	Actuals	Projections		EBS 16/68	Projection	Projections			Projections			
Net foreign assets	2,610	2,860	3,172	3,587	3,582	3,496	3,445	3,462	3,718	3,671	3,811	3,874	4,286	5,083	6,080	6,956
Net foreign assets (BCM)	1,763	2,014	2,250	2,709	2,569	2,607	2,537	2,493	2,769	2,711	2,832	2,852	3,205	3,969	4,927	5,766
Net foreign assets (deposit money banks)	847	846	922	878	1,012	889	908	969	949	960	980	1,022	1,081	1,114	1,152	1,190
Net domestic assets	4,892	5,433	5,672	5,406	5,686	6,171	6,558	6,505	6,621	6,938	7,291	7,543	8,535	9,810	11,303	13,009
Domestic credit	5,558	5,974	6,404	6,160	6,358	6,842	7,242	7,248	7,374	7,635	7,991	8,264	9,269	10,645	12,132	13,817
Net credit to government	1,696	1,947	2,118	1,978	2,098	2,273	2,389	2,375	2,471	2,340	2,660	2,561	2,639	2,951	3,295	3,735
BCM	1,049	1,136	1,137	1,028	1,032	1,143	1,315	948	1,316	1,253	1,243	1,221	1,207	1,204	1,204	1,207
DMBs	398	531	685	644	782	819	764	1,123	846	776	1,107	1,022	1,104	1,409	1,745	2,173
Gross credits (mainly BTAs)	773	860	1,060	1,052	1,194	1,228	1,174	1,498	1,256	1,192	1,530	1,457	1,547	1,856	2,197	2,630
Deposits	-375	-329	-375	-408	-412	-409	-410	-375	-410	-416	-423	-436	-443	-447	-452	-458
Other credits	248	280	296	306	284	311	310	305	309	311	311	318	328	338	347	355
Credit to the economy	3,863	4,027	4,286	4,182	4,260	4,569	4,853	4,873	4,902	5,296	5,331	5,702	6,630	7,694	8,837	10,083
Credit to public enterprises	63	57	148	70	54	70	70	148	70	70	70	70	70	70	70	70
Credit to private sector	3,785	3,957	4,128	4,094	4,187	4,481	4,765	4,715	4,815	5,208	5,243	5,615	6,542	7,606	8,749	9,995
Other credits	15	12	10	18	18	18	18	10	18	18	18	18	18	18	18	18
Other items (net)	-666	-540	-732	-754	-671	-671	-684	-743	-752	-698	-701	-720	-734	-835	-829	-808
BCM	359	388	368	305	412	376	371	410	343	366	364	350	330	310	298	298
Other	-1,025	-928	-1,100	-1,059	-1,083	-1,047	-1,055	-1,153	-1,095	-1,064	-1,065	-1,070	-1,064	-1,145	-1,127	-1,106
Money and quasi-money (M3)	7,502	8,293	8,844	8,993	9,268	9,666	10,003	9,966	10,340	10,609	11,102	11,417	12,820	14,893	17,382	19,965
Foreign currency deposits	869	877	932	955	1,077	966	985	979	1,026	1,037	1,057	1,100	1,158	1,192	1,229	1,267
Short term obligations of commercial banks	34	49	44	45	49	40	37	34	34	34	34	34	34	34	34	34
Broad money (M2)	6,600	7,367	7,868	7,993	8,143	8,661	8,981	8,953	9,280	9,538	10,011	10,284	11,629	13,668	16,119	18,664
Currency in circulation	2,115	2,476	2,462	2,632	2,524	2,774	3,028	2,743	3,113	2,853	2,997	3,266	3,604	4,112	4,712	5,313
Demand deposits in local currency	2,285	2,549	2,710	2,847	2,902	3,058	3,095	3,011	3,213	3,496	3,676	3,674	4,220	5,054	6,064	7,124
Quasi-money including time deposits	2,200	2,342	2,696	2,513	2,717	2,829	2,858	3,199	2,954	3,189	3,338	3,344	3,805	4,502	5,343	6,227
	(Percentage change relative to broad money at beginning of the year)															
Net foreign assets	7.9	3.8	8.5	14.8	-0.1	-1.1	-1.7	3.7	1.6	-0.5	1.0	1.7	4.0	6.9	7.3	5.4
Net domestic assets	8.8	8.2	11.8	7.8	3.5	9.6	10.7	10.6	15.2	3.4	7.2	9.9	9.6	11.0	10.9	10.6
Domestic credit	17.1	6.3	12.8	9.1	2.5	8.5	10.9	10.7	15.2	2.8	6.7	9.6	9.8	11.8	10.9	10.5
Net credit to government	8.1	3.8	6.4	4.3	1.5	3.7	3.6	3.3	6.2	-1.4	2.0	1.0	0.8	2.7	2.5	2.7
Credit to the economy	9.0	2.5	6.4	4.8	1.0	4.8	7.3	7.5	9.0	4.2	4.6	8.6	9.0	9.2	8.4	7.7
Credit to public enterprises	-0.3	-0.1	1.3	0.1	-0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Credit to private sector	9.4	2.6	5.2	4.7	1.2	4.8	7.1	7.5	9.0	4.2	4.6	8.6	9.0	9.2	8.4	7.7
Other items (net; asset = +)	-8.5	1.9	-1.0	-1.3	1.0	1.0	-0.2	-0.1	0.0	0.6	0.6	0.3	-0.1	-0.9	0.0	0.1
	(Percentage change year-on-year)															
Broad money (M2)	15.8	20.4	19.2	21.1	19.5	22.0	21.9	13.8	16.1	17.1	15.6	10.8	13.1	17.5	17.9	15.8
Currency in circulation	15.9	30.1	16.4	24.4	21.4	18.7	22.3	11.4	18.2	13.0	8.0	4.9	10.3	14.1	14.6	12.7
Demand deposits in local currency	9.5	16.9	18.6	24.6	21.1	24.9	21.4	11.1	12.9	20.5	20.2	14.3	14.9	19.8	20.0	17.5
Quasi-money in local currency	23.2	15.1	22.6	14.3	15.9	22.1	22.0	18.7	17.5	17.4	18.0	13.2	13.8	18.3	18.7	16.5
Credit to the private sector (in nominal terms)	16.5	11.3	9.1	8.2	11.4	16.9	20.4	14.2	17.6	24.4	17.0	16.6	16.5	16.3	15.0	14.2
Credit to the private sector (in real terms)	8.9	…	2.0	1.2	…	…	…	7.1	9.9	…	…	9.9	10.5	10.9	9.7	9.2
Memorandum items:																
Money multiplier (M3/reserve money)	2.4	2.3	2.5	2.3	2.5	2.4	2.3	2.5	2.4	2.5	2.5	2.4	2.5	2.5	2.5	2.6
Velocity of money (GDP/end-of-period M3)	3.81	4.38	3.59	3.53	…	…	…	3.56	3.46	…	…	3.52	3.53	3.38	3.21	3.08

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

[1] End of period.

Table 7. Madagascar: Balance Sheet of the Central Bank 2015-18

(Billions of Ariary; unless otherwise indicated)

	2015	2016				2017							2018		
	Dec	Sep		Dec		March		June		Sep	Dec		March	June	Dec
	Actuals	EBS 16/68	Actuals	EBS 16/68	Actuals	EBS 16/68	Actuals	EBS 16/68	Proj.	Proj.	EBS 16/68	Proj.	Projections		
Net foreign assets	1,763	2,036	2,014	2,250	2,709	2,283	2,569	2,349	2,607	2,537	2,493	2,769	2,711	2,832	2,852
Gross foreign assets	2,666	3,086	3,017	3,312	3,744	3,336	3,575	3,567	3,653	3,877	3,883	4,301	4,232	4,526	4,744
Gross foreign liabilities	-903	-1,051	-1,003	-1,062	-1,035	-1,053	-1,006	-1,217	-1,046	-1,340	-1,390	-1,532	-1,520	-1,694	-1,892
Net domestic assets	1,304	1,421	1,585	1,309	1,136	1,404	1,192	1,484	1,412	1,734	1,519	1,614	1,551	1,622	1,860
Credit to government (net)	1,049	1,112	1,136	1,137	1,028	1,148	1,032	1,064	1,143	1,315	948	1,316	1,253	1,243	1,221
Claims on central government	1,263	1,233	1,284	1,279	1,323	1,268	1,190	1,184	1,260	1,420	1,090	1,409	1,346	1,335	1,314
Statutory advances	376	296	298	296	298	296	213	223	260	260	150	260	208	208	208
Securitized debt (T-bonds and bills)	734	840	840	829	829	819	819	808	808	797	786	786	776	765	743
Discounted bills of exchange	27	0	36	57	78	57	44	57	78	78	57	78	78	78	78
On-lending of funds	0	…	109	…	117	…	113	…	113	283	…	283	283	283	283
Other credits	126	97	2	97	2	97	2	97	2	2	97	2	2	2	2
Government deposits	-213	-121	-148	-142	-295	-120	-158	-120	-117	-105	-142	-93	-93	-93	-93
Claims on other sectors	6	7	11	4	12	7	14	7	7	7	3	16	16	16	20
Claims on banks: Liquidity operations (+ = injection)	-110	-35	50	-200	-210	-136	-266	13	-113	41	158	-62	-84	-1	269
Other items (net; asset +)	359	337	388	368	305	385	412	400	376	371	410	343	366	364	350
Reserve money	3,067	3,457	3,599	3,559	3,845	3,687	3,761	3,834	4,019	4,271	4,012	4,383	4,262	4,454	4,712
Currency outside banks	2,115	2,241	2,476	2,462	2,632	2,390	2,524	2,487	2,774	3,028	2,743	3,113	2,853	2,997	3,266
Bank reserves	951	1,216	1,122	1,097	1,212	1,296	1,237	1,346	1,244	1,242	1,268	1,269	1,408	1,456	1,445
Currency in banks	188	167	155	188	202	167	169	199	169	199	223	202	221	222	253
Deposits	762	1,049	966	908	1,009	1,129	1,067	1,147	1,075	1,043	1,045	1,067	1,187	1,234	1,191
							(Cumulative annual flows)								
Memorandum items:															
Net foreign assets	374	273	251	487	946	33	-139	99	-102	-171	243	61	-58	62	82
Millions of SDRs	27	38	66	79	205	1	-14	9	-30	-57	26	-25	-15	2	-11
Net domestic assets	-106	117	281	5	-168	95	56	175	276	598	210	477	-63	9	247
Credit to government (net)	397	63	87	87	-21	12	3	-72	114	286	-189	288	-63	-74	-95
Reserve money	268	390	532	492	778	128	-83	275	175	426	453	538	-121	71	329
							(Millions of SDRs)								
Net foreign assets	397	435	463	476	602	477	588	485	572	545	502	577	562	579	566

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

[1] End of period.

Table 8. Madagascar: Financial Soundness Indicators, 2009-17[1]

(Ratios, percent)

	2009 Dec	2010 Dec	2011 Dec	2012 Dec	2013 Dec	2014 Dec	2015 Dec	2016 Dec	2017 Mar
Capital Adequacy									
Regulatory capital to risk-weighted assets	14.64	14.37	15.31	15.17	14.75	13.25	12.37	12.71	12.23
Capital to assets	7.13	7.36	7.17	7.24	7.89	7.68	7.29	7.17	6.76
Regulatory Tier 1 capital to risk-weighted assets	14.78	14.87	16.18	15.86	14.97	13.68	12.94	13.11	12.61
Tier 1 to assets	7.20	7.61	7.58	7.57	8.00	7.93	7.62	7.39	6.97
Non-performing loans net of provisions to capital	20.25	19.20	17.98	13.48	17.74	17.29	19.12	13.18	14.06
Net open position in equities to capital	6.65	6.34	6.84	5.96	6.47	7.56	8.62	7.68	7.67
Asset Quality									
Non-performing loans to total gross loans	11.29	13.11	14.61	14.21	13.78	12.02	10.58	9.66	9.82
Earnings and Profitability									
Return on assets	1.60	1.50	1.80	1.95	2.34	3.10	3.78	3.13	2.93
Return on equity	21.88	19.90	22.90	25.36	29.15	38.12	47.75	38.13	29.43
Interest margin to gross income	60.71	62.12	63.20	63.64	63.88	58.80	57.78	64.08	66.81
Non-interest expenses to gross income	50.90	52.32	52.81	55.97	54.23	48.03	48.03	50.98	51.11
Trading income to total income	97.46	97.93	97.42	97.68	97.49	97.70	97.79	97.87	98.81
Personnel expenses to non-interest expenses	36.58	37.65	37.17	38.41	39.52	41.31	39.85	40.08	40.07
Liquidity									
Liquid assets to total assets (liquid asset ratio)	46.89	45.87	49.66	50.43	43.24	39.93	37.74	41.11	42.68
Liquid assets to short-term liabilities	69.73	67.83	71.01	74.08	63.73	58.92	55.23	59.67	62.58
Customer deposits to total (non-interbank) loans	183.51	175.02	188.22	188.34	158.18	145.81	142.25	154.12	160.20
Sensitivity to Market Risk									
Net open position in foreign exchange to capital	15.39	15.13	14.50	11.90	17.12	8.92	9.61	9.33	7.83
Spread between reference lending and deposit rates	10.57	11.16	11.58	11.85	12.54	11.97	11.62	12.06	11.65
Foreign currency-denominated loans to total loans	4.87	4.72	7.31	5.87	6.26	5.27	5.67	5.63	…
Foreign currency-denominated liabilities to total liabilities	17.84	19.34	18.31	17.53	16.33	17.61	16.61	15.63	16.57

Source: Malagasy authorities.

[1] Ratios only concern banking sector.

Table 9. Madagascar: Quantitative Performance Criteria and Indicative Targets for the ECF Arrangement, September 2016 to March 2017

	2016								2017			
	End-Sep.				End-Dec.				End-March			
	Indicative Targets	Adjusted	Actual	Status	Performance Criteria	Adjusted	Actual	Status	Indicative Targets	Adjusted	Prel. Estimation	Prel. Status
	(Billions of Ariary; unless otherwise indicated)											
Fiscal												
Floor on primary balance excl. foreign-financed investment (commitment basis) [1]	-126	-126	128	Met	-184	40	245	Met	180	180	35	Not Met
External												
Ceiling on accumulation of new external payment arrears (US$ millions) [2]	0		0	Met	0		0	Met	0		8	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) [3]												
Grant element of less than 35 percent	300		10	Met	300		10	Met	383		…	
Grant element of less than 20 percent	100		0	Met	100		0	Met	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	Met	0		0	Met	0		…	
Central bank												
Floor on net foreign assets (NFA) of BCM (millions of SDRs) [4]	435	396	463	Met	477	413	586	Met	477	427	574	Met
Ceiling on net domestic assets (NDA) of BCM [4]	1,524	1,698	1,543	Met	1,441	1,725	1,241	Met	1,566	1,789	1,210	Met
Indicative targets												
Floor on social priority spending [1]	162		134	Not Met	235		259	Met	60		62	Met
Floor on gross tax revenue [1]	2,491		2,568	Met	3,587		3,618	Met	846		951	Met
Memorandum items												
Official external program support (millions of SDRs) [3]	52		13		127		63		127		77	
Official external program grants (millions of SDRs) [1]	0		0		0		50		0		0	
New concessional loans, contracted or guaranteed by the central government or BCM (US$ millions)[3]	687		283		1,055		397		1,422		…	
Program exchange rate (MGA/SDR)	4,444		4,444		4,444		4,444		4,444		4,444	

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 10. Madagascar: Structural Benchmarks Under the Program through End-February 2017

Action	Tentative Dates	Status
<u>Improving the composition and quality of fiscal spending</u>		
Continued implementation of the automatic pricing formula for maintaining full cost-recovery fuel prices (for diesel, gasoline, and kerosene).	Continuous benchmark	**Not met.** However, the application of the mechanism has avoided any budget costs, even though it has not been fully automatic.
<u>Mobilizing fiscal revenue</u>		
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.	End-February 2017	**Met.**
<u>Enforcing economic governance</u>		
The terms and conditions of all PPP contracts will be published within one month of the date of signature on ARMP's web site.	Continuous benchmark	**Met.** No PPP contracts have been signed.
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.	Continuous benchmark	**Not met**. One single source contract signed without notification to the IMF or World Bank.
Make the Council of Budget and Financial Discipline (CDBF) operational by issuing a decree, appointing its staff, and publishing its disciplinary decisions.	End-September 2016	**Not met. Implemented with delay.** However, the CDBF launched its first inquiries in March, following delays in staffing.
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.	End-October 2016	**Not met. Implemented with delay.** Law submitted to the Parliament on June 13, 2017.
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.	End-December 2016	**Met.**

Table 11. Madagascar: External Financing Requirements and Sources, 2015-19

(Millions of U.S. Dollars)

	2015	2016	2017	2018	2019	2017-19
	Prel. Est.		Projections			
Total financing requirements	859	908	1,362	1,488	1,561	4,411
Current account deficit	184	-75	489	590	603	1,683
Net repayment of private sector debt	173	205	193	205	194	592
Repayment of government debt	39	70	86	69	62	217
Gross reserves accumulation (+ = increase)	90	326	83	63	141	286
IMF repayments	-17	15	5	8	5	18
Other (inc. unrepatriated export revenues)	389	367	504	553	556	1,613
Available financing	859	908	1,362	1,455	1,523	4,340
Foreign direct and portfolio investment	436	452	463	494	532	1,488
Budgetary support	134	17	140	14	14	167
Project support	246	395	634	862	892	2,388
Project grants	130	272	266	305	342	913
Project drawings	116	123	368	557	550	1,475
IMF: RCF and ECF arrangement	43	44	126	86	86	297
External financing gap	0	0	0	33	38	71
Memorandum items:						
Gross official reserves	839	1,160	1,208	1,282	1,426	...

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

Table 12. 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	12.9	31,428,000	Board approval of the arrangement
June 28, 2017	25.4	61,978,000	Board completion of first review based on observance of performance criteria for end-December 2016
November 20, 2017	12.9	31,428,000	Board completion of second review based on observance of performance criteria for end-June 2017
May 20, 2018	12.9	31,428,000	Board completion of third review based on observance of performance criteria for end-December 2017
November 20, 2018	12.9	31,428,000	Board completion of fourth review based on observance of performance criteria for end-June 2018
May 20, 2019	12.9	31,428,000	Board completion of fifth review based on observance of performance criteria for end-December 2018
November 20, 2019	12.9	31,432,000	Board completion of sixth review based on observance of performance criteria for end-June 2019
Total	102.5	250,550,000	

Source: IMF.

Table 13. Madagascar: Indicators of Capacity to Repay the Fund, 2017-31

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
	(Millions of SDRs)														
Fund obligations based on existing credit															
Principal	3.7	5.9	3.1	6.1	12.2	18.5	18.5	15.5	12.4	6.3	0.0	0.0	0.0	0.0	0.0
Charges and interest	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Fund obligations based on existing and prospective credit															
Principal	3.7	5.9	3.1	6.1	12.2	24.7	40.4	49.9	56.2	50.1	37.6	22.0	9.4	0.0	0.0
Charges and interest	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Total obligations based on existing and prospective credit															
Millions of SDRs	4.0	6.3	3.5	6.5	12.7	25.1	40.8	50.3	56.7	50.6	38.1	22.4	9.9	0.4	0.4
Billions of Ariary	18.4	31.0	18.0	34.9	69.7	143.2	240.0	305.8	355.8	327.6	254.5	154.7	70.1	3.1	3.2
Percent of exports of goods and services	0.2	0.2	0.1	0.2	0.4	0.7	1.0	1.1	1.2	1.0	0.7	0.4	0.2	0.0	0.0
Percent of debt service	2.9	4.8	2.6	3.9	6.9	12.4	18.4	20.4	22.1	17.6	11.7	6.2	2.4	0.1	0.1
Percent of GDP	0.1	0.1	0.0	0.1	0.1	0.2	0.4	0.4	0.4	0.4	0.3	0.1	0.1	0.0	0.0
Percent of government revenue	0.5	0.7	0.3	0.5	0.9	1.7	2.5	2.9	2.9	2.4	1.6	0.9	0.4	0.0	0.0
Percent of quota	1.7	2.6	1.4	2.7	5.2	10.3	16.7	20.6	23.2	20.7	15.6	9.2	4.0	0.2	0.2
Outstanding IMF credit based on existing and prospective drawings															
Millions of SDRs	191.9	248.8	308.7	302.6	290.4	265.7	225.3	175.4	119.2	69.1	31.3	9.3	0.0	0.0	0.0
Billions of Ariary	875.5	1,219.4	1,588.5	1,615.1	1,600.2	1,512.9	1,326.0	1,066.6	748.3	447.5	209.4	64.3	0.0	0.0	0.0
Percent of exports of goods and services	7.6	9.5	10.7	9.4	8.2	7.0	5.4	4.0	2.5	1.4	0.6	0.2	0.0	0.0	0.0
Percent of debt service	138.7	187.2	226.5	180.5	158.3	131.3	101.5	71.3	46.5	24.0	9.7	2.6	0.0	0.0	0.0
Percent of GDP	2.5	3.0	3.5	3.2	2.9	2.5	2.0	1.4	0.9	0.5	0.2	0.1	0.0	0.0	0.0
Percent of government revenue	21.6	25.7	28.6	25.0	21.7	18.1	14.0	9.9	6.2	3.3	1.4	0.4	0.0	0.0	0.0
Percent of quota	78.5	101.8	126.3	123.8	118.8	108.7	92.2	71.8	48.8	28.3	12.8	3.8	0.0	0.0	0.0
Net use of IMF credit (millions of SDRs)	89.7	57.0	59.8	-6.1	-12.2	-24.7	-40.4	-49.9	-56.2	-50.1	-37.6	-22.0	-9.4	0.0	0.0
Disbursements	93.4	62.9	62.9	0.0	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	3.7	5.9	3.1	6.1	12.2	24.7	40.4	49.9	56.2	50.1	37.6	22.0	9.4	0.0	0.0
Memorandum items:	(Billions of Ariary, unless otherwise indicated)														
Exports of goods and services (millions of SDRs)	2,540	2,626	2,879	3,230	3,534	3,818	4,171	4,401	4,720	5,061	5,438	5,912	6,260	6,711	7,193
Debt service	631.4	651.4	701.4	895.0	1,011.1	1,151.9	1,306.1	1,496.1	1,608.0	1,865.7	2,168.3	2,513.3	2,916.5	3,393.4	3,865.5
Nominal GDP (at market prices)	35,729	40,183	45,304	50,398	55,846	61,570	67,888	74,854	82,538	90,974	100,288	110,569	121,854	134,352	148,123
Government revenue	4,063	4,737	5,560	6,472	7,375	8,363	9,460	10,721	12,120	13,723	15,429	17,232	19,112	21,207	23,529
Quota (millions of SDRs)	244.4	244.4	244.4	244.4	244.4	244.4	244.4	244.4	244.4	244.4	244.4	244.4	244.4	244.4	244.4

Source: IMF staff estimates and projections.

Table 14. Madagascar: Projected External Borrowing, 2017-18

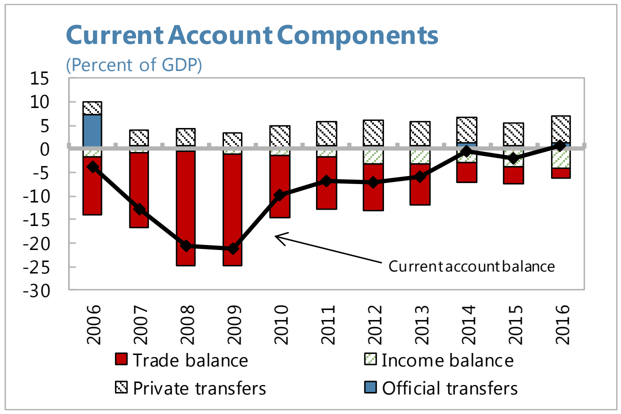
Public and publicly-guaranteed external debt	Volume of new debt in 2017-18		PV of new debt (program purposes)	
	USD million	Percent	USD million	Percent
By sources of debt financing	**2014**	**100**	**1039**	**100**
Concessional debt, of which	**1875**	**93**	**918**	**88**
Multilateral debt	1107	55	535	52
Bilateral debt	768	38	383	37
Other	0	0	0	0
Non-concessional debt, of which	**139**	**7**	**120**	**12**
Semi-concessional	139	7	120	12
Commercial terms	0	0	0	0
By Creditor Type	**2014**	**100**	**1039**	**100**
Multilateral	1111	55	538	52
Bilateral - Paris Club	446	22	150	14
Bilateral - Non-Paris Club	363	18	264	25
Other	95	5	87	8
Uses of debt financing	**2014**	**100**	**1039**	**100**
Infrastructure	1368	68	712	69
Social Spending	87	4	38	4
Budget Financing	166	8	115	11
Other	394	20	173	17

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

Annex I. External Balance Assessment

Staff assesses the 2016 external balance to be stronger than values consistent with fundamentals and desirable policy settings. Improvements in the terms of trade, most importantly due to higher vanilla prices have contributed to a significant strengthening of the external position. However, the expected reversal of vanilla prices to more normal levels and especially increasing reconstruction- and investment-related imports are projected to bring the current account closer to its norm. International reserves are adequate but in the lower end of the target range.

The trade balance has improved in recent years. Large mining projects, which boosted imports and created huge trade deficits between 2007 and 2010, are now generating significant export earnings. In addition, the terms of trade have improved, particularly as vanilla prices more than tripled in 2016, resulting in the first current account surplus since 2001. The positive transfer balance has generally been slightly higher than the deficit in the income balance.



Staff assess the current account to be about 2.7 percent of GDP stronger than values implied by fundamentals and the desirable policy setting. While the actual 2016 current account reported a surplus of 0.8 percent of GDP, Madagascar benefited significantly from a temporary spike in vanilla prices (Table 1 and Figure 1). If the price of vanilla in 2016 had been identical to the average price over 2004-16, then Madagascar's export earnings from vanilla would have been about $300 million (3.0 percent of GDP) lower. After adjustment for vanilla prices, the adjusted current account therefore reported a deficit of 2.3 percent of GDP. At the same time, the EBA-lite current account model estimates Madagascar's fitted current account to a deficit of 3.5 percent of GDP. Deviations from desirable policies—a constrained fiscal stance (1.0 percent of GDP), limited private credit disbursements (0.3 percent of GDP), and relatively rapid reserve accumulation (0.2 percent of GDP)—added up to a policy gap of 1.4 percent of GDP. After adjustment for the policy gap, the current account norm for Madagascar corresponded to a deficit of 5.0 percent of GDP. Consequently, the adjusted current account (a deficit of 2.3 percent of GDP) was 2.7 percent of GDP stronger than its norm in 2016. The high deficit for the current account norm reflects the long-term development needs of the country, which explain the high external financing needs.

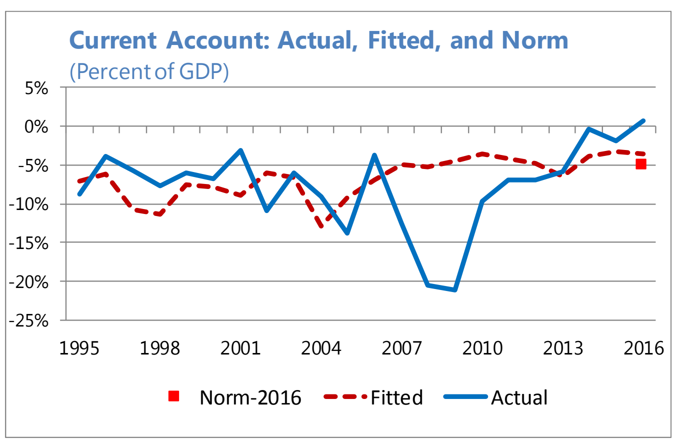
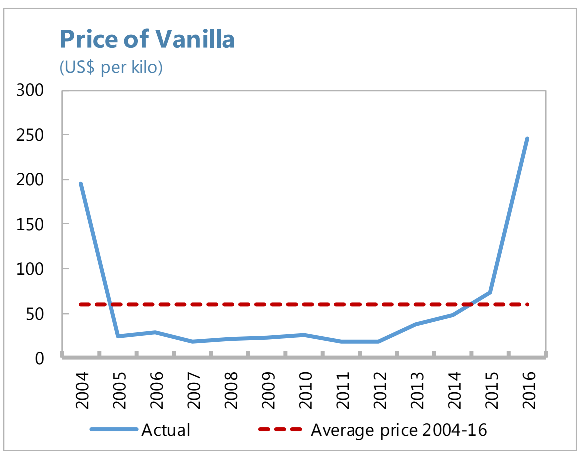
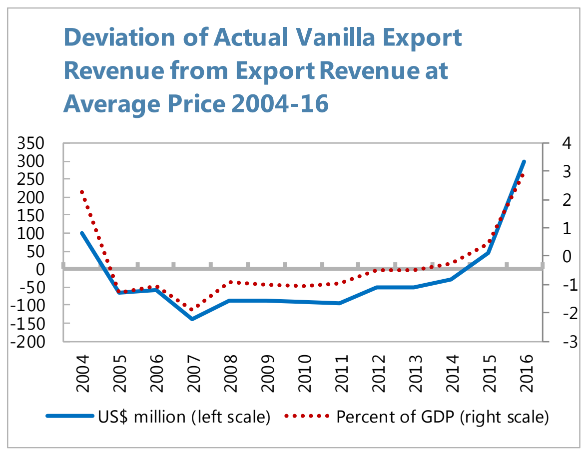


Table 1. Staff-Assessed Current Account and REER Gaps
(Percent of GDP, unless otherwise indicated)

Actual current account (A)	0.8
Temporary factors (spike in vanilla prices) (B)	3.0
Adjusted current account (C=A-B)	-2.3
Fitted current account (D)	-3.5
Policy gap (E)	1.4
Current account norm (F=D-E)	-5.0
Current account gap (G=C-F)	-2.7
Elasticity	-0.27
REER gap (percent)	10

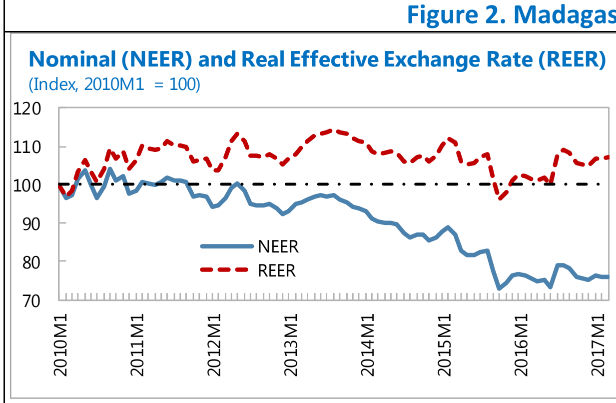
Figure 1. Madagascar: The Vanilla Price Spike

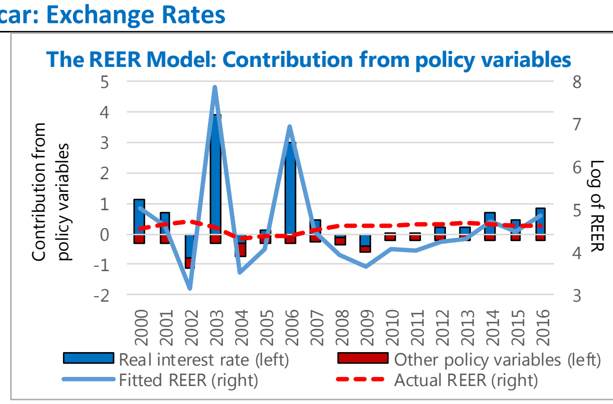




Sources: Malagasy authorities; and IMF staff estimates.

Figure 2. Madagascar: Exchange Rates



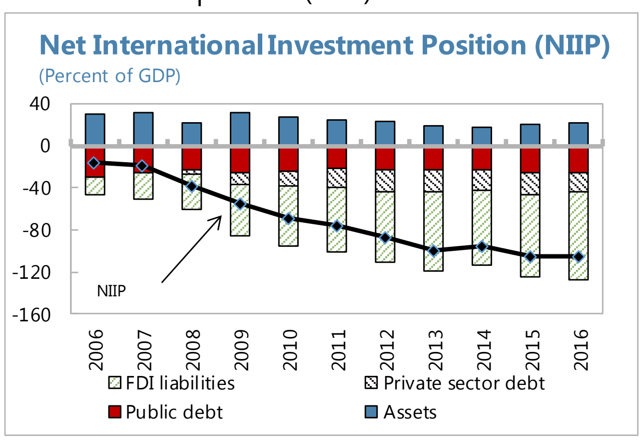


Sources: Malagasy authorities; and IMF staff estimates.

The current account is expected to adjust to its norm as terms of trade return to historical levels and especially as public investment scales up. Based on historical evidence, the vanilla price boom will probably be short lived. In addition, given Madagascar's current level of development, investment needs will remain significant for the foreseeable future. Imports are likely to increase because of the ongoing scaling up of investment and reconstruction work following the cyclone Enawo. Growing current accounts deficits will be offset by related surpluses in the capital and financial accounts from public sector grants and loans and foreign direct investment. The existing constraints to external borrowing should decrease with increasing political stability and implementation of policies supported by an IMF arrangement that reinforce Madagascar's relations with its development partners. At the same time, improvements in the business climate would make Madagascar more attractive to foreign investors. In this context, to maintain debt sustainability and macro-economic stability, the authorities need to scale up investment gradually (as planned), ensure that investment projects are well targeted, and rely on resources with the most attractive financing conditions.

The REER gap is about 10 percent based on staff-assessed current account gap. Staff has estimated the elasticity of the exchange rate by regressing the observed REER on the current account using historical data for Madagascar. The regression indicates an elasticity of -0.27, which in combination with a current account gap of 2.7 percent suggests an REER undervaluation of 10 percent. The result from another model, the REER model, suggests a larger REER undervaluation of about 27 percent in 2016. That said, these results should be interpreted with caution, not least because the REER has been more stable than the current account deficit would suggest.[15]

The foreign asset and liability position is highly negative, but exaggerates the effective vulnerabilities. The deficit in the net international investment position (NIIP) increased from below 40 percent of GDP in 2008 to roughly 105 percent of GDP in 2016, mainly because of higher private-sector liabilities linked to the mining projects. Given their predominantly intra-group character, the risk related to these liabilities is small.



Madagascar has a floating exchange rate regime. The central bank intervenes in the interbank market to smooth large exchange rate fluctuations and meet foreign reserve targets. In 2015, the central bank intervened heavily in the foreign exchange market with so-called buyback operations. The interventions maintained the published official exchange rate at a more appreciated artificial level until the buyback operations were completely abolished in September 2015. Madagascar has restrictions on exports and imports of domestic currency and certain goods

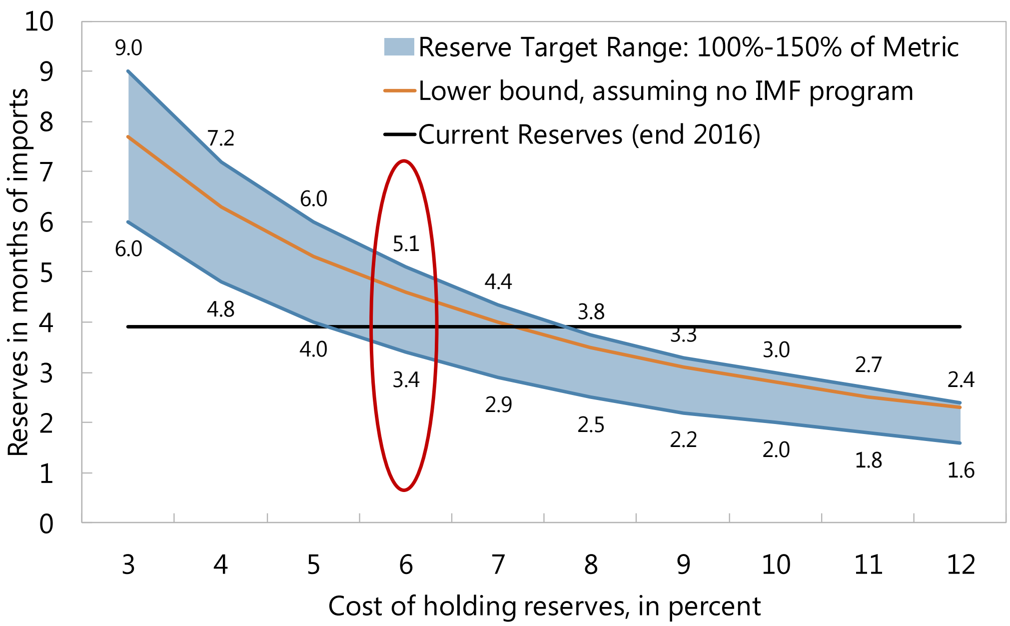
[15] Additionally, the application of the REER model to Madagascar is blurred by peaks in the real exchange rate, which lead the model to predict large overvaluations during most of the sample period.

(e.g. gold, rose wood), requirements to repatriate export proceeds from goods and services, and some controls on capital transactions.

The international reserves are adequate but in the lower half of the target range. By end-2016, reserves are estimated to have covered 3.9 months of current import compared to 2.9 months at end 2015. This import coverage is in the lower half of the target range given an assumed cost of holding reserves of 6 percent, the heavy reliance on mining exports, and the challenging international environment. The accumulation of central bank reserves exceeded projections in 2016. Because of the spike in vanilla export prices, un-banked small vanilla producers received large cash payments. Currency in circulation expanded and drained bank liquidity. In response, the central banks started buying substantial amounts of foreign exchange, which increased bank liquidity and satiated the demand for local currency. The reserve accumulation is expected to level off in 2017. The above normal amounts of currency in circulation are expected to return to the banking system when (as is likely) vanilla prices retreat to more typical levels. At that time, the central bank may sell some foreign exchange to avoid excess liquidity and keep the inflationary pressure under control. Following a projected rapid increase in imports, the import coverage of reserves is likely to fall in 2017. The reserve accumulation is projected to continue at a gradual pace over the medium term.

Optimal Reserves

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



Source: IMF staff calculation.

Annex II. Risk Assessment Matrix

Source of Risks	Relative Likelihood	Potential Impact	Policy response
		Domestic Risks	
Weak project implementation capacity.	High	High: Slower economic growth and higher inflation.	Monitor available domestic capacity (particularly in construction), postpone project implementation, and give precedence to priority investment with highest returns.
Larger than anticipated transfers to SOEs (JIRAMA and Air Madagascar).	High	High: Transfers to SOEs reduce other priority expenditure. Potential economic disruption if SOE's operations are affected.	Identify options to protect key public services. Strengthen governance structures, including government oversight of key SOEs. Consider private management of specific units or operations.
Growing political uncertainty and tensions ahead of 2018 elections.	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 response above.
Cyclones, floods, and droughts.	Medium	Medium: Loss of real and human capital and lower growth.	Reallocate fiscal spending to finance recovery work and appeal to donors for post-disaster financing. Build resilience and risk transfer mechanisms for medium-term.
		External Risks	
Structurally weak growth in key advanced and emerging economies	High (Euro area and Japan)/ Medium (emerging markets)	High: Less financing reduces 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.
Retreat from cross-border integration	High	High: Reduced inflows from FDI and donor support (including lower concessionality). Reduced access to foreign markets.	Maintain exchange rate flexibility and reallocate fiscal spending from investment to support of the most vulnerable.

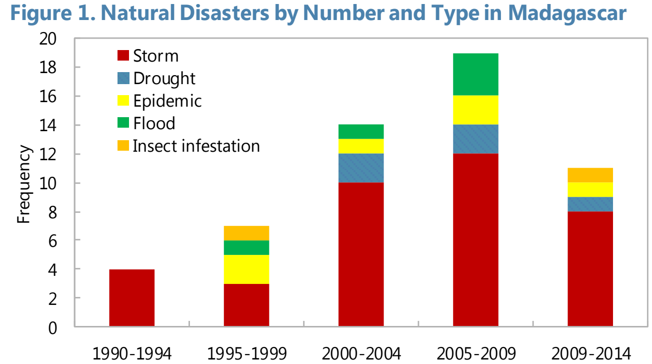
[1] The Risk Assessment Matrix (RAM) shows events that could materially alter the baseline path (the scenario most likely to materialize in the view of the IMF staff. The relative likelihood of risks listed is the staff's subjective assessment of the risks surrounding the baseline ("low" is meant to 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.

Annex III. Madagascar: Vulnerability to Natural Disasters

Madagascar is highly vulnerable to natural disasters given its geographical location, weak institutional capacity, and high dependency on natural resources. Situated in the Indian Ocean off the eastern coast of southern Africa, Madagascar often falls victim to recurrent cyclones and tropical storms, while other natural disasters, namely floods, droughts, and locust invasions are also common (Figure 1).

Madagascar has been caught in a cycle of frequent natural disasters (Figure 2). In particular, during the period 1990-2014, Madagascar was hit by 55 natural disasters that killed at least 3,561 people and left 10 million people with an urgent need for aid (EM-DAT database). Staff research shows that frequent disasters inhibits the economy's ability to grow and improve social conditions (REO chapter).

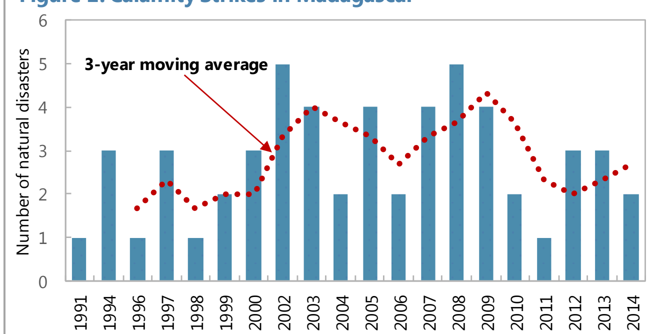
Figure 1. Natural Disasters by Number and Type in Madagascar



Sources: EM-DAT database; and IMF staff calculations.

Relative to other sub-Saharan African (SSA) countries, Madagascar has experienced far more storms (Figure 3). While the frequency of droughts in Madagascar appears to be in line with the SSA average, insect infestations are more frequent and damaging. In this context, Madagascar was struck by a plague of locusts in 2012, infesting over half of the island's cultivated land and pastures, causing the loss of 25 percent of national food consumption.

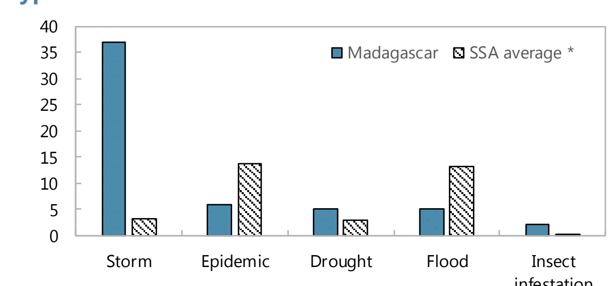
Figure 2. Calamity Strikes in Madagascar



Sources: EM-DAT database; and IMF staff calculations.

Madagascar's high levels of poverty and dependence on rain-fed agriculture (Figure 4) presents particular challenges for resilience to natural disaster and climate change. With a large and rising proportion of the Malagasy population living in absolute poverty ($1.90 a day), coping mechanisms for emergencies remain very limited (Figure 5). In fact,

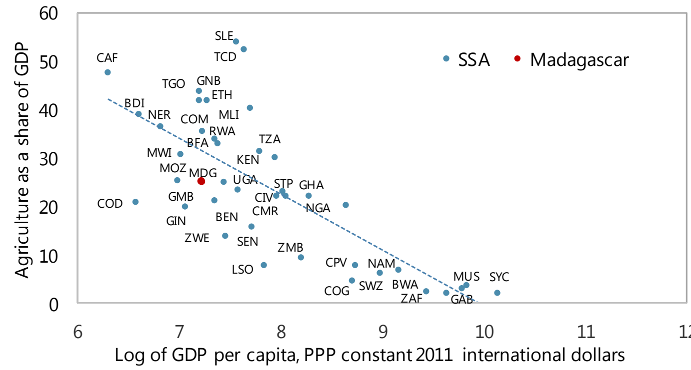
Figure 3. Madagascar: Natural Disasters by Number and Type



Source: EM-DAT database; and IMF staff calculations.
* Average frequency of natural disaters per country from 1990 till 2014.

Madagascar's current food security rating of 35.4 is "alarming" (Global Hunger Index 2016). Madagascar is one of the 10 most vulnerable[1] countries to natural disasters that impact communities' food and nutrition security. One-quarter of Madagascar's population—approximately five million people—lives in zones at high risk of natural disasters (World Bank 2016). Climate change and the El Niño weather pattern have exacerbated these risks and hindered the adaptive capacity of the Malagasy economy to weather external shocks.[2]

Figure 4. Share of Agriculture and GDP per Capita, 2014



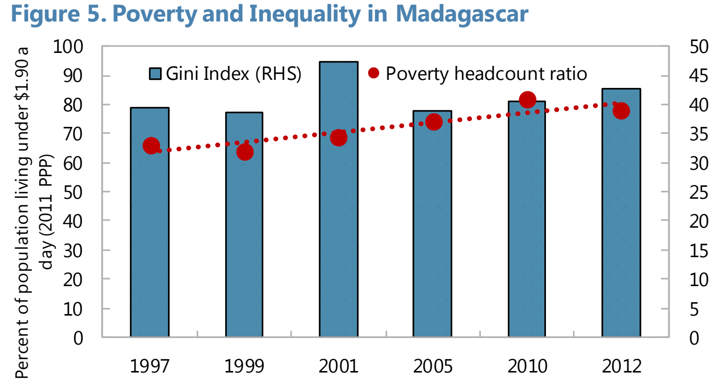
Sources: World Development Indicators; and IMF staff calculations.

The macroeconomic impact of natural disasters in Madagascar varies by the type of disaster. Event analysis was used to identify stylized facts on the evolution of some key macroeconomic variables (Figure 6).[3]

Results suggest a slowdown of economic growth following the event of droughts, storms, and epidemics, but not floods.

- Growth rebounds in the year after a disaster. Food prices rise in the event of natural disaster, and persistently so in the year following floods.
- The event analysis also suggests a deterioration of the trade balance in the year of a natural disaster, but recovers the next year, except in the event of floods and storms.
- Conversely, the near-term impact of natural disasters on the fiscal balance is muted, possibly reflecting policy adjustments.

Figure 5. Poverty and Inequality in Madagascar



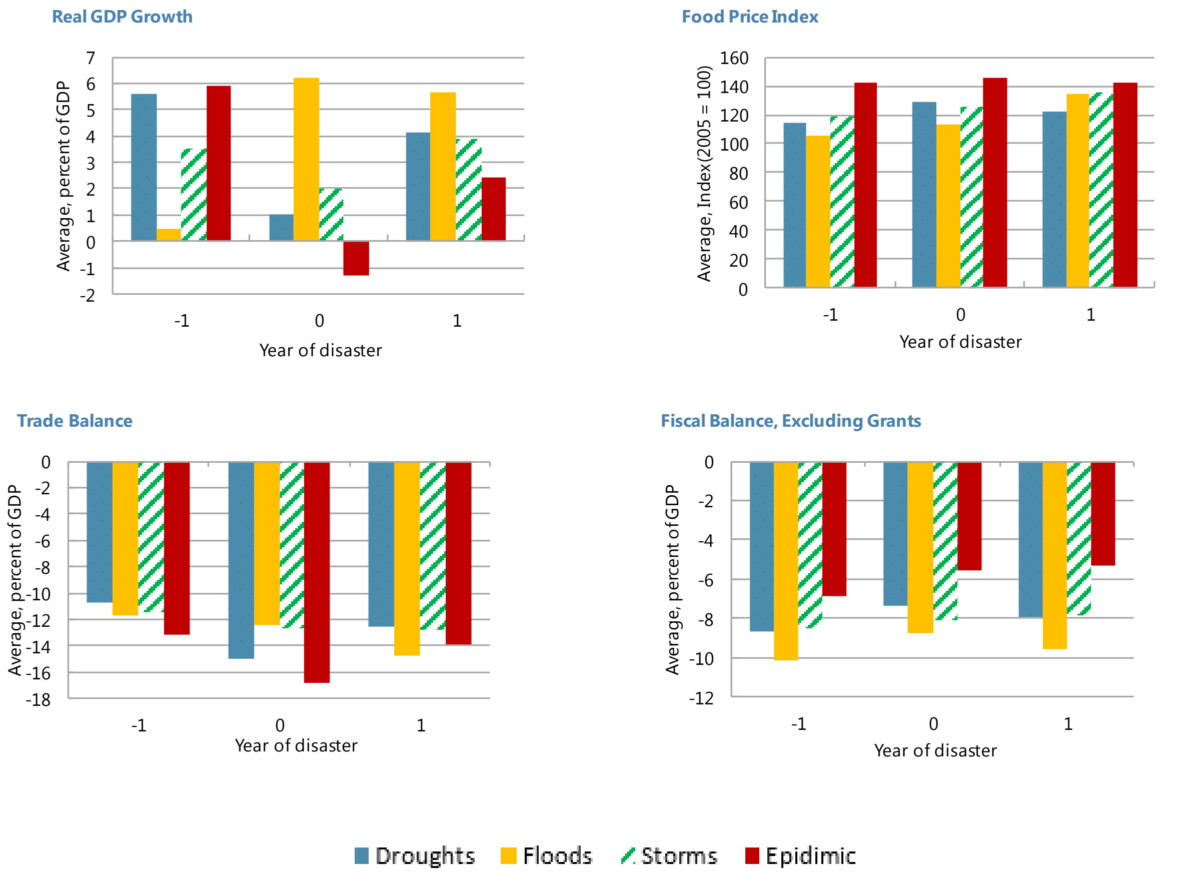
Source: World Bank Indicators.
Note: Latest data available are as at end 2012.

[1] The World Risk Index 2016 ranked Madagascar 9th worldwide for its vulnerability (measured by the level of susceptibility, lack of coping capacities and lack of adaptive capacities of an economy) and 1st for its susceptibility (the likelihood of suffering harm in the event of a natural hazard process) to natural disasters. Weak structural characteristics and poor framework conditions of the Malagasy society —measured by state of public infrastructure, housing conditions, share of undernourished population, poverty level and dependency ratio, and income level—formed the basis of these rankings.

[2] Largely due to its unique geographic isolation and size, Madagascar has tremendous biodiversity.

[3] These stylized facts are broadly consistent with more rigorous econometric results for SSA.

Figure 6. Madagascar: Event Analysis, Impact of Natural Disasters on Macroeconomic Indicators, (1990–2014)



Sources: EM-DAT database; Madagascar authorities; WEO and IMF Staff calculations.

A policy approach of building resilience through risk reduction and transfer strategies is appropriate for Madagascar. The authorities have explicitly integrated resilience through adaptation into national development policies. The challenge is to implement adaptation with limited resources and capacity. Development partners, particularly the World Bank, have been assisting the authorities' efforts (e.g., Urban Development and Resilience, Pilot Program for Climate Resilience). Risk transfer mechanisms are less advanced, although the authorities are considering options such as the World Bank's Catastrophe Deferred Drawdown Option and the Africa Risk Capacity insurance scheme. Self-insurance through building international reserve and fiscal buffers could also make sense in this case, although the desirable size of the buffers is limited by their high opportunity cost in a context of high interest rates and infrastructure gaps.

Appendix I. Letter of Intent

Antananarivo, Madagascar

June 13, 2017

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

Dear Madam Managing Director:

1. The Republic of Madagascar has made progress in implementing its economic reform program, supported by an IMF arrangement under the Extended Credit Facility (ECF) since July 2016. Despite fragility and an uncertain environment, the government's efforts to strengthen macroeconomic stability, foster sustainable and inclusive growth, and reduce poverty in the context of the National Development Plan (NDP) have begun to bear fruit. In general, macroeconomic stability has been sustained, economic growth has stabilized, and inflation remains under control. We are now aiming to break a pattern of low growth by advancing public investment and structural reforms with technical and financial assistance from our international partners. Resolving critical social and infrastructural shortfalls will be essential to achieving strong economic growth and reducing poverty. The economic recovery accelerated somewhat in 2016 and growth is expected to strengthen further over the next few years.

2. The government believes that measures and policies described in the July 2016 Memorandum of Economic and Financial Policies (MEFP attachment I) remain appropriate for attaining the objectives of our program. The attached supplement to the MEFP discusses performance under the program thus far and updates policies toward meeting these objectives. Our key focus going forward remains to: promote inclusive growth by scaling up public investment and social spending; create more fiscal space by increasing tax revenues and reducing low-priority spending; enhance economic governance and reduce corruption by strengthening institutions and the legal framework; and strengthen stability and financial sector development by developing the monetary policy framework and the financial system.

3. Recently, the government concluded discussions on the first review under the ECF-supported program with an IMF staff mission, with focus on program implementation through end-December 2016, as well as on measures to be implemented during 2017. Implementation of the ECF-supported program has been broadly consistent with its objectives. All end-December 2016 performance criteria (PCs) were met. The zero ceiling on the accumulation of new external payment arrears was not observed in February 2017 because of a delayed debt service payment. The payment has been made, and the government requests a waiver on the basis of the temporary nature of the non-observance. Although the structural reform agenda is advancing, two structural benchmarks were

met after a delay and two continuous structural benchmarks were missed. Following an agreement with the petroleum product distributing companies, a price smoothing mechanism was introduced with the consequence that the continuous benchmark on implementation of an automatic fuel price mechanism was not met but no additional budget costs have been incurred. The continuous benchmark on notifying World Bank and IMF staff of any single source contracts awarded by JIRAMA was not met because one contract was signed as a matter of urgency to meet a deadline agreed upon with the investor. The new management team appointed by the government has renewed the commitment to competitive and transparent procurement practices.

4. The attached MEFP describes government policies for 2017 that would support achieving program objectives under the ECF arrangement. 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 the 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.

5. In light of the progress in implementing the program and our additional balance of payments needs, we request the IMF Executive Board to approve: (i) an augmentation of our three-year arrangement under the ECF up to a total amount of SDR 250.55 million for the period from July 27, 2016 through November 27, 2019; (ii) the waiver for non-observance of the continuous performance criterion on new external payment arrears; (iii) a modification of the performance criterion (floor) on the primary balance excluding foreign-financed investment at end-June 2017; and (iv) the request for the completion of the first review. With the requested augmentation of access, at the first review we are seeking total financial support from the Fund equivalent to 25.4 percent of our quota, or SDR 61.98 million.

6. 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 ECF and the Debt Sustainability Analysis, after approval by the Executive Board of the IMF.

Sincerely yours,

/s/
Mr. François Marie Maurice Gervais Rakotoarimanana
Minister of Finance and Budget
Madagascar

/s/
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, 2017-19

This Memorandum of Economic and Financial Policies (MEFP) updates the previous outlined in the ECF-supported program approved by the IMF Executive Board on July 27, 2016. It describes recent macroeconomic developments, implementation of the ECF-supported program, the economic outlook and risks, and macroeconomic and structural policies. The objectives of the program remain as explained in the MEFP for the program request.

I. RECENT ECONOMIC DEVELOPMENTS

1. **The economic recovery is continuing and growth accelerated to 4.2 percent in 2016.** Economic activity was supported by higher public investment, growing textile exports (following reinstated AGOA privileges), and recovering agriculture. Total investment increased from about 13.1 percent of GDP in 2015 to an estimated 15.3 percent of GDP in 2016.

2. **Notwithstanding fiscal pressures, the government executed the budget largely as planned.** While transfers to the loss-making public utility JIRAMA and Air Madagascar created fiscal challenges, the government was able to keep current expenditure within budget limits in 2016. The growth in capital expenditure was significant. Tax revenues exceeded original budget targets—the first time in many years—and current grants from Madagascar's development partners were higher than projected. Added together, the overall fiscal deficit (commitment basis) at 1.3 percent of GDP was significantly less than projected. The primary balance excluding foreign financed investment stood at 0.8 percent of GDP, exceeding the program target and reflecting that revenue covered domestic spending (the program's fiscal anchor).

3. **The BFM (*Banky Foiben I Madagasikara*), the central bank, successfully managed external challenges.** A spike in export prices of vanilla led to extraordinarily large cash payments to un-banked small producers in 2016. The expansion of currency in circulation drew liquidity from banks, which curtailed their lending to the government and the private sector. In response, BFM restored normal liquidity and credit conditions through foreign exchange purchases and domestic liquidity operations starting in September. Driven by inflows related to vanilla exports, broad money growth remained strong throughout the year. Nevertheless, inflation was well contained and reported at 7.0 percent in December 2016. The current account also recorded a surplus (0.8 percent of GDP) compared with a projected deficit.

4. **In this context, BFM accumulated significant foreign exchange reserves.** The vanilla price spike and strong production in the export processing zones (helped by the reinstatement of AGOA privileges) boosted export revenues in 2016, which more than offset a drop in mining revenues. The real effective exchange rate appreciated by an estimated 8 percent (year-on-year in December 2016), at the same time as the BFM made net purchases of US$312 million that increased its reserves of foreign exchange. Reserves reached US$1,121 million at end-2016, equivalent to 3.9 months of imports (compared to 2.2 months at end-2013).

5. The performance of the banking sector as a whole appears to be robust and improving. The capital adequacy ratio (measured as capital to assets ratio) is adequate. The banking sector as a whole reports strong profitability, but some microfinance institutions are struggling. The ratio of nonperforming loans is declining. While several banks faced liquidity challenges in 2016, mainly related to the surprisingly large increase in the demand for currency because of the vanilla price shock, these were resolved within a short period of time.

II. PERFORMANCE UNDER THE ECF-SUPPORTED PROGRAM

6. Performance on the program's quantitative targets was strong through end-December 2016. All quantitative performance criteria (PC), as well as continuous PCs, were observed through end-December, although the continuous PC on external arrears was not observed in February. The performance criterion on net foreign assets was met by a large margin. All indicative targets were also met, except that social spending fell narrowly short at end-September, but this was recouped by end-December (MGA 259 billion).

7. The recent temporary breach on a continuous PC does not constitute a weakening of the program implementation. Technical difficulties related to the strengthening of international controls have contributed to delays in paying some maturities on debt to Libya, leading to the accumulation of external arrears in February 2017. These technical difficulties are now solved, delayed payments have been regularized, and the government reaffirms its commitment to comply with all its external obligations. Therefore, the government requests in the Letter of Intent a waiver for the non-observance of the continuous PC on the accumulation of new external payment arrears.

8. Implementation of the structural reform agenda advanced, although there were some delays and slippages relative to plans in the program. The continuous benchmark that the terms and conditions of all public-private partnership (PPP) contracts will be published within one month of the date of signature on ARMP's (*Autorité de Régulation des Marchés Publics*) web site was observed, and the benchmark related to the publication and submission to the Court of Auditors of the 2015 financial statements of ten large state-owned enterprises was also met. The Council of Budget and Financial Discipline launched its first inquiries in March, thereby meeting the objective, following delays in staffing (end-September 2016 benchmark). The law to enhance asset recovery was submitted to the Parliament on June 13, 2017 (end-October 2016 benchmark). The delay was due to further consideration from the draft law, which subsequently benefited from further technical assistance from the IMF. The implementation of the fuel price mechanism has avoided any budget costs, as intended, but was not carried out in a fully automatic manner due to the introduction of an ad hoc smoothing mechanism agreed with the petroleum product distributor companies. As a result, the continuous benchmark was not technically observed. Looking forward, negotiations are underway with the petroleum distributors on a new price structure and mechanism to be introduced in the second semester of 2017, which will incorporate smoothing in an automatic mechanism while preserving the principle of zero subsidies. The continuous benchmark on notifying World Bank and IMF staff of any single source contracts awarded by JIRAMA was not met because one contract was signed as a matter of urgency to meet deadline agreed upon with the investor. Following the change in management in January 2017, the company's new management and board have renewed the commitment to competitive and transparent procurement practices, including informing Fund and Bank staff in writing in advance of signing any single source procurement contracts (continuous structural benchmark).

III. ECONOMIC OUTLOOK AND VULNERABILITIES

9. The medium-term macroeconomic outlook is generally favorable but challenges remain. Growth is projected to accelerate progressively going from 4.3 percent in 2017 to 5.9 percent in 2019 driven by scaled-up public investment and structural reforms. The targeted increase in investment spending is substantial and will be financed largely through external grants and concessional loans. With careful management, the scaling up is not expected to jeopardize debt sustainability, inflation, or exchange rate alignment. The planned governance reforms will also improve the business climate and support private sector investment, including inflows of foreign direct investment (FDI).

10. Significant vulnerabilities create challenges for maintaining macroeconomic stability and building the foundation for sustained and inclusive growth. Domestic vulnerabilities stem inter alia from: (i) the planned scaling up that will be delayed without a rapid build-up of the implementation capacity; and (ii) loss-making state-owned enterprises that may request additional fiscal transfers. External vulnerabilities arise from: (i) shifting terms of trade; (ii) dependence on external donor funding: (iii) possible loss of trade preferences; and (iv) dependence on FDI. Madagascar is also prone to costly natural disasters. This vulnerability is highlighted by the cyclone Enawo in March (the most severe in 13 years), the current drought affecting the central plateau (that has hit hydropower generation and food prices), and the drought in the South that persisted for three years. The government is fully committed to responding to these vulnerabilities with timely and appropriate policies and measures.

IV. MACROECONOMIC AND STRUCTURAL POLICIES

A. Promoting Inclusive and Sustainable Growth

11. The scaling up of public investment is central to our strategy to resolve pressing social and infrastructure needs and to sustain strong inclusive economic growth. Investment is critical in energy, roads, port facilities, agricultural development, education, and health where we are lagging behind. Limited resources prevent universal primary education and access to primary health care. We have also completed an Economic Development Document, which draws upon our National Development Plan and focuses on growth, poverty reduction and pursuit of the Sustainable Development Goals generally.

12. The government has developed a prioritized investment program and is committed to develop a strategy to boost investment capacity. Our investment plan was developed in a consultative process involving the population, the private sector and development partners. In some circumstances, rapid scaling up can pose risks to macroeconomic stability, including upward pressure to the exchange rate and inflation. Effective monitoring, coordination, and timely policy responses are essential to manage such risks. We aim to reinforce the implementation capacity by: (i) further strengthening the institutional framework for the management of public investments; (ii) improving project evaluation and selection; (iii) strengthening the supervision of investment activities; and (iv) improving coordination with donors. We will also reinforce macroeconomic absorption by: (i) refining national and sectoral strategies, in particular by updating the implementation plan based on the National Development Plan; and (ii) developing medium-term investment plans. We are also committed to addressing weaknesses identified in the Public Investment Management Assessment (PIMA) conducted in 2016. In the near term, we will implement a 6-month priority action plan developed with the help of a technical assistance mission in March 2017 from AFRITAC South, and for the medium-term, the Government will adopt a medium-term strategy to enhance public investment management capacity in line with the recommendations of the PIMA by end-December 2017 (structural benchmark), with support from technical assistance, notably from the IMF and World Bank. We have established the investment coordination unit in the Presidency to manage these risks. Administratively, the work will be coordinated by the central strategy and coordination unit under the Presidency that was established in February 2017. Moreover, we stand ready to respond promptly and effectively to emerging signs of risks identified above, including if necessary to stretch out the implementation of investment projects.

13. We will primarily seek financing by grants and external borrowing on concessional terms to reconcile investment needs with debt sustainability. The risk of external debt distress is assessed to be moderate using the IMF/World Bank debt sustainability framework, and we are firmly committed to maintaining this level of risk under this framework. Nevertheless, debt sustainability is vulnerable to external shocks, underperforming revenue collections, and contingent liabilities related to state-owned enterprises. We are committed to following the debt management strategy adopted in December 2015, which aims to maximize the share of concessional financing and reinforce debt management capacity at the Ministry of Finance and Budget. Debt contracted on concessional terms will help maintain the current risk rating while meeting pressing social and investment needs. If concessional external financing is unavailable, some limited long-term non- and semi-concessional borrowing could be considered to support critical expenditure needs, within limits established in the ECF arrangement. In these circumstances, we will consult with IMF and World Bank staff in advance. In keeping with these objectives under the ECF-supported program, we will avoid all non-concessional short-term external borrowing (with original maturity of less than one year), and we have set explicit cumulative ceilings for longer-term non-and semi-concessional borrowing at US$383 million up to end-June 2018, of which only US$100 million can have a grant element of less than 20 percent (PC, Table 1).

14. We will avoid accumulating new external payment arrears. The external arrears which accumulated before the ECF program in the case of Iraq have been rescheduled. Regarding Libya (see ¶7), we have cleared all arrears and we will continue to remain current on our engagements/ liabilities. Relative to our pre-HIPC arrears to Angola, we have undertaken substantial, but unsuccessful efforts to renegotiate. Given an adequately representative underlying Paris Club agreement, they are expected to be deemed away.

15. Establishing a systemic and ongoing financial assessment and prioritization of PPPs is a priority. The new PPP law was enacted in February 2016 and the application decrees were adopted by the Cabinet in March 2017. While PPPs can add valuable expertise and financing to key investment projects, they also create fiscal risks. A dedicated unit at the presidency is responsible for project 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 build capacity, we will intensify staff training for the identification and analysis of PPP contracts, implicit and explicit guarantees, and fiscal risks. IMF and World Bank staff will continue to provide technical support in this area. The terms and conditions of all PPP contracts will be published within one month of the date of signature on the web site of the Ministry of Finance and Budget (continuous benchmark).[1]

16. The government will prioritize legislative and regulatory reforms with the potential of "quick wins" for improving the business climate and reducing barriers to FDI. There are many impediments that need to be addressed. In cooperation with the World Bank, we are undertaking reforms to improve the business climate and help strengthen the public-private interface to increase investor confidence and private investment. There has already been progress. The 2017 Doing Business Survey estimates that Madagascar's overall performance is currently 45 percent of best performance (up from 44 percent in the 2016 survey) and ranks Madagascar 167 (out of 190 countries) on ease of doing business in 2017—an improvement of 2 places compared to the previous 2016 survey. Likewise, starting a business improved by 13 steps to 113 and trading across borders improved by 5 steps to 129. We will modernize the company act and plan to submit revisions to the Parliament. We are pursuing the process of identifying the successive steps which will lead us to join the OHADA (*Organisation pour l'Harmonisation en Afrique du Droit des Affaires*).

17. New legislation and regulations under preparation will aim to provide cost-effective incentives for potential investors in mining, petroleum, and special economic zones. Several laws are being drafted. The mining law and the petroleum law will be brought in line with international best practice. The principal measures include: an increase in royalty rates and more differentiation by type of mineral; a review of the royalty revenue-sharing formula; and a reduction in length of fiscal stability clauses. A law on Special Economic Zones (SEZ) is also under preparation. While all these laws aim to provide incentives for investment, they will focus on structural benefits such as easier access to infrastructure and electricity, and fiscal incentives will be kept to a level that does not undermine future revenue generation. Moreover, we are examining the harmonization of the regimes for SEZs and *Zones Franches* over the medium term. Similarly, the draft Law on Industrial

[1] Following the adoption of the new public procurement law, the CNM (Commission Nationale de Passation de Marché) will continue to be responsible for exercising the control of public procurement.

Development is under consideration and any fiscal incentives will be kept to a level that does not undermine future revenue generation.

18. The government will take actions to support the implementation of the social protection policy approved in 2015. With support from the World Bank, we are implementing three social protection programs. The program for conditional cash transfers targets 39,000 households with children under the age of 12. The cash-for-work program provides a regular income for 32,500 households. The third program (non-conditional cash transfer) targets 45.000 households in 2017 and 65.000 households in 2018, with a shift to conditional cash transfers. In total, these programs cover more than half a million people living in extreme poverty and 97 percent of the children in the beneficiary families now attend school. With co-financing from our development partners, we hope to expand the coverage of these and comparable programs. To further support the implementation of the social protection policy, we are working to establish a strong legal and institutional framework, in particular by submitting to Parliament the new law on social protection to strengthen the coordination function of the Ministry of Population regarding social safety net programs by end-2017 (structural benchmark). Agricultural and rural development are also critical to inclusive growth, and we intend to enhance the implementation and coordination for these objectives. Efforts to enhance inclusive growth are all also intertwined with our efforts to enhance resilience to natural disasters and climate change.

B. Creating More Fiscal Space

19. The government is committed to create more fiscal space to ensure that priority spending can be financed from current and future revenues. The aim is to both increase revenues and contain low priority spending. In the current year, we will limit the budget deficit (commitment basis) to 5.0 percent of GDP and we are aiming for a deficit of 0.6 percent of GDP in the primary balance excluding foreign financed investment. Repaying domestic arrears remains a priority after repayments in 2016 reduced the stock by more than 1 percent of GDP. A tax policy unit will be established at the Ministry of Finance and Budget by end-September 2017 (structural benchmark). The unit will undertake impact studies, analyze tax expenditures, and improve efficiency through better coordination and data sharing, in particular between the tax and customs departments. We will furthermore improve public wage bill planning and execution with the support of IMF technical assistance.

20. Revenue mobilization remains a priority. Net/gross revenue collections exceeded projections in 2016 by 0.1/0.2 percent of GDP. The collection of outstanding tax arrears (MGA 42 billion) boosted revenues in 2016; by surpassing the target and publishing a report in February we completed a structural benchmark. We aim at recovering a similar amount in 2017. Administrative measures that supported revenue collections in 2016 included better risk-based auditing and the establishment of a unique tax identification number (TIN) at both the customs and tax departments, clearer rules in cases of tax litigation, and the use of performance based contracts at customs. Notwithstanding the revenue over-performance and the measures to date, Madagascar's tax and customs collections are still significantly below its potential.

21. Accordingly, we have reviewed the prioritization of our action plan for enhanced revenue collections. Near-term actions include: (i) publishing a report summarizing the tax credits granted and irregular tax credits by major companies that will have been cancelled by end-June 2017 (structural benchmark); (ii) employing the use of the new TIN throughout all departments of the Ministry of Finance and Budget and CNAPS by end-December 2017 (structural benchmark); (iii) making preparations to expand the use of TINs to all other ministries by end-December 2018 and (iv) extension of performance contracts to the anti-fraud unit at customs by end-September 2017 (structural benchmark). Coordination between the two departments will be further strengthened, with clearly outlined measures in the priority action plan and repeated progress updates, and electronic tax reforms will create the basis to implement the 5 percent withholding tax.

22. Reducing low-priority spending—especially transfers—is another priority. Notwithstanding requests for higher transfers, social spending was given priority and sheltered from budget cuts in 2016. However, state-owned enterprises, and in particular the public utility JIRAMA and Air Madagascar, continue to create fiscal challenges and will need additional financial support from the government in 2017.

23. Our spending needs will increase because of the cyclone and the drought. The drought has increased the operational cost of JIRAMA, requiring additional transfers (MGA 200 billion, see below). The cyclone (the worst in 13 years) led to significant human costs and economic damage. It has created unexpected additional spending needs for relief and reconstruction. We have committed US$52 million spending for pressing reconstruction and relief needs (of which MGA 8 billion in transfers and US$14 million re-programmed financing from the World Bank will be budget neutral), increasing capital expenditures by MGA 123 billion (US$36 million) total. The focus is on the following sectors: agriculture, education, social protection, health, transportation, and road rehabilitation. We are seeking additional external assistance for these needs as well as longer-term reconstruction.

24. The expected improvement in JIRAMA's financial position has not materialized. The company is battling with several challenges: (i) an exceptional drought starting in November 2016 in the central plateau and in the eastern part of the country has cut vital hydropower generation, forcing an increased reliance on far more expensive diesel-based thermal generation; (ii) delays in the plans to shift from expensive diesel-based thermal generation to less expensive heavy fuel oil; (iii) unexpectedly high increases in fuel costs linked both to rising world prices and disadvantageous supply contracts, which expired in April 2017; (iv) slower improvement in enforcement of customer payments and control of theft; and (v) many contracts disadvantageous to JIRAMA remain in place. As a result, JIRAMA's needs for transfers, just to maintain operations this year, rose from MGA 250 billion to MGA 420 billion and an additional MGA 30 billion for a necessary reduction in accounts payable from previous years. These needs reflect the impact of both the challenges outlined above and forceful measures reflected in the government's policies in the sector and JIRAMA's updated business plan.

25. JIRAMA's new management developed an updated business plan that was approved by the government's strategic committee on JIRAMA and the board of JIRAMA on June 12, 2017 (prior action). The business plan contains the following key elements, with a budget approved for 2017 (consistent with planned transfers) and projections for 2018-20:

- Detailed financial projections and concrete measures, with monitorable, monthly targets for costs savings and revenue collection, to ensure that JIRAMA's projected financial needs do not exceed the revised budgeted amounts.
- Measures providing for periodic price increases in line with the evolution of JIRAMA's costs and differentiated by type of customer. As such, an increase of 7.5 percent (weighted average) will be applied from July 1, 2017.
- Measures to pursue electricity theft based on the decree criminalizing the theft of electricity.
- Steps to improve collection of payments due.
- Program for installation of smart meters. At least 3,500 smart meters will be installed by end-June 2018 (structural benchmark).
- Enhanced review of and transparency in contracting practices to ensure accountability and strengthen public trust. Some contracts have already been revised.
- A schedule for the transition from diesel to heavy fuel oil at all major facilities when technical conditions allow it.
- Where legally appropriate, the renegotiation or cancellation of disadvantageous, high-cost contracts.
- Adoption of a model contract to strengthen the negotiating position of JIRAMA, boost transparency, and build public trust.
- Continued reliance on competitive and open bidding for all contracts in conformity with the existing procurement law, with prior notification in writing of World Bank and IMF staff of any exceptions (such as emergencies) allowing for single source procurement contracts for JIRAMA's purchase of fuel and electricity, as well as purchase and rental of generators (continuous structural benchmark).
- Projections for 2018-20 that bring transfer needs down gradually over time, with an objective of no transfers by 2020.

Finally, we intend to develop a medium-term action plan to develop the electricity sector as a whole, which will provide reliable, low-cost electricity to a growing proportion of the population with an increasing reliance on renewable energy. We are aiming for providing access to 30 percent of the population by 2030.

26. We are entering into a strategic partnership for Air Madagascar that will put the airline on a sustainable commercial footing. This will allow Air Madagascar to continue to play a key role in the economy, especially as the main domestic carrier. In connection with this partnership, the state is assuming its liabilities related to past losses. This will involve a one-time budget charge up to MGA 303 billion in 2017. Combined with a capital injection from the strategic partner, Air Madagascar will emerge as a financially sound and commercially viable company, which will have no further need for government support.

27. The supplementary budget (*Loi des finances rectificative*) submitted to the Parliament on June 9 2017 (prior action) provides for these unavoidable increases in spending needs. The supplementary budget also protects priority social spending. To ensure that planned spending is fully financed, the supplementary budget includes both adjustment measures and additional financing:

- Revenue measures will increase domestic revenues by MGA 30 billion and customs revenue by MGA 25 billion compared to the budget (LFI);
- Transfers to JIRAMA will be increased by MGA200 billion, of which MGA 30 billion are financed by a corresponding amount of budget cuts, of which MGA 13 billion in goods and services, MGA 16 billion in domestically-financed capital expenditure (without reducing counterpart funding), and MGA 1 billion in transfers;
- Following the ECF disbursement, the central bank will on-lend up to $50 million to meet the exceptional needs. 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;
- Additional financing associated with the cyclone will be provided by development partners, most notably the World Bank and the African Development Bank; and
- Following discussions with creditors and potential lenders, financing assurances of about $60 million have been identified, which ensures that the strategic partnership between Air Madagascar and Air Austral is fully financed and non-concessional external financing will be limited to at most $45 million.

C. Enhancing Economic Governance

28. The Government is committed to strengthen institutions and reduce corruption, including in particular the illegal trafficking of natural resources. Madagascar's governance indicators, which were improving up to 2009, deteriorated during the 2009-13 period of transition and isolation. The government adopted a new "National Strategy to Fight Corruption, 2015-2025" with the vision to put in place an effective rule of law by strengthening state capacities, sanctioning corruption, and reducing risks and opportunities for corruption. Implementation of the new strategy aims to break the existing culture of impunity. The government is steadfast that individuals engaged in corrupt practices will be prosecuted.

29. We continue to strengthen the legal and institutional framework for governance. Two new laws on declaration of assets and the formation of judicial anti-corruption centers were adopted in 2016 and a new law on asset recovery was submitted to the Parliament on June 13, 2017 to ensure that judicial authorities can confiscate the instrumentalities and proceeds of crime in line with the FATF (Financial Action Task Force) standard (prior action). While the new legislation has established the essential legal framework to strengthen governance, there are certain weaknesses that remain to address. By end-June, we will submit bills strengthening the anti-corruption legal framework by ensuring that (i) domestic politically exposed persons are covered under the anti-money laundering legislation in line with the FATF standard; (ii) asset declarations from officials covered under article 41 of the Constitution and article 2 of the anti-corruption law are comprehensive (covering both assets legally owned and beneficially owned), verifiable, subject to dissuasive sanctions for non-compliance, and made publicly available online progressively; and (iii) SAMIFIN, BIANCO, and the anti-corruption police can effectively participate in international cooperation in line with the FATF and UNCAC standards.

30. Judicial independence is essential to ensure a fair and effective execution of the anti-corruption laws, and its strengthening is a priority for our strategy. To continue and strengthen the rehabilitation of the justice system, it will be essential to ensure that the anti-corruption centers (*poles anti-corruption*) are completely independent and free of any influence and confirm the authority of these centers to evaluate the conduct of all officers of the court (including judges), in line with the Constitution. Other measures to strengthen execution include: (i) launch a case assignment system to eliminate the concept of "ownership" of a case by a judge before the case is ready to go to trial; and (ii) publish statistics to monitor that justice is served within a reasonable time frame and that the significant backlog of cases in the court system is reduced. To increase transparency and reduce the inconsistencies between decisions, we will launch the process of publishing, including providing on-line internet access to, all court decisions, beginning with the anti-corruption centers (*poles anti-corruption*) starting in January 2018.

31. To make the best use of existing control organs and anti-corruption agencies, we will improve coordination, strengthen capacity building, and allocate adequate budget resources. Against this background, starting in July 2017, we will publish statistics on a quarterly basis on corruption cases based on investigations made by the anti-corruption office (BIANCO) and the financial intelligence unit (SAMIFIN) (see Tables 2-5 in the technical memorandum of understanding, TMU). We will also improve the quality of recruitment and allocate more financial resources to the control organs and anti-corruption agencies. Because of budget limitations, only one anti-corruption center in Antananarivo has been established so far. The 2018 Budget will allocate sufficient financial resources for at least one additional anti-corruption center. Civil servants' commitment to fight corruption is vital.

32. Stronger transparency and integrity in public financial management is crucial in enhancing governance and fighting corruption. Transparent fiscal reporting and an open budget process are fundamental prerequisites. Key transparency-enhancing measures implemented so far include: (i) the publication and submission to the Court of Auditors of the 2015 financial statements of ten large state-owned enterprises (end-December 2016 structural benchmark); (ii) the approval by Parliament of audit reports on budget execution (*loi de reglement*) for 2012-14 in 2016; and (iii) Madagascar's participation in an assessment by Open Budget Survey to evaluate transparency and the accessibility of budget documents. To improve transparency further, we also aim to: (i) submit to Parliament the audit report on budget execution for 2015 during the first session of 2017; (ii) expand the variety of budget documents published; (iii) make timely on-line publishing of all budget documents; and (iv) make budget documents more comprehensive by including information about state-owned enterprises, autonomous public establishments, and PPPs. We will also revise and submit to Parliament the law governing the National Public Establishments (*Etablissements publics nationaux, EPN*) by end-June 2018 (structural benchmark) to enhance transparency and accountability, with the goal of issuing the application decrees before the end of 2018.

33. After adopting a PFM strategy for 2017-2026 in December, we now plan to develop and implement a three-year action plan for priority PFM reforms, following consultations with civil society, development partners, and the IMF. Actions taken in recent years have started to improve the prioritization of public expenditure, enhance transparency (as noted above), advance multi-year budgeting, and strengthen public procurement. The new action plan to be adopted by end-June 2017 by the steering committee of the SNMGFP[2] will give priority to: (i) preventing and managing existing domestic arrears; (ii) settling cross-debts between the state and the private sector; (iii) strengthening medium-term budgeting; and (iv) managing budgetary risks and in particular risks associated with PPPs and state-owned enterprises. The PFM action plan will integrate related action plans when possible, including the actions to enhance public investment management in both the near-term priority action plan and, once it is completed, the medium-term strategy.

D. Strengthening Financial Sector Development and Stability

34. Our monetary policy framework has been successful in controlling inflation, and we intend to continue to improve and modernize it. In the near-term, we are developing a priority action plan by end-June 2017 to enhance the effectiveness of monetary policy, especially the transmission mechanisms for policy impulses. Over the longer term, we intend to institute reforms and develop capacities and markets to move gradually away from monetary targeting towards an interest rate-based framework, once on-demand overnight deposit facilities to banks and an interest-rate corridor have been established. Our long-term goal is a regime where a transparent, forward-looking policy strategy—based on sound analysis of actual and perspective conditions—can effectively link policy objectives to policy actions through a consistent, transparent, predictable, and market-based operating framework.

[2] The national strategy for the modernization of public financial management (*la stratégie nationale de modernisation de la gestion des finances publiques*).

35. Reforms underway to the monetary policy framework will accelerate. The BFM has been steadily improving its ability to manage banking sector liquidity, with the aim of using liquidity operations in the interbank market to equate the rate there with the policy rate. Improvement in this important area will continue, including through strengthening coordination between the BFM and the Ministry of Finance and Budget to raise the quality of government cash flows forecasts. The enactment of the new Central Bank Act (CBA) on November 7, 2016 was a major step forward in terms of establishing better governance, accountability, and both operational and policy related central bank independence—with the latter significantly advancing through the placing of legal limits on the BFM's lending to Government. Going forward, we are working to fully implement the BFM law—including with respect with capital levels—to ensure the central bank has the independence and resources it needs to fully carry out its functions. The BFM's audit function, both external and internal, has been upgraded. This will help ensure greater accountability within the BFM, and improvements in this area will continue—including the extension of BFM's procedures for competitive tenders for purchases of currency, albeit with appropriate deference to its sensitive nature. The anticipated shift to IFRS accounting by 2019 will facilitate the audit and internal control process by providing an international standard for evaluating the BFM's financial position. We will prepare an action plan for IFRS implementation by September 2017. In the period running up to adoption of IFRS, to the extent possible, we will publish pro-forma IFRS accounts as an annex to our annual financial statements. We have also made advances in our understanding of the monetary transmission mechanism, including through better development of forecasting capacity, and improvements in this area will continue.

36. One immediate focus is enhancing the functioning of key financial markets to facilitate better monetary policy transmission. To this end, we are in the process of improving the interbank money and foreign exchange markets with IMF technical assistance, and expect to extend this reform effort to the government securities markets soon.

- The interbank market is shallow and characterized by low levels of activity. To address transparency, trust, and legal recourse, we will fully implement risk-based banking supervision in the medium-term (¶40), and develop a functioning market for repurchase agreements (repos) in the shorter term. In this latter regard, we will submit to Parliament draft legislation to promote repo transactions by end-December 2018 (structural benchmark).

- Nonbank participation in the primary market for government securities will be encouraged. Secondary markets remain underdeveloped, which complicates government's efforts to secure needed budget finance. As the new central bank act establishes tight limits on central bank credit to the government, improving these markets now takes on greater urgency. As a first step towards improvement, we will reach agreement on a securities market development strategy by end-2017 in consultation with the banking sector and other relevant actors.

- In the foreign exchange market, we are aiming for more efficient, liquid and transparent functioning. To this end, we successfully held our first flash foreign exchange auction in December, with support from IMF TA. Going forward, we aim to eventually make such auctions our primary modality of intervention, and we will also move towards a more rules-based intervention strategy. To further private sector participation and confidence in the market, and to improve BFM oversight, we will significantly increase the transparency of market operations, including by better monitoring of foreign exchange positions and transactions, improving the comprehensiveness of commercial banks reporting, and facilitating the availability of all relevant regulations to market participants. We will also work towards the introduction of foreign exchange forward contracts and swap arrangements with the technical assistance from the IMF, beginning with the development of an action plan by end-December 2017 for the introduction of swap arrangements.

37. The central bank will advance ongoing reforms of the monetary policy operational framework. As mentioned above, we will develop an action plan whose objectives will include:

- To help better align the interbank rate with the policy rate, we will initiate an overnight deposit facility to be available to banks on demand, with an interest rate indexed to, but lower than the policy rate. Combined with the liquidity expanding and already existing overnight repo facility—also available to banks on demand, with an interest rate indexed to but higher than the policy rate—this will create an interest rate corridor around the policy rate that will help stabilize liquidity conditions. Given that the effectiveness of the deposit facility could be adversely impacted by high seasonal variations in liquidity, we will study the possibility of incorporating seasonality in the setting of reserve requirements.

- To facilitate greater capacity for the BFM to fine tune the interbank market, we will also introduce a shorter-term deposit auction facility and a repo facility (both of less than 7-day tenor) to allow the BFM to absorb and inject liquidity over periods of less than the current 7 days.

38. To enhance the ability of the financial sector to contribute to development, we will pursue reforms to expand financial inclusion and to raise the level of competition in the banking sector. The rate of access to the banking system in Madagascar is currently less than 10 percent overall, with only about half that rate prevailing in the rural areas. Mobile money operations conversely have expanded rapidly since their inception in 2010, to the point where 10 percent of the adult population is now participating. Further expansion would provide significant benefits to the population in terms of enhanced efficiency and safety of savings, and eventually connect previously unserved persons to an enhanced set of financial services. Progress has been good, and Madagascar is now one of only two countries in Sub-Saharan Africa where all mobile money networks are fully interconnected. We passed the Electronic Money law in February 2017 to provide a formal legal framework for these operations, including the rules for participating in the industry and the prudential supervision of electronic money institutions. We intend to issue the needed implementing decrees and regulations for this law, with World Bank technical assistance, by end-December 2017 (structural benchmark). The growth of electronic money networks is eventually expected to increase competition for financial services, leading to more accessible, more flexible and cheaper services for consumers. With regards to the banking system, we aim to increase the level of competition while improving the quality of loan portfolios going forward. One key step will be the submission to parliament of the legal framework for the establishment of a private credit bureau by December 2017, with a view to tendering for proposals in 2018, with establishment of a functioning bureau by 2019. We also aim to establish a collateral registry, with the expectation that the resulting reduction in banks' credit risk would promote financial intermediation.

39. The BFM will make one change to its operational modalities in the foreign exchange market to avoid the potential of creating a multiple currency practice (MCP).

- As noted by IMF technical assistance, an MCP could potentially arise from the BFM's past practice of using the previous day's reference rate when providing foreign currency to satisfy urgent client transactions. The MCP would arise in the event the rate applied to a client operation differed by more than 2 percent from the ongoing rate in the market at the time the urgent client transaction was finalized by the BFM. This potential was removed by amending the service level agreement regulating urgent client transactions as follows: (i) transactions made before the opening of the foreign exchange market will be executed at the previous day's reference rate, and (ii) transactions made after the opening of the foreign exchange market will be executed at the ongoing exchange rate in the market at that time. Any penalty imposed on urgent client transactions will not exceed 2 percent.

- Recognizing the importance of communication in carrying out its main missions, BFM has committed to implementing a strategic communication plan since the beginning of 2015. It aims to insure the credibility of BFM actions and decisions to all actors of the economy. In this regard, BFM has adopted, as its guiding principle, the conduct of responsible communication, which consists in disclosing updated and reliable information in a transparent and objective manner. BFM has already implemented a set of procedures to reinforce the communication unit staff and its technical capacity. Furthermore, regular (quarterly) meetings with banks to discuss the evolution of liquidity and BFM intervention in the money market have been held. This last action aims to strengthen the communication framework with the financial sector, which makes the monetary policy more effective. In addition to this action plan, BFM also intends to work on a communication policy which will include both its internal and external strategic objectives and designed to its target audience. Action plans to strengthen and to facilitate the communication with the priority target audience (banks, media, staff) will be implemented by the end of 2017.

- We have started carrying out quarterly business surveys aimed at determining the private sector's experience and intentions with respect to growth and employment, their experience with wage pressure, and the level of their inflationary expectations. The information collection process started in April 2017 and is being supported by technical assistance provided by the IMF.

40. We will accelerate reforms to make financial sector supervision more proactive and penetrating. We are in the process of strengthening the Banking Law, with the goal of submission to parliament in October 2018. We are seeking technical assistance in this effort. This will provide the legal framework to improve our bank recovery and resolution framework, expand the array of possible corrective measures that can be employed by the banking supervisor, and develop a robust prompt corrective action framework. With the view to extend supervisory discipline to all non-bank financial institutions, some of which are currently operating with loose oversight, we will complete audits of *Caisse d'Epargne de Madagascar* (CEM, our oldest financial services company) and the postal service by end-July 2017, and implement the resulting near-term recommendations by end-

December 2017. Building on this base, we will also devote more resources to develop and improve our supervisory capacity and improve compliance with the Basel Core Principles. Our aim here, with help from Fund technical assistance, will be to better safeguard financial sector stability through full implementation of a system of risk-based supervision by end 2019. Furthermore, we will issue new prudential regulations and strengthen the existing ones by December 2018; and establish an action plan for the effective implementation of risk-based supervision by end 2017.

E. Improving the Quality of Statistics

41. The government remains committed to strengthening the statistical system. Principal actions to be undertaken include: (i) strengthening the legal framework for statistics, including the submission of a new statistics law modernizing and regulating data collection to the Parliament by end-December 2017 (structural benchmark); (ii) increasing the human, financial, and material resources allocated to the production of statistics; and (iii) improving the coordination among producers of statistics, including making a coordination committee operational by end-June 2018. At the sectoral level, key actions include:

- National accounts: Publish a revised series of annual national accounts based on the 1993 System of National Accounts (SNA) covering 2007-14 (with the base year updated to 2007 from 1984) by end-June 2017 (structural benchmark). Quarterly GDP estimates by production will follow later in the year.
- Price statistics: The reweighted consumer price index (CPI) will be based on the 2012 national household survey for the Millennium Development Goals and with 2017 as the base year. Following a test period, the new CPI would become the official CPI starting in January 2018.
- Monetary and financial statistics: Start consolidating the balance sheets of micro-financial institutions in the preparation of the monetary survey by end-September 2018.
- Government finance statistics: Over the long term, extend the statistical coverage from currently the central government only to the general public sector including local authorities and National Public Establishments (EPN).

V. PROGRAM MONITORING

42. 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 second, third, and fourth reviews are scheduled to be completed on or after November 20, 2017, May 20, 2018, and November 20, 2018 respectively, based on test dates for periodic performance criteria of end-June 2017, end-December 2017, and end-June 2018, respectively.

Table 1. Madagascar: Quantitative Performance Criteria and Indicative Targets for the ECF Arrangement, June 2017 to June 2018

	2017			2018	
	End-June	End-Sep.	End-Dec.	End-March	End-June
	Performance Criteria	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 2]	-222	-241	48	223	105
External					
Ceiling on accumulation of new external payment arrears (US$ millions) [3]	0	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) [4]					
Grant element of less than 35 percent	383	383	383	383	383
Grant element of less than 20 percent	100	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) [3]	0	0	0	0	0
Central bank					
Floor on net foreign assets (NFA) of BCM (millions of SDRs) [5]	485	506	537	523	539
Ceilings on net domestic assets (NDA) of BCM [5]	1,678	1,999	1,967	1,908	2,030
Indicative targets					
Floor on social priority spending [1]	130	174	298	84	175
Floor on gross tax revenue [1 2]	1,975	2,997	4,132	1,022	2,212
Memorandum items					
Official external program support (millions of SDRs) [4]	153	161	239	239	269
Official external program grants (millions of SDRs) [1]	0	41	71	0	29
New concessional loans, contracted or guaranteed by the central government or BCM (US$ millions) [4]	816	1,025	1,234	1,427	1,620
Program exchange rate (MGA/SDR)	4,444	4,444	4,444	4,444	4,444

Sources: Madagascar authorities; and IMF staff projections.

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

[2] Fiscal spending and gross tax revenues exclude operations for Air Madagascar (budget transfers and mutual tax cancellation).

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

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

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

Table 2. Madagascar: Prior Actions and Structural Benchmarks through End-June 2018

Action	Tentative Dates	Rationale
Prior actions		
Adopt a business plan for JIRAMA by government's Strategic Committee for the Reform of JIRAMA and JIRAMA's Board, that ensures that JIRAMA's projected financial needs do not exceed the revised budgeted amounts.	Completed on June 12, 2017	Major fiscal risk
Submit draft law on asset recovery, that is consistent with all FATF recommendations, to parliament.	Completed on June 13, 2017	Critical to economic governance
Submit draft supplementary budget law to parliament consistent with paragraph 27 of the MEFP.	Completed on June 9, 2017	Critical to fiscal policy
Promoting inclusive growth		
Adopt by the Cabinet a medium-term strategy to enhance public investment management capacity.	End-Dec. 2017	Critical to fiscal policy
Support the implementation of the social protection policy by submitting to parliament the new law on social protection to strengthen the coordination function of the Ministry of Population regarding social safety net programs.	End-Dec. 2017	Central to inclusive growth
Mobilizing fiscal revenue		
Publish a report summarizing the tax credits granted and irregular tax credits by major companies that will have been cancelled.	End-June 2017	Important for increasing revenue
Employ the new Tax Identification Number (TIN) throughout all departments of the Ministry of Finance and Budget and CNAPS.	End-Dec. 2017	Important to reduce fraud
Establish a Tax Policy Unit at the Ministry of Finance and Budget.	End-Sept. 2017	Important for increasing revenue
Extend performance contracts to the anti-fraud service (in charge of ex post inspections) at customs.	End-Sept. 2017	Important for increasing revenue
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).	Continuous benchmark	Critical to contain transfers

Install 3,500 smart meters for JIRAMA.	End-June 2018	Critical to contain transfers
<u>Enhancing economic governance</u>		
The terms and conditions of all PPP contracts will be published within one month of the date of signature on the web site of the Ministry of Finance and Budget.	Continuous benchmark	Critical to enhance transparency and accountability
Notify World Bank and IMF staff in advance of any single source procurement contracts for JIRAMA's purchases of fuel and electricity and purchases and rentals of generators.	Continuous benchmark	Critical to enhance transparency and accountability
Revise and submit to Parliament the law governing the National Public Establishments (*Etablissements publics nationaux*, *EPN*).	End-June 2018	Critical to PFM (EPNs account for 10 percent of spending)
<u>Strengthening financial sector development</u>		
Issue the implementing decrees and regulations for the new law on electronic money.	End-Dec. 2017	Central to financial inclusion
Submit to Parliament draft legislation to promote repo transactions.	End-Dec. 2018	Critical tool for monetary policy
<u>Improving quality of statistics</u>		
Submit to Parliament a new statistics law modernizing and regulating data collection.	End-Dec. 2017	Critical tool for economic policy

Attachment II. Madagascar: Technical Memorandum of Understanding, June 2017

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 2017-18. 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. 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 primary balance excluding foreign financed investment (commitment basis). Performance criteria will

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

be set for end-June and end-December 2017 and end-June 2018 while indicative targets will be set for end-September 2017 and end-March 2018.

6. The authorities will give prior notification to World Bank and IMF staff of any single source procurement contracts for JIRAMA's purchases of fuel and electricity and purchases and rentals of generators. Prior notification entails that World Bank and IMF staff will receive written communication at least 3 working days before the signing of the contract. The signing of addendums and extensions of previously signed contracts are also subject to the requirement of prior notification.

II. PROVISION OF DATA TO THE FUND

7. The following information will be provided to the IMF staff for the purpose of monitoring the program:

- Data with respect to all variables subject to quantitative 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.
- The Financial Intelligence Unit (SAMIFIN) will continue to publish, on a website that is freely available to the public, quarterly data (no later than the end of the month following the quarter) on reports sent to BIANCO in relation to suspicions of laundering of the proceeds of corruption (Table 2).
- The BIANCO will publish on a website, that is freely available to the public, quarterly data (no later than at the end of the month following the quarter) on the number of persons indicted, the number of persons convicted by a first instance court decision, and the number of persons convicted pursuant a final court decision (Tables 3-5).
- 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)

8. 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. In 2017, spending (for the purposes only of calculating this primary balance) excludes government financial assistance to Air Madagascar of up to MGA 330 billion as a result of direct transfers or guarantees to service Air Madagascar's existing liabilities, including arrears to suppliers but excluding tax arrears, provided such assistance is specified in a strategic partnership agreement between Air Madagascar and another airline. 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
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

9. 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 30 days after the due date or after the end of a 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] 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.

2. Ceilings on New Non-Concessional External Debt

10. 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.

11. 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.

12. 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.

13. 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

14. 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

[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 2016 World Economic Outlook (WEO).

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.

15. 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 (this also applies to liabilities of Air Madagascar assumed by the government in the context of a strategic partnership agreement); 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

16. 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.

17. 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 (this also applies to liabilities of Air Madagascar assumed by the government in the context of a strategic partnership agreement); (iii) debts classified as international reserve liabilities of CBM; and (v) 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

18. The target floor for NFA of the CBM is evaluated using the end-period stock, calculated using 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

19. 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. 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

20. **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

21. **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

22. **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.

23. **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.

24. **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

25. 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 the 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.

26. 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 beginning 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 downward deviation of actual from projected official external program grants, calculated at quarterly period-average actual exchange rates. This adjustment will be capped at the equivalent of SDR30 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 publicly-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

Table 2. Reports sent by SAMIFIN to BIANCO

	Members of the Supreme Powers [1]	Magistrates	Heads of province and district, Commissaries, Prefects, Mayors	Director of Ministry or equivalent	SOE Managers	Others
Number of reports disseminated						
Aggregated value of suspected money laundering						

[1] Members of the Supreme Powers must be understood as those listed on art. 40 of the Constitution: President, members of Parliament, and High Constitutional Court Magistrates.

Table 3. Number of Persons Indicted

Penal Code Article	President Members of parliament High Constitutional Court Magistrates	Magistrates	Heads of province and district, Commissaries, Prefects, Mayors	Director of Ministry or equivalent	SOE Managers	Others
Art. 174						
Art. 174.1						
Art. 174.2						
Art. 174.3						
Art. 175						
Art. 175.1						
Art. 175.2						
Art. 176						
Art. 177						
Art. 177.1						
Art. 177.2						
Art. 178						
Art. 179						
Art. 179.1						
Art. 180						
Art. 180.1						
Art 180.2						
Art. 181						
Art. 182						
Art. 183						
Art. 183.1						
Art. 183.2						

Table 4. Number of Persons Convicted—First Instance

Penal Code Article	President Members of parliament High Constitutional Court Magistrates		Magistrates		Heads of province and district, Commissaries, Prefects, Mayors		Director of Ministry or equivalent		SOE Managers		Others	
	Fine	Jail	Fine	Jail	Fine	Jail	Fine	Jail	Fine	Jail	Fine	Jail
Art. 174												
Art. 174.1												
Art. 174.2												
Art. 174.3												
Art. 175												
Art. 175.1												
Art. 175.2												
Art. 176												
Art. 177												
Art. 177.1												
Art. 177.2												
Art. 178												
Art. 179												
Art. 179.1												
Art. 180												
Art. 180.1												
Art 180.2												
Art. 181												
Art. 182												
Art. 183												
Art. 183.1												
Art. 183.2												

For fines, total value in ariary. For jail, total months (and suspended jail).

Table 5. Number of Persons Convicted—Final Decision

Penal Code Article	President Members of parliament High Constitutional Court Magistrates		Magistrates		Heads of province and district, Commissaries, Prefects, Mayors		Director of Ministry or equivalent		SOE Managers		Others	
	Fine	Jail	Fine	Jail	Fine	Jail	Fine	Jail	Fine	Jail	Fine	Jail
Art. 174												
Art. 174.1												
Art. 174.2												
Art. 174.3												
Art. 175												
Art. 175.1												
Art. 175.2												
Art. 176												
Art. 177												
Art. 177.1												
Art. 177.2												
Art. 178												
Art. 179												
Art. 179.1												
Art. 180												
Art. 180.1												
Art 180.2												
Art. 181												
Art. 182												
Art. 183												
Art. 183.1												
Art. 183.2												

For fines, total value in ariary. For jail, total months (and suspended jail).

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.

1. (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 some time 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.

REPUBLIC OF MADAGASCAR

June 14, 2017

STAFF REPORT FOR THE 2017 ARTICLE IV CONSULTATION, FIRST REVIEW UNDER THE EXTENDED CREDIT FACILITY ARRANGEMENT, AND REQUESTS FOR WAIVER OF NONOBSERVANCE OF PERFORMANCE CRITERION, MODIFICATION OF PERFORMANCE CRITERION, AND AUGMENTATION OF ACCESS—INFORMATIONAL ANNEX

Prepared By
African Department

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

CONTENTS

FUND RELATIONS

(As of May 31, 2017)

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

General Resources Account:	**SDR Million**	**%Quota**
Quota	244.40	100.00
Fund Holdings of currency	213.78	87.47
Reserve Tranche Position	30.62	12.53

SDR Department:	**SDR Million**	**%Allocation**
Net cumulative allocation	117.09	100.00
Holdings	13.21	11.28

Outstanding Purchases and Loans:	**SDR Million**	**%Quota**
RCF Loans	61.10	25.00
ECF Arrangements	41.05	16.80

Latest Financial Arrangements:

Type	Date of Arrangement	Expiration Date	Amount Approved (SDR Million)	Amount Drawn (SDR Million)
ECF	Jul 27, 2016	Nov 26, 2019	220.00	31.43
ECF[1]	Jul 21, 2006	Jul 20, 2009	73.32	53.03
ECF[1]	Mar 01, 2001	Mar 01, 2005	91.65	91.65

[1] Formerly PRGF.

Projected Payments to Fund[2]

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

	Forthcoming				
	2017	2018	2019	2020	2021
Principal	3.73	5.89	3.06	6.11	12.22
Charges/Interest	0.28	0.57	0.57	0.58	0.57
Total	4.02	6.47	3.63	6.69	12.79

[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:

An update safeguards assessment of the *Banque Centrale de Madagascar* (BCM) was completed in March 2017. Previous assessments were completed in March 2006, September 2008, and January 2015. The updated safeguards assessment found that progress had been made in implementing recommendations made in the 2015 assessment, including strengthening the legal framework and establishing an audit committee to oversee the internal and external audit process. However, delays in the publication of audited financial statements and an outdated accounting framework undermine transparency. In addition, risks in currency operations and reserves management are elevated. While the BCM received technical assistance on internal audit and financial reporting in the past two years, capacity constraints have hindered progress.

Exchange Rate Arrangement:

The currency of the Republic of Madagascar is the Malagasy ariary. The de jure exchange rate arrangement is 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. The central bank undertook buyback operations in the foreign exchange market for several months in 2015 which artificially maintained the published exchange rate at a more appreciated level than the market exchange rate. The buyback operations were discontinued in

September 2015 and the official exchange rate depreciated by about 10 percent against the US Dollar at that time (when the official exchange rate converged with the market exchange rate).

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 completed 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
Revenue and Customs Administration (AFS)	2016

Management of Arrears and VAT Refunds	2016
Public Investment Management Assessment (joint mission with AFS and the World Bank}	2016
Medium-Term Budget Framework: Developing manual	2016
Data Matching of Customs and Domestic Tax Data (AFS)	2017
Medium-Term Budget Framework and Public Investment	2017

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
Foreign Exchange Operations (AFS)	2016
Monetary Policy Communication (AFS)	2016
Inflation Analysis and Forecasting	2016
Risk Based Supervision	2016
Liquidity Management and Implementation of Repo Agreements	2017
Internal Audit and Risk Management	2017
Regulation and Functioning of the Interbank Foreign Exchange Market (AFS)	2017

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
National Accounts (AFS)	2016
Open Data Initiative	2016
Government Finance Statistics	2016
Monetary and Financial Statistics	2016
National Accounts (AFS)	2017
Balance of Payments Statistics	2017
Price Statistics (AFS)	2017

Resident Representative:

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

RELATIONS WITH THE WORLD BANK GROUP

(As of May, 2017)

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. Sharma (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:** 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) including control of public enterprises:** Actual budget allocations deviate significantly from the original budget. Budget execution and cash management are too weak to adjust for changes in available resources during the course of the year. Government transfers to cover losses in public enterprises are crowding out higher-priority public spending.

- **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.

- **Public investment and debt management:** A priority against the background of planned scaling up of public investment and new financing from public-private partnerships (PPPs), especially the need to enhance public investment capacity and donor coordination. Implementation of the priority investment plan must be phased in such a way that debt is maintained at sustainable levels.

- **Economic governance and corruption:** Governance weakened and corruption increased after the unconstitutional change of government in 2009. People perceive payment of bribes to be a frequent feature in interactions with the government and political parties have become a tool to maintain influential individuals in power through the distribution of favors. The justice system is perceived to be partial with an unfair enforcement of laws and Madagascar is seen as having one of the least independent judicial systems in Sub-Saharan Africa.

- **Business environment:** 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.

- **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.

- **Central bank operations:** The transmission of monetary policy impulses is limited in effectiveness due largely to an insufficiently developed financial system. The government securities market is segmented and exclusively short term with little activity in the interbank money market and the market for secondary Treasury Bill trading. While there is significant excess liquidity in the money market, the seasonal fluctuations are strong with effectively all excess liquidity held by two or three of the dominant banks.

- **Financial sector stability:** Financial regulation and supervision is inadequate with significant regulatory gaps and scarce resources. Banking supervision performs poorly when assessed against the Basel Core Principles. The supervisory authorities lack a framework for early and effective intervention and many non-bank financial institutions are not supervised by any authority.

- **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.

- **The statistical system:** Key statistics are provided by the National Institute of Statistics (NIS) and other government agencies. The central bank, ministries, and NIS regularly undertake standard economic and social surveys with donor financing. 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.

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

- **Tax and customs administration:** Shared responsibility. In tax administration, TA will help to refocus available resources on real challenges and compliance risks, remove regulatory obstacles, streamline management resources to support change, and give priority to measures that are likely to generate additional tax revenues. In customs administration, the aim is to move from strictly transaction-based controls to more use of post-clearance audits. 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.

- **PFM including control of public enterprises:** 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 is providing assistance in the following areas: (i) the public sector project is supporting the government in improving revenue management and local service delivery; (ii) the energy sector project is providing TA and financial support in order to improve the operational performance of the national electricity utility (JIRAMA) and improve the reliability of electricity supply, including the purchasing of spare parts necessary for the rehabilitation of the fuel supply system of JIRAMA's existing heavy fuel oil (HFO) plants; (iii) and a support to Air Madagascar in the research of a strategic partner.

- **Public expenditure efficiency:** The World Bank public sector projects is supporting selected reforms in the education sector based on a previous public expenditure review in health and education.

- **Public investment and debt management:** Shared responsibility. The Bank and the Fund conducted a joint Public Investment Management Assessment (PIMA) to diagnose the public investment management framework in 2016.

- **Economic governance and corruption:** Shared responsibility. With joint support from the World Bank and the Fund, the authorities are reviewing existing legislation, regulations, and supervisory practices with the aim of hindering money laundering and the financing of terrorism. Fund TA is also focused on reducing administrative discretion in tax and customs administration and public expenditure management.

- **Business environment:** The World Bank's Second Integrated Growth Poles project (PIC2) is aiming to improve commercial justice and increase economic opportunities and access to enabling services in selected regions. At the national level, the project is supporting a series of investment climate reforms and help strengthening the public-private interface to increase investor confidence and private investment. At the regional level, the project is supporting 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.

- **Service delivery and social safety nets:** The Bank has the lead. The emergency food security and social protection project is supporting a labor-intensive public works program as well as the design and implementation of a pilot program for conditional cash transfers. The safety nets project is preparing 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.

- **Central bank operations:** The IMF has the lead. The Fund is assisting 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 Treasury 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 and the Fund will coordinate in providing support to banking supervision (CSBF). Both institutions assist the authorities in implementing risk-based supervision and establishing a legal and regulatory framework focused on anti-money laundering/combating the financing of terrorism (AML/CFT). The Bank supported the establishment of the legal framework regulating electronic money and is exploring the possibility of supporting the establishment of the institutional framework for control and supervision of non-bank financial institutions.

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

- **The statistical system:** Shared responsibility. The Fund is providing TA 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.

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. Table 1 lists the teams' separate and joint work programs during 2017 and 2018.

Table 1. Madagascar: Bank and Fund Planned Activities in Macro-Critical Structural Reform Areas, 2017-2018			
Title	**Products**	**Provisional Timing of Missions**	**Expected Delivery Date of Report**
Bank Work Program	TA in project prioritization tool for PIM	Q2, 2017	Q2, 2017
	Resident Advisor on PIM	Q3, 2017	Ongoing
	TA in Pension reforms	Q2, 2017	Q2, 2017
	Pump price structure analysis	Ongoing	Q2, 2017
	TA in Debt management	Q3, 2017	Q4, 2017
	TA in Public expenditure analysis (BOOST)	Q2, 2017	Q2, 2017
	TSA Assessment	Q2, 2017	Q2, 2017
	Air Madagascar support	Ongoing	Ongoing
	PPP - Pipeline project elaboration	Q2, 2017	Q2, 2017
	PPP- MFB Capacity building on financial analysis and screening of PPP projects	Q1, 2017	Q2, 2017
	PPP - Finalization of the 2 remaining enforcement decrees on PPP	Ongoing	Q1, 2017
	IFC Investment Climate support/ Doing Business	Q2/Q4, 2017	Ongoing
	ENR TA on modelling for sustainable land use planning		
	GIS planning for rural electrification	To be determined	To be determined
	Scaling up Renewable Energy Program – Investment Plan	Ongoing	Q1, 2018
	Market study for Energy stand-alone System	To be determined	To be determined
	FIRST project on Microfinance Supervision	Q2, 2017	Q2, 2018
	FIRST project on Payment Systems	Q3, 2017	Q4, 2018
	IFC TA on Credit Information	Q3, 2017; Q1, 2018	Q1, 2018
	IFC TA on Collateral registry	Q4, 2017	Q2, 2018
	Assessment of the Malagasy AML/CFT regime	No mission – World Bank report presented at the ESAAMLG Plenary (Sept 2017 or April 2018)	To be determined
	AML/CFT – National Risk Assessment	To be determined	To be determined
	Governance of State Owned Enterprises	Ongoing	Q2, 2017
	Customs modernization (public sector performance project)	To be determined	To be determined
	Support to Accountability Institutions	Q3, 2017	Q3, 2017
	Tax administration modernization (public sector performance project)	Q3, 2017	Q3, 2017

Table 1. Madagascar: Bank and Fund Planned Activities in Macro-Critical Structural Reform Areas, 2017-2018 (concluded)

Fund Work Program	STA TA in national accounts	Q2, 2017	Q3, 2017
	AFS TA in price statistics	Q2, 2017	Q3, 2017
	LEG TA in foreign exchange legislation	Q2, 2017	Q3, 2017
	FAD TA on MTBF, public investment, and natural resource management	Q3, 2017	Q4, 2017
	LEG multi-topic TA on banking law and the legal framework for repo agreements	Q3, 2017	Q4, 2017
	FAD TA in fiscal risk management	Q4, 2017	Q1, 2018
	STA TA in public finances	Q4, 2017	Q1, 2018
	FAD TA in cash and arrear management	Q1, 2018	Q2, 2018
	LEG TA in banking law	Q1, 2018	Q2, 2018
	LEG TA in the legal framework for repo agreements	Q1, 2018	Q2, 2018
	AFS TA in PIMA follow up	To be determined	To be determined
	AFS TA in fiscal forecast	To be determined	To be determined
	FAD TA in tax policy	To be determined	To be determined
	FAD TA in tax and customs administration (follow-up mission)	To be determined	Within 45 days after the last day of the mission
	AFS TA in customs administration	To be determined	Within 45 days after the last day of the mission
	AFS TA in tax administration	To be determined	Within 45 days after the last day of the mission
	AFS TA in payment system legislation	To be determined	To be determined
	AFS TA in monetary policy implementation	To be determined	To be determined
	AFS TA in foreign exchange market	To be determined	To be determined
	AFS TA in central bank governance	To be determined	To be determined
	AFS TA in central bank communication	To be determined	To be determined
	AFS TA in business surveys	To be determined	To be determined
	LEG TA in AML/CFT issues	To be determined	To be determined
	MCM TA in central bank accounting	To be determined	To be determined
	Long-term expert on macro-fiscal issues	To be determined	To be determined
Joint Work Program	Debt sustainability analysis	Q1, 2017	Q2, 2017
	AML/CFT	Q1, 2017	Q2, 2017

RELATIONS WITH THE AFRICAN DEVELOPMENT BANK GROUP

(As of April, 2017)

1. Madagascar (MDG) became a member of the African Development Bank Group (AfDB) in 1977. To date, the AfDB has financed 91 operations in the country, for a total net commitment of UA1,329.2 billion. This comprises of 78 projects, including institutional support, and 13 studies. The clear majority of these operations were financed through loans.

2. As of March 30, 2017, the AfDB's ongoing portfolio comprised of 8 active projects, 4 studies, and 1 humanitarian assistance for a total commitment of UA194.5 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 is currently preparing a new CSP, which will cover 2017-2021. The new CSP's main objective is to contribute to improving the quality of life of the population through strong and inclusive growth. The proposed strategy in the new CSP focuses on Pillar I – development of energy and transport infrastructure to support inclusive growth; and Pillar II – support for the transformation of agriculture and the development of industry. 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 and Programs

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	33
	Projet d'Extension du Périmètre du Bas Mangoky (PEPBM)	November 11, 2014	40.14	01
	Projet Jeunes Entreprises Rurales dans le Moyen Ouest (PROJERMO)	September 24, 2012	24.61	01
	Programme Entrepreneuriat des Jeunes dans l'Agriculture et l'Agro-Industrie (étude)	May 23, 2016	0.67	10
	Etude de faisabilité du Programme de Transformation de l'Agriculture Malagasy	November 25, 2016	1	0
Transportation	Projet d'Aménagement des infrastructures routières (PAIR)	October 18, 2013	58.20	37
Governance	Projet d'Appui à la Gouvernance Institutionnelle (PAGI)	September 17, 2013	4.50	44
	Projet d'Appui à Promotion des Investissements (PAPI)	July 9, 2015	7.00	02
	Programme d'Appui au Réformes de la Gestion Economique (PARGE)	March 30, 2016	12.5	100
	Programme d'Appui à la Réforme du Secteur de l'Energie (PARSE)	November 25, 2017	13.77	100
Social	Projet d'élaboration de Schémas Directeurs d'Assainissement de huit centres Urbains secondaires (étude)	March 21, 2016	1.44	4
	Don d'aide humanitaire d'urgence pour l'assistance à la lutte contre la Malnutrition suite à la sècheresse dans le grand sud	July 13, 2016	0.72	0
	Appui à l'amélioration de l'efficacité et de l'efficience en matière de réduction des risques de catastrophes (naturelles, climatiques et anthropiques) (étude)	December 01, 2017	1	0
Total			**UA194.5 million**	**30.95**

STATISTICAL ISSUES APPENDIX

(As of June 7, 2017)

I. Assessment of Data Adequacy for Surveillance
General: Data provision has some shortcomings, but is broadly adequate for surveillance. The database remains weak, particularly in the areas of real sector, government finances, the balance of payments, and social statistics. Fund technical assistance was interrupted in 2009 in response to an unconstitutional change of government. Following re-engagement in 2014, IMF staff have undertaken several missions to provide technical assistance in statistics.
National Accounts: Production of complete national accounts (based on benchmark data) is infrequent and depends on irregularly collected source data. The last complete sets of benchmark data cover 2015. The reliability of national accounts estimates remains weak due to gaps in the source data and methodological shortcomings. In particular, estimates of agricultural activities are poor because there is no suitable information about the size and the evolution of this sector. Moreover, service activities are not properly covered and little information is available on the magnitude of the informal sector. INSTAT used to produce two industrial production indices, one for the export processing zone (IPI-ZF) and the other for enterprises outside the export processing zone (IPI-RC) but the production has been suspended due to financing issues.
Price Statistics: The current consumer price index (CPI) covers the seven principal cities, has a base year of 2000, and expenditure weights based on the 1999 household survey. The CPI is generally reported to Fund staff on a timely basis. Data on producer prices, "l'Indice de la Production Industrielle (IPI)", were available till 2008 but the publication has been suspended since then due to financing issues.
Government Finance Statistics: The 2004 multi-sector mission found significant gaps in the coverage of government financial statistics (GFS) and recommended that it be broadened to include public agencies that are part of the central government. Also, the mission made recommendations on the classification and recording of transactions, as well as the calculation of domestic arrears. Data on central government financial operations are disseminated only annually. Since August 2014, data on public debt are disseminated with the publication of the "Statistical Bulletin of Debt". Madagascar does not report sub-annual data for publication in *International Finance Statistics* (*IFS*).
Monetary Statistics: The BCM has reported monetary data to STA for publication in *IFS* since August 2001.
Balance of Payments: The current compilation system is flawed, external trade data are derived from customs data that suffer from inadequate coverage and deficient recording procedures. The significant amount of smuggling, particularly in the mining sector, further reduces the reliability of the trade data. The 2004 multi-sector technical assistance mission reviewed progress in the transition to *BPM5*. The mission noted that the compilation system was still hampered by such recurring issues as excessive processing lags due to partial automation of customs reports and inadequate coverage of several transactions. The compilation of external debt statistics is generally satisfactory.
II. Data Standards and Quality
Madagascar participates in the General Data Dissemination System (GDDS) since May 2004.

Madagascar: Table of Common Indicators Required for Surveillance

	Date of latest observation (all dates in table use dd/mm/yy format)	Date received	Frequency of Data[7]	Frequency of Reporting[7]	Frequency of Publication[7]
Exchange rate	070/6/17	07/06/17	D	D	D
International Reserve Assets and Reserve Liabilities of the Monetary Authorities[1]	31/05/17	01/06/17	M	M	M
Reserve/Base Money	31/05/17	01/06/17	M	M	M
Broad Money	31/03/17	08/05/17	M	M	M
Central Bank Balance Sheet	31/05/17	01/06/17	M	M	M
Consolidated Balance Sheet of the Banking System	31/03/17	08/05/17	M	M	M
Interest Rates[2]	19/04/17	02/05/17	M	M	M
Consumer Price Index	03/17	02/05/17	M	M	M
Revenue, Expenditure, Balance and Composition of Financing[3] – General Government[4]	NA				
Revenue, Expenditure, Balance and Composition of Financing[3] – Central Government	30/04/17	01/06/17	M	M	A
Stocks of Central Government and Central Government-Guaranteed Debt[5]	2016	08/03/17	A	A	A
External Current Account Balance	03/2017	12/04/17	Q	Q	Q
Exports and Imports of Goods and Services	03/2017	12/04/17	Q	Q	Q
GDP/GNP	2016	09/03/17	A	A	A
Gross External Debt	NA				
International Investment Position[6]	NA				

[1] Any reserves assets that are pledged or otherwise encumbered should be specified separately. Also, data should comprise short-term liabilities linked to a foreign currency but settled by other means as well as the notional values of financial derivatives to pay and to receive foreign currency, including those lined to a foreign currency but settled by other means.
[2] Both market-based and officially-determined, including discounts rates, money market rates, rates on treasury bills, notes and bonds.
[3] Foreign, domestic bank, and domestic nonbank financing. [4] The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state and local government.
[5] Including currency and maturity composition.
[6] Includes external gross financial asset and liability positions vis-à-vis nonresidents.
[7] Daily (D); weekly (W); monthly (M); quarterly (Q) annually (A); irregular (I); and not available (NA).

REPUBLIC OF MADAGASCAR

REPUBLIC OF MADAGASCAR

June 14, 2017

STAFF REPORT FOR THE 2017 ARTICLE IV CONSULTATION, FIRST REVIEW UNDER THE EXTENDED CREDIT FACILITY ARRANGEMENT, AND REQUESTS FOR WAIVER OF NONOBSERVANCE OF PERFORMANCE CRITERION, MODIFICATION OF PERFORMANCE CRITERION, AND AUGMENTATION OF ACCESS—DEBT SUSTAINABILITY ANALYSIS

Approved By
David Owen and Zuzana Murgasova (IMF) and Paloma Anos Casero (IDA)

Prepared by the Staffs of the International Monetary Fund and the International Development Association[1]

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,' in line with the last DSA at the time of the ECF program request in July 2016. Debt dynamics have improved slightly since then, mainly because of more favorable financing assumptions following a successful donor conference in late 2016. The public DSA suggests that the dynamics of Madagascar's total public and publicly-guaranteed (PPG) debt are sustainable, although weak fiscal revenue generation, possible exchange rate shocks, and contingent liabilities related to state-owned enterprises remain potential 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 central government.** The DSA does not include the debt of local government or state owned enterprises (other than through direct guarantees provided by the central government). 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. **The trend toward an increasing reliance on domestic debt was reversed in 2016** (Figure 1). A smaller amount of loans from development partners during the 2008-13 crisis made the government more dependent on domestic borrowing to finance budget deficits. Domestic debt, including domestic budgetary arrears, grew from 7.6 percent of GDP in 2008 to 12.9 percent in 2015. With the government regaining the confidence of the international donor community, external financing has become more readily available and is reducing the need for domestic borrowing and domestic debt had declined to 11.7 percent of GDP in 2016. Total public debt rose from around $2.7 billion (31 percent of GDP) in 2008 to $3.7 billion (41 percent of GDP) in 2015 and then remained stable at that amount (a decline to 39 percent of GDP) in 2016 (Table 1). These debt levels are substantially less than the pre-HIPC peak of 95 percent of GDP. The debt service to revenue ratio has been trending upward.

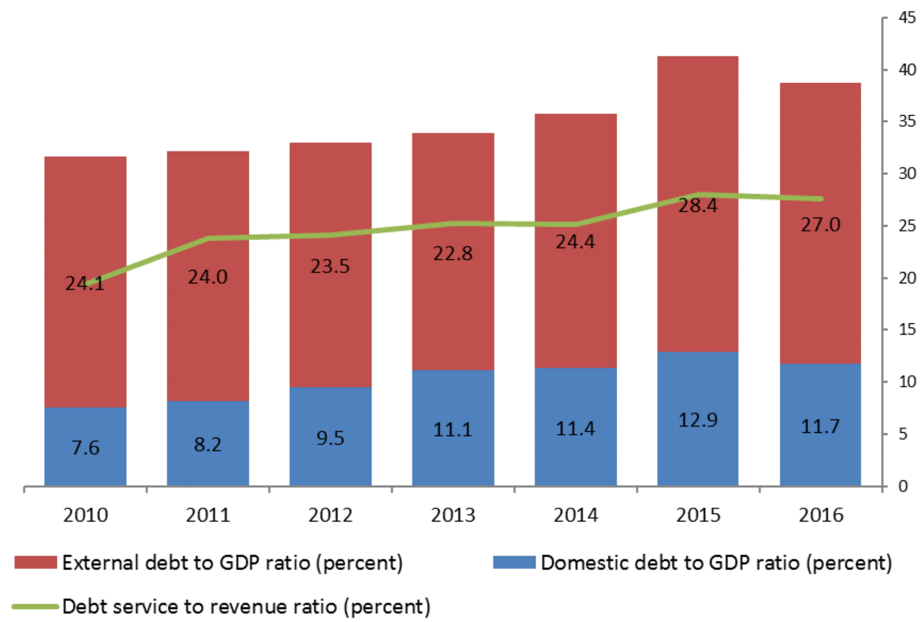
4. **A stronger than expected exchange rate, on average more favorable borrowing terms, and a delayed commercial loan led to a better-than-expected outcome in 2016.** A spike in vanilla prices boosted export revenues and the real effective exchange rate appreciated by about 3½ percent in 2016 (January to December).[3] The 2016 debt level was further reduced by a change in IDA lending terms that led to the front loading of grant disbursements (part of which will be offset in subsequent years) and a commercial loan (with an AfDB guarantee) that was delayed and is now projected to be disbursed in 2017. The authorities have also largely

[2] According to the World Bank Country and Policy Institutional Assessment (CPIA) Index, Madagascar is rated as a 'weak' performer in terms of the quality of policy and institutions (the average CPIA in 2013-15 is 3.1), Thus, 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.

[3] In comparison and as discussed in the previous DSA, the Ariary depreciation in 2015 was the main driver behind an increase in external PPG debt by 3.5 percent of GDP (see Figure 1 and Table 3).

refrained from borrowing externally on non-concessional terms, which helped support debt sustainability.

Figure 1: Debt Level and Service Ratios



5. **The majority of external debt is owed to multilateral creditors on highly concessional terms** (Table 1). About one-third of total debt is held by domestic creditors mainly in the form of treasury bills and debt to the central bank[4]. Domestic arrears have declined over 2016 to about 2½ percent of GDP from around 3½ percent in the previous year. 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.** According to the authorities, external debt owed by *domestically* owned companies and households is negligible. However, there are a number of multinational companies (in mining, banking, telecommunications) with wholly-owned local subsidiaries that have accumulated external debt. While the authorities do not have comprehensive data on such obligations, the largest of these debtors is the Nickel/Cobalt mining company *Ambatovy* with external debt just under $2bn (20 percent of GDP). This obligation caused total external debt to

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

increase from 24 percent of GDP in 2007 to 39 percent in 2010, with a more gradual increase after that. It is projected that this commercial loan will be fully repaid by 2030.

Table 1: Break-down of Total PPG Debt (end-2016)

Creditor	Amount (US$m)	Percent of GDP	Percent of total
Domestic debt, *of which:*	**1,113**	**11.7**	**30.3**
Treasury bills	473	5.0	12.9
Debt to the Central Bank	337	3.6	9.2
Arrears	214	2.3	5.8
Other inc. loans	89	0.9	2.4
External debt, *of which:*	**2,562**	**27.0**	**69.7**
Multilateral	2,074	21.9	56.4
Paris Club	129	1.4	3.5
Non-Paris Club	337	3.6	9.2
Commercial & Garanties	23	0.2	0.6
Total PPG debt	**3,675**	**38.7**	**100.0**

7. **The government may face some contingent liabilities with respect to state-owned enterprises including the nonbank financial sector, while the banking sector is less likely to generate direct fiscal costs.** While the recapitalization of Air Madagascar is part of the baseline assumptions and thus reflected in projected debt dynamics, contingent liabilities from other state-owned enterprises are not included.[5] 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.[6] The postal savings scheme and possibly the Madagascar Savings Fund (*Caisse d'Epargne de Madagascar, CEM*) may need future recapitalization (probably less than 1 percent of GDP combined). While the government is a minority shareholder in several commercial banks, most banks have financially solid foreign majority shareholders and bank liabilities are mainly composed of deposits that exceed loans. Dollarization of deposits and credits is not pronounced and banks generally maintain foreign assets that are larger than their foreign liabilities.

[5] Debt projections include explicit government guarantees provided for JIRAMA's external borrowing, but amounts are limited. Regarding Air Madagascar, in discussions of a strategic partnership with Air Austral, the government committed to clean Air Madagascar's balance sheet of all past net liabilities, which resulted from past losses. According to the business plan for Air Madagascar, there are no plans for future government guarantees.

[6] Financial statement for 2015 not yet available.

UNDERLYING ASSUMPTIONS

8. **Besides the increasing current account deficit, most key variables driving debt dynamics are forecast 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 big part of this investment will be financed through concessional external borrowing and grants.

Box 1. Baseline Macroeconomic Assumptions

Real GDP growth. Growth is projected to peak temporarily just below 6 percent in 2019. Compared to the 2016 DSA, the acceleration is more dynamic in the short-run, based on higher foreign financed investment. Medium-term growth remains roughly unchanged at 5 percent, driven by improved confidence, further re-engagement of development partners, and increased mining exports.

Current account. While the 2016 current account was substantially stronger than expected, it was mostly due to temporary factors. Consistent with faster investment-led growth and additional reconstruction-related efforts, imports have been revised up, which leads to larger current account deficits in the short- and medium term.

Fiscal variables: More financing, including to finance the reconstruction efforts and the restructuring of Air Madagascar in 2017, will allow the government to run slightly higher primary deficits in the short run. While revenue projections have remained unchanged, donor grant support has been revised up substantially, particularly in the short-run.

Table 2: Madagascar; Baseline Macroeconomic Assumptions

		2017	2018	2019	2020	2021	2022
Real GDP growth (percent)	2017DSA	4.3	5.3	5.9	5.5	5.2	5.0
	2016DSA	4.5	4.8	5.0	5.0	5.0	
Non-interest CA deficit (% of GDP)	2017DSA	4.4	4.9	4.6	3.8	3.7	3.5
	2016DSA	3.3	3.7	3.7	3.6	3.5	
Primary deficit (% of GDP)	2017DSA	4.2	3.6	3.4	2.8	2.5	2.4
	2016DSA	3.4	3.3	3.1	2.9	2.7	
Total revenues, excl grants (% of GDP)	2017DSA	11.6	11.8	12.2	12.7	13.1	13.5
	2016DSA	11.2	11.7	12.2	12.7	13.2	
Grants (% of GDP)	2017DSA	3.5	3.6	3.4	2.4	2.3	2.3
	2016DSA	2.8	1.7	2.0	2.1	1.8	
Non-Interest Expenditure (% of GDP)	2017DSA	19.2	19.0	19.1	17.8	17.9	18.1
	2016DSA	17.3	16.6	17.0	17.2	17.3	

Source: World Bank and IMF staff projections.

9. **Following a successful donor-conference in late 2016, expected financing conditions have improved.** At the time of the donor conference in Paris in December 2016, the

authorities received pledges of $6.4 billion (over 60 percent of 2016 GDP). While not all of this amount is available for investment in the near-term, concrete pledges for project financing have nevertheless exceeded assumptions in previous frameworks in 2017-2020.

10. **Semi-concessional and very limited non-concessional borrowing is envisaged throughout the forecast horizon.** Consistent with the ceiling in the program, non-concessional borrowing (with a negative average grant element of 12 percent[7]) is foreseen at $100 million in 2017, of which $55 million will be disbursed before end-June 2017 under a long-delayed loan with an AfDB guarantee and an additional $45m is expected under similar conditions to finance the restructuring of Air Madagascar. Over the medium term, the importance of semi-concessional borrowing is expected to increase, reducing the average grant element of new borrowing from above 45 percent in 2019 to roughly 37 percent in 2037.

11. **The main risks to these assumptions relate to political instability, revenue generation, the exchange rate, and the persistence of donor grant support.** Political instability could weaken economic confidence, with negative implications for key macroeconomic variables, such as growth, the exchange rate and donor support. Continued weak revenue performance would accelerate debt accumulation and a faster-than-expected depreciation of the Ariary would increase the real value of the existing debt stock. Additionally, while the outlook on donor grant support is positive, lack of reform progress going forward could undo these gains. There are reasons to expect that the risks from natural disasters not already incorporated in the baseline to be rather limited (Box 2). Risks are assessed to be symmetric since the exchange rate may continue to surprise on the upside and revenue generation has a significant upside potential given the low base. This would boost the ability to service higher debt levels while structural fiscal reforms could stimulate higher-than-expected donor support also in the medium-to longer-term.

EXTERNAL DSA

Baseline scenario

12. **The level of PPG external debt was roughly $2.5 billion in 2016 and is projected to grow gradually throughout the forecast period**. PPG external debt is forecast to increase from 27 percent of GDP in 2016 to a peak of 36 percent of GDP in 2022 (Table 3). A temporarily higher trade deficit and outflows from the mining sector[8] are balanced by increasing transfer inflows and a moderate increase in net FDI inflows[9], consistent with the authorities' National Development

[7] Such a grant element is the outcome of the following assumptions: 8.5 percent interest rate, 7-year maturity, and two-year grace period. Only part of future commercial loans are assumed to benefit from a guarantee from an external agency.

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

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

Plan. As domestic debt markets deepen (see below), PPG external debt is projected to decline to 25 percent of GDP by 2037.

Box 2. Debt Dynamics and Natural Disasters

Madagascar's history of natural disasters suggests that the effects of these events that are not already incorporated in the baseline scenario would be manageable. The potential effect of natural disasters on debt dynamics are investigated using an event study of the tropical cyclones in 2004 as an example; it was the most destructive year since 1980 (the greater damage by cyclones in the seventies reflected a different economic and social structure). Among standard macro-variables, the effects were most pronounced for inflation and the exchange rate, but modest overall.

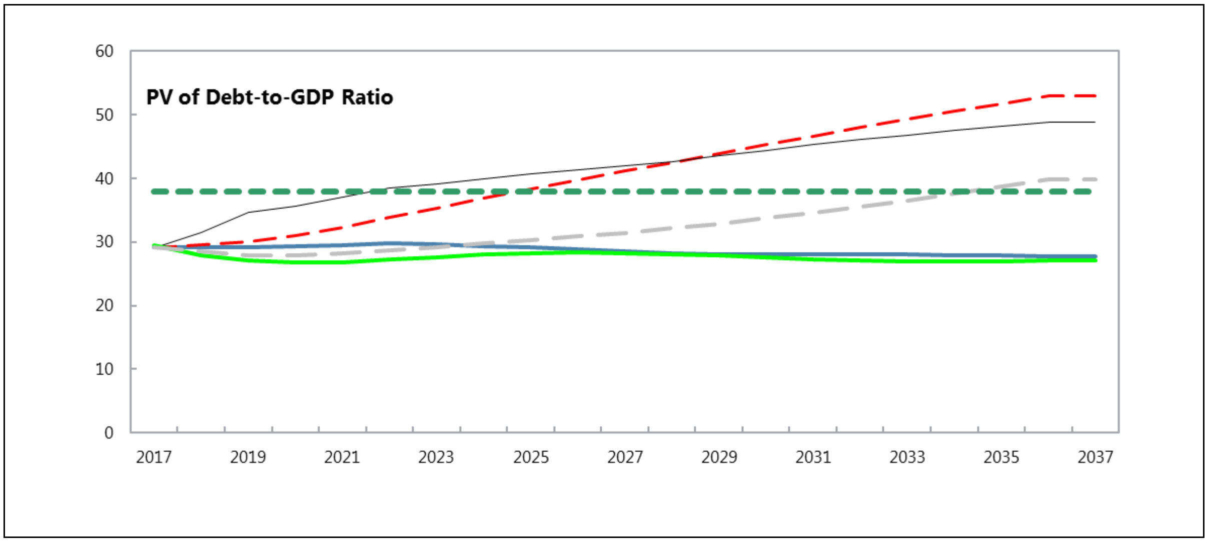
Natural disasters are a recurring phenomenon in Madagascar, so their occurrence is incorporated into baseline assumptions. Since 2000, Madagascar has been affected by 30 natural disasters, including droughts, storms, floods, epidemics and insect infestation. Since they are recurring, natural disasters are included into the medium-term macroeconomic forecasts. The starting point for these forecasts are historical averages, which already incorporate the medium-term impact of these recurrent disasters and are then adjusted for the impact of planned policy measures. Nevertheless, the possible occurrence of a more severe event raises the question of its macro-economic implications and its risk to debt dynamics.

The most violent storms in recent history suggest that the macro-economic effects of natural disasters tend to be surprisingly contained. In 2004, Madagascar was hit by two tropical cyclones that caused 400 deaths, nearly 1,000 injured and estimated economic damage equivalent to 5.7 percent of GDP. Macro-economic variables were less affected than usual volatility, including from political crises. *Primary expenditure* by the government increased from 17 percent of GDP in the previous year to 22 percent in 2004. However, general government revenues also rose; with 3 of the 5 percentage points of GDP increase coming from additional grant support. Both expenditure and revenues declined again the following year. The *primary fiscal deficit* thus increased by only 0.3 percent of GDP, from 1.7 to 2 percent of GDP in 2004. In 2005, the primary fiscal accounts were roughly in balance. Despite the disaster, GDP growth was above 5 percent (which was a slowdown from the exceptional 10 percent in the previous year but close to the long-run average). (In early 2017, the country was hit by the biggest tropical cyclone for 13 years, which is also projected to have a very small net impact on growth in that year.) Of greater importance, the cyclone may have contributed to above average inflation reported at 14 percent in 2004 and 18 percent in the following year, compared to an average 8 percent over the previous 5 years. Related to the higher inflation, the currency depreciated in nominal terms by 34 percent in 2004.

A customized debt scenario confirms the robustness of the fiscal debt dynamics. We thus include a 35 percent depreciation of the exchange rate and 10 percent faster inflation in 2018. Consistent with the experience in 2004, the fiscal variables and GDP growth rates for the year of the shock are left unchanged. The effects of the depreciation and the higher inflation roughly offset one another in the case of the PV of Debt-to-GDP ratio. For the other measures in the fiscal scenario, indicators actually improve.

Baseline — Fix Primary Balance — Most extreme shock

Historical scenario — Public debt benchmark — Natural disaster



13. **Under the baseline projection, all PPG external debt indicators remain below the policy-dependent debt burden thresholds** (Figure 2). The present value (PV) of external debt is projected to increase from 15½ percent of GDP in 2016 to 21 percent of GDP by 2022 and then to decline to 16 percent by 2037. This projection is somewhat more favorable than the medium-term DSA forecast at the time of the ECF request.

14. **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 for these loans is held by the multinational shareholders, rather than resident entities (such as domestic banks or the government).

Alternative scenarios

15. **The two standard DSA alternative scenarios are applied to the baseline external PPG debt projections.** First, the standard bound tests apply 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 set equal to their average over 2007-16 is imposed on the baseline projection. These shocks are detailed in Table 4.

16. **For the standard bound tests, at least one scenario causes a significant breach of the threshold for one or more indicators**. A simultaneous slowdown in GDP, decline in exports, a depreciation, and reduction of non-debt creating flows (all a one-half standard deviation; see Table 4) would cause the PV of debt-to-revenue ratio to peak at 243 percent in 2017, above the threshold implied by Madagascar's CPIA rating. The same shock would also just barely exceed the threshold for the PV of debt-to-GDP ratio. Additionally, a one standard deviation decline in exports would result in the PV of debt-to-exports to increase to 108 percent, above its threshold of 100. The first stress test in particular is sufficient to classify Madagascar as standing at moderate risk of external debt distress.

17. **The historical scenario[10] 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 three thresholds, especially for the PV of debt-to-GDP and the PV of debt-to-revenue ratios. However, there are good reasons to place less weight on the historical scenario. The large current account deficits in 2008 and 2009 (over 20 percent of GDP) were driven by imports associated with large mining projects, which were principally financed through non-debt creating FDI flows. Thus, 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

18. **Domestic PPG debt is projected to decline as a proportion of GDP over the next decade**, with authorities replacing domestic financing by concessional external borrowing, given the projected continued improvement in donor relations. The importance of domestic PPG debt is then expected to grow again over the long term, as domestic markets deepen and savings become more abundant. The PV of total PPG debt is projected to remain less than 30 percent of GDP throughout the forecast horizon—well-below the threshold of 38 percent (Figure 3 and Table 5).

Alternative scenarios

19. **Two of the three alternative scenarios used to stress test the baseline for total PPG debt breach the risk threshold** (Figure 3 and Table 6). The most extreme shock—a one standard deviation reduction in GDP growth in 2018-2019—would lead to a rapid and persistent breach of the threshold starting in 2022. Assuming that the primary deficit remains unchanged as a proportion to GDP throughout the forecast horizon also results in a breach in the PV of debt-to-GDP ratio in the outer years. Reducing the current gap between revenue and spending is a clear priority.

CONCLUSION

20. **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, the debt sustainability is vulnerable to shocks, poor revenue collection, and contingent liabilities related to state-owned enterprises. The authorities have initiated measures that can help address these vulnerabilities including enhanced revenue collections and budgetary execution, strengthened debt monitoring capacity, and improved policy and institutional performance. If successful, these measures should help to maintain favorable financing

[10] 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 2007-16 period.

conditions and increase Madagascar potential economic growth. It is also important to strengthen the monitoring and management of state-owned enterprises, including by publishing their audited financial statements.

21. **The DSA was discussed with the authorities during the March 2017 Article IV mission.** Staff used the results to illustrate the need for prudence and continued reform of public financial management when increasing external borrowing to maintain debt sustainability. Reforms should focus on (i) increasing tax revenues to safeguard the capacity of the state to service debt; (ii) ensuring that debt continues to be financed on the most concessional terms possible; (iii) ensuring that investments are carefully prioritized to enhance growth and human capital accumulation; and (iv) improving debt monitoring capacity, especially the control of debt guarantees and potential contingent liabilities. The authorities agreed with the overall assessment as well as the policy implications. They expressed their firm commitment to tackle any risks that could push them beyond a moderate risk rating.

Table 3. Madagascar: External Debt Sustainability Framework, Baseline Scenario, 2014-37[1]

(In percent of GDP; unless otherwise indicated)

	Actual			Historical Average 6/	Standard Deviation 6/	Projections									
	2014	2015	2016			2017	2018	2019	2020	2021	2022	2017-2022 Average	2027	2037	2023-2037 Average
External debt (nominal) 1/	**45.0**	**48.6**	**45.4**	**43.0**	**7.8**	**45.3**	**45.6**	**45.7**	**44.9**	**44.0**	**43.1**	**44.8**	**34.7**	**29.7**	**32.6**
of which: public and publicly guaranteed (PPG)	24.4	28.4	27.0	25.0	1.7	29.6	31.9	33.9	34.8	35.4	35.8	33.6	32.1	25.3	29.8
Change in external debt	1.2	3.7	-3.2	2.0	3.4	-0.1	0.2	0.1	-0.8	-0.9	-0.9	-0.4	-1.5	0.9	-0.9
Identified net debt-creating flows	-2.9	1.7	-6.5			-1.6	-1.4	-1.9	-2.9	-3.1	-3.2		-3.1	0.9	
Non-interest current account deficit	**0.1**	**1.6**	**-1.0**	**8.2**	**7.7**	**4.4**	**4.9**	**4.6**	**3.8**	**3.7**	**3.5**	**4.2**	**3.9**	**7.6**	**5.1**
Deficit in balance of goods and services	4.4	3.5	2.1	11.7	7.8	7.5	8.1	7.6	6.4	6.2	6.1	7.0	6.7	11.0	8.0
Exports	32.8	32.1	33.5			33.2	32.4	33.1	34.6	35.3	35.7		36.5	37.7	36.9
Imports	37.2	35.5	35.6			40.7	40.5	40.7	41.0	41.5	41.8		43.2	48.8	44.8
Net current transfers (negative = inflow)	-6.9	-5.4	-6.9	-5.4	1.1	-6.8	-6.9	-6.6	-6.1	-6.1	-6.1	-6.4	-6.1	-6.1	-6.1
of which: official	-0.8	-1.5	-3.4	-1.5	1.6	-3.5	-3.6	-3.3	-2.3	-2.3	-2.2	-2.9	-2.0	-1.8	-2.0
Other current account flows (negative = net inflow)	2.5	3.6	3.8	1.9	1.4	3.7	3.7	3.6	3.5	3.6	3.5	3.6	3.3	2.6	3.2
Net FDI (negative = inflow)	**-2.9**	**-4.5**	**-4.5**	**-5.6**	**1.9**	**-4.4**	**-4.4**	**-4.4**	**-4.8**	**-5.1**	**-5.1**	**-4.7**	**-5.1**	**-5.1**	**-5.1**
Endogenous debt dynamics 2/	**0.0**	**4.6**	**-1.0**	**-1.2**	**3.5**	**-1.6**	**-1.9**	**-2.1**	**-1.9**	**-1.7**	**-1.6**	**-1.8**	**-1.9**	**-1.6**	**-1.8**
Contribution from nominal interest rate	0.3	0.3	0.3	0.3	0.0	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4
Contribution from real GDP growth	-1.4	-1.5	-2.0	-0.9	1.0	-1.9	-2.3	-2.5	-2.3	-2.2	-2.1	-2.2	-1.7	-1.3	-1.6
Contribution from price and exchange rate changes	1.1	5.8	0.7			...	...	...	...	...	...		...	...	
Residual (3-4) 3/	**4.1**	**1.9**	**3.3**	**0.4**	**5.1**	**1.5**	**1.7**	**2.0**	**2.2**	**2.3**	**2.3**	**2.0**	**1.6**	**0.0**	**0.9**
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/	...	...	33.9			33.2	32.5	31.7	30.6	29.6	28.6		22.5	20.6	
In percent of exports	...	...	101.2			99.8	100.3	95.9	88.6	83.9	80.2		61.7	54.5	
PV of PPG external debt	**...**	**...**	**15.5**			**17.4**	**18.8**	**20.0**	**20.5**	**21.0**	**21.3**		**19.9**	**16.2**	
In percent of exports	**...**	**...**	**46.2**			**52.4**	**58.1**	**60.4**	**59.4**	**59.4**	**59.7**		**54.5**	**43.0**	
In percent of government revenues	**...**	**...**	**138**			**150**	**160**	**163**	**162**	**160**	**158**		**130**	**100**	
Debt service-to-exports ratio (in percent)	**2.3**	**2.1**	**2.9**			**3.4**	**3.0**	**2.7**	**3.2**	**3.3**	**3.4**		**3.6**	**3.8**	
PPG debt service-to-exports ratio (in percent)	**2.3**	**2.1**	**2.9**			**3.4**	**3.0**	**2.7**	**3.2**	**3.3**	**3.4**		**3.6**	**3.8**	
PPG debt service-to-revenue ratio (in percent)	**7.4**	**6.5**	**8.6**			**9.7**	**8.3**	**7.4**	**8.8**	**8.8**	**9.1**		**8.6**	**8.9**	
Total gross financing need (Millions of U.S. dollars)	-227.5	-212.8	-458.4			114.5	165.1	132.9	13.1	-35.7	-49.9		27.3	1587.6	
Non-interest current account deficit that stabilizes debt ratio	-1.1	-2.0	2.2			4.5	4.7	4.5	4.6	4.6	4.5		5.5	6.6	
Key macroeconomic assumptions															
Real GDP growth (in percent)	3.3	3.1	4.2	2.7	3.3	4.3	5.3	5.9	5.5	5.2	5.0	5.2	5.0	5.0	5.0
GDP deflator in US dollar terms (change in percent)	-2.6	-11.5	-1.5	4.0	11.5	1.2	0.4	1.6	1.8	2.0	1.6	1.4	1.8	2.1	1.9
Effective interest rate (percent) 5/	0.6	0.6	0.6	0.9	0.4	0.7	0.9	0.9	1.0	1.0	1.0	0.9	1.1	1.3	1.2
Growth of exports of G&S (US dollar terms, in percent)	9.8	-10.7	7.3	8.6	16.5	4.6	3.2	9.7	12.3	9.4	8.0	7.9	7.4	7.5	7.4
Growth of imports of G&S (US dollar terms, in percent)	-3.4	-12.7	2.8	6.4	22.4	20.7	5.3	8.0	8.2	8.6	7.5	9.7	7.9	8.6	8.1
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	36.2	43.1	47.8	45.0	45.3	43.7	43.5	40.4	37.0	39.1
Government revenues (excluding grants, in percent of GDP)	10.1	10.4	11.2	10.6	1.0	11.6	11.8	12.2	12.7	13.1	13.5	12.5	15.3	16.4	15.5
Aid flows (in Millions of US dollars) 7/	246	144	343			658	759	858	713	751	751		820	1575	
of which: Grants	246	144	343			367	404	406	305	316	330		419	741	
of which: Concessional loans	0.0	0.0	0.0			290.3	354.7	452.3	407.5	434.6	420.6		400.4	834.2	
Grant-equivalent financing (in percent of GDP) 8/	...	...	...			5.3	5.7	5.7	4.2	3.9	3.7	4.7	2.9	2.8	2.9
Grant-equivalent financing (in percent of external financing) 8/	...	...	...			62.7	67.4	69.1	65.4	66.6	66.2	66.2	69.1	62.9	67.3
Memorandum items:															
Nominal GDP (Millions of US dollars)	10674	9744	10001			10557	11161	12009	12896	13841	14761		20480	40629	
Nominal dollar GDP growth	0.7	-8.7	2.6			5.6	5.7	7.6	7.4	7.3	6.6	6.7	6.8	7.2	7.0
PV of PPG external debt (in Millions of US dollars)			1469.0			1762.0	2048.7	2350.0	2608.7	2852.7	3094.2		4016.7	6500.7	
(PVt-PVt-1)/GDPt-1 (in percent)						2.9	2.7	2.7	2.2	1.9	1.7	2.4	1.0	1.0	0.9
Gross workers' remittances (Millions of US dollars)	...	...	...			...	...	...	...	...	...		...	...	
PV of PPG external debt (in percent of GDP + remittances)	...	...	15.5			17.4	18.8	20.0	20.5	21.0	21.3		19.9	16.2	
PV of PPG external debt (in percent of exports + remittances)	...	...	46.2			52.4	58.1	60.4	59.4	59.4	59.7		54.5	43.0	
Debt service of PPG external debt (in percent of exports + remittances)	...	...	2.9			3.4	3.0	2.7	3.2	3.3	3.4		3.6	3.8	

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.

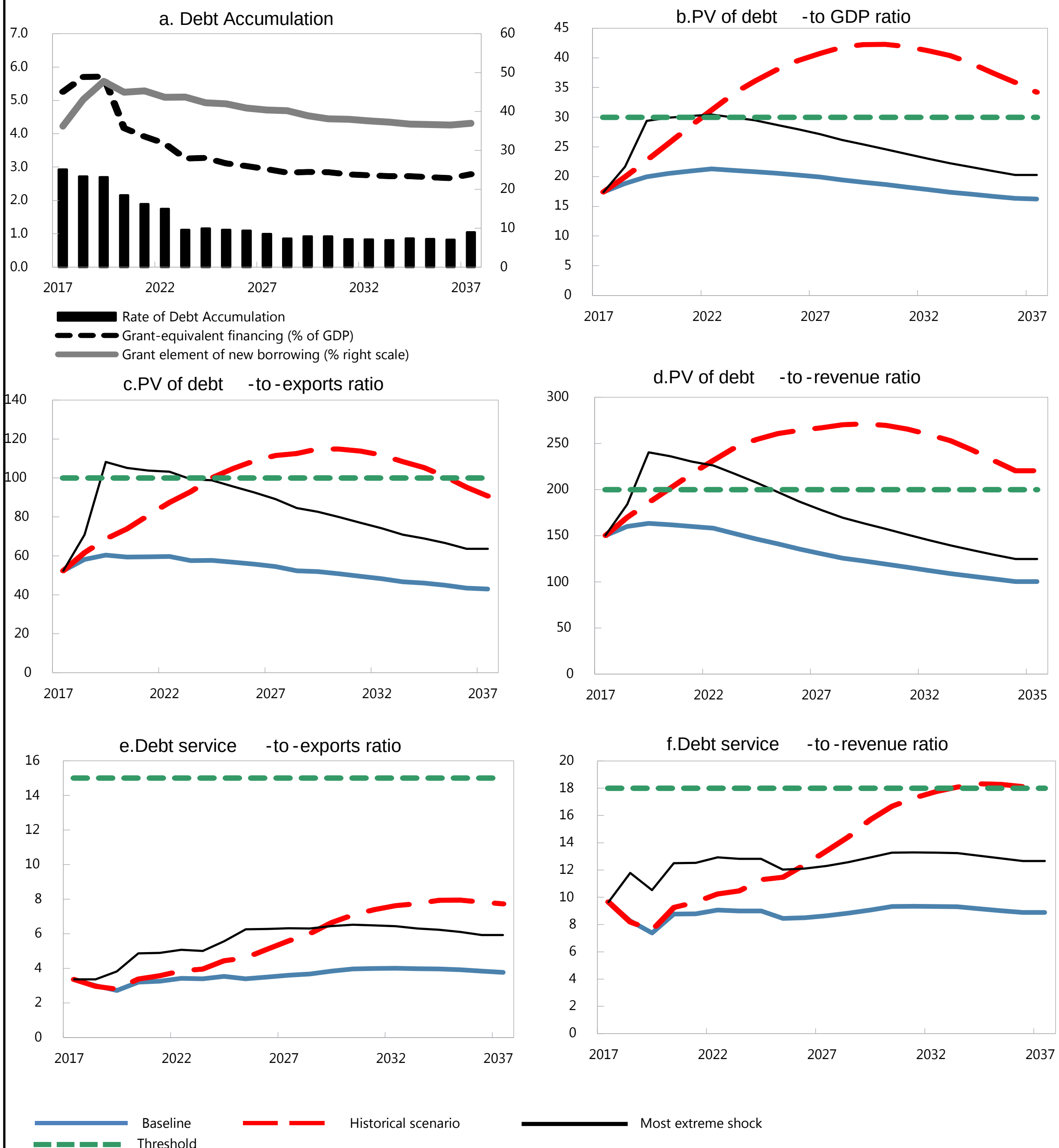
5/ Current-year interest payments divided by previous period debt stock.

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, 2017-2037 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 2027. In figure b. it corresponds to a Natural disaster shock; in c. to a Exports shock; in d. to a Combination 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, 2017-37

(In percent)

										Projections											
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	**2027**	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
										PV of debt-to GDP ratio											
Baseline	17	19	20	21	21	21	21	21	21	20	**20**	19	19	19	18	18	17	17	17	16	16
A. Alternative Scenarios																					
A1. Key variables at their historical averages in 2017-2037 1/	17	20	23	26	28	31	34	36	38	40	**41**	42	42	42	42	41	40	39	37	36	34
A2. New public sector loans on less favorable terms in 2017-2037 2	17	20	23	24	26	27	27	27	27	27	**27**	27	27	27	27	26	26	26	26	26	26
B. Bound Tests																					
B1. Real GDP growth at historical average minus one standard deviation in 2018-2019	17	19	22	23	23	24	23	23	23	23	**22**	22	21	21	20	20	19	19	19	18	18
B2. Export value growth at historical average minus one standard deviation in 2018-2019 3/	17	21	27	27	27	28	27	27	26	25	**24**	24	23	22	21	20	20	19	19	18	18
B3. US dollar GDP deflator at historical average minus one standard deviation in 2018-2019	17	20	23	24	25	25	25	24	24	24	**23**	23	22	22	21	21	20	20	20	19	19
B4. Net non-debt creating flows at historical average minus one standard deviation in 2018-2019 4/	17	20	23	24	24	24	24	24	23	23	**22**	21	21	20	20	19	18	18	17	17	17
B5. Combination of B1-B4 using one-half standard deviation shocks	17	22	29	30	30	30	30	29	29	28	**27**	26	25	25	24	23	22	22	21	20	20
B6. One-time 30 percent nominal depreciation relative to the baseline in 2018 5/	17	26	28	29	29	30	29	29	29	28	**28**	27	27	26	26	25	24	24	23	23	23
										PV of debt-to-exports ratio											
Baseline	52	58	60	59	59	60	58	58	57	56	**55**	52	52	51	50	48	47	46	45	43	43
A. Alternative Scenarios																					
A1. Key variables at their historical averages in 2017-2037 1/	52	62	69	74	81	87	93	100	105	109	**112**	113	115	115	114	112	108	105	101	95	91
A2. New public sector loans on less favorable terms in 2017-2037 2	52	62	69	71	73	75	74	75	75	75	**75**	73	73	73	72	72	71	71	70	69	69
B. Bound Tests																					
B1. Real GDP growth at historical average minus one standard deviation in 2018-2019	52	57	59	58	58	59	57	57	56	55	**54**	51	51	50	49	48	46	45	44	43	42
B2. Export value growth at historical average minus one standard deviation in 2018-2019 3/	52	71	108	105	104	103	99	99	96	93	**89**	85	83	80	77	74	71	69	67	64	62
B3. US dollar GDP deflator at historical average minus one standard deviation in 2018-2019	52	57	59	58	58	59	57	57	56	55	**54**	51	51	50	49	48	46	45	44	43	42
B4. Net non-debt creating flows at historical average minus one standard deviation in 2018-2019 4/	52	63	70	69	68	68	66	66	64	62	**60**	58	57	55	53	52	50	48	47	45	44
B5. Combination of B1-B4 using one-half standard deviation shocks	52	65	87	84	83	83	80	80	77	75	**72**	69	67	65	63	61	58	57	55	53	51
B6. One-time 30 percent nominal depreciation relative to the baseline in 2018 5/	52	57	59	58	58	59	57	57	56	55	**54**	51	51	50	49	48	46	45	44	43	42
										PV of debt-to-revenue ratio											
Baseline	150	160	163	162	160	158	152	146	141	135	**130**	126	122	119	116	112	109	106	103	100	100
A. Alternative Scenarios																					
A1. Key variables at their historical averages in 2017-2037 1/	150	170	186	201	217	232	246	254	261	264	**267**	270	271	270	266	260	253	243	231	220	209
A2. New public sector loans on less favorable terms in 2017-2037 2	150	171	187	192	196	198	195	191	187	182	**178**	175	173	171	169	167	165	163	161	159	159
B. Bound Tests																					
B1. Real GDP growth at historical average minus one standard deviation in 2018-2019	150	165	181	180	178	176	169	163	157	151	**145**	140	136	133	129	125	121	118	115	112	110
B2. Export value growth at historical average minus one standard deviation in 2018-2019 3/	150	174	219	215	209	205	197	188	178	168	**160**	152	146	140	135	129	124	119	114	110	107
B3. US dollar GDP deflator at historical average minus one standard deviation in 2018-2019	150	169	191	190	187	185	178	172	165	159	**153**	147	143	140	136	132	128	124	121	118	116
B4. Net non-debt creating flows at historical average minus one standard deviation in 2018-2019 4/	150	173	191	188	184	181	174	166	159	151	**144**	138	133	129	124	120	116	112	108	105	102
B5. Combination of B1-B4 using one-half standard deviation shocks	150	184	240	236	230	226	217	207	197	187	**178**	169	163	157	151	145	139	134	129	125	122
B6. One-time 30 percent nominal depreciation relative to the baseline in 2018 5/	150	222	228	227	224	222	213	205	198	190	**183**	176	172	167	162	157	153	149	145	141	139

Table 4. Madagascar: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2017-37 (concluded)

(In percent)

						Projections															
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	**2027**	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
						Debt service-to-exports ratio															
Baseline	3	3	3	3	3	3	3	4	3	3	**4**	4	4	4	4	4	4	4	4	4	4
A. Alternative Scenarios																					
A1. Key variables at their historical averages in 2017-2037 1/	3	3	3	3	4	4	4	4	5	5	**6**	6	7	7	7	8	8	8	8	8	8
A2. New public sector loans on less favorable terms in 2017-2037 2	3	3	3	3	3	4	4	4	5	5	**5**	5	5	5	5	5	5	5	6	5	6
B. Bound Tests																					
B1. Real GDP growth at historical average minus one standard deviation in 2018-2019	3	3	3	3	3	3	3	4	3	3	**4**	4	4	4	4	4	4	4	4	4	4
B2. Export value growth at historical average minus one standard deviation in 2018-2019 3/	3	3	4	5	5	5	5	6	6	6	**6**	6	6	7	6	6	6	6	6	6	6
B3. US dollar GDP deflator at historical average minus one standard deviation in 2018-2019	3	3	3	3	3	3	3	4	3	3	**4**	4	4	4	4	4	4	4	4	4	4
B4. Net non-debt creating flows at historical average minus one standard deviation in 2018-2019 4/	3	3	3	3	3	4	4	4	4	4	**4**	4	4	4	4	4	4	4	4	4	4
B5. Combination of B1-B4 using one-half standard deviation shocks	3	3	3	4	4	4	4	5	5	5	**5**	5	5	5	5	5	5	5	5	5	5
B6. One-time 30 percent nominal depreciation relative to the baseline in 2018 5/	3	3	3	3	3	3	3	4	3	3	**4**	4	4	4	4	4	4	4	4	4	4
						Debt service-to-revenue ratio															
Baseline	10	8	7	9	9	9	9	9	8	8	**9**	9	9	9	9	9	9	9	9	9	9
A. Alternative Scenarios																					
A1. Key variables at their historical averages in 2017-2037 1/	10	8	8	9	10	10	10	11	11	12	**13**	14	16	17	17	18	18	18	18	18	18
A2. New public sector loans on less favorable terms in 2017-2037 2	10	8	7	8	9	10	10	11	12	11	**12**	12	12	12	13	13	13	13	13	13	13
B. Bound Tests																					
B1. Real GDP growth at historical average minus one standard deviation in 2018-2019	10	9	8	10	10	10	10	10	10	10	**10**	10	10	11	11	11	10	10	10	10	10
B2. Export value growth at historical average minus one standard deviation in 2018-2019 3/	10	8	8	10	10	10	10	11	12	11	**11**	11	11	11	11	11	11	11	11	10	10
B3. US dollar GDP deflator at historical average minus one standard deviation in 2018-2019	10	9	9	10	10	11	11	11	10	10	**10**	11	11	11	11	11	11	11	11	11	10
B4. Net non-debt creating flows at historical average minus one standard deviation in 2018-2019 4/	10	8	8	9	9	10	9	10	10	10	**10**	10	10	10	10	10	10	10	10	10	9
B5. Combination of B1-B4 using one-half standard deviation shocks	10	9	9	11	11	11	11	12	13	13	**13**	13	13	13	13	13	12	12	12	12	11
B6. One-time 30 percent nominal depreciation relative to the baseline in 2018 5/	10	12	11	12	13	13	13	13	12	12	**12**	13	13	13	13	13	13	13	13	13	12
Memorandum item:																					
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	38	38	38	38	38	38	38	38	38	38	**38**	38	38	38	38	38	38	38	38	38	38

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.

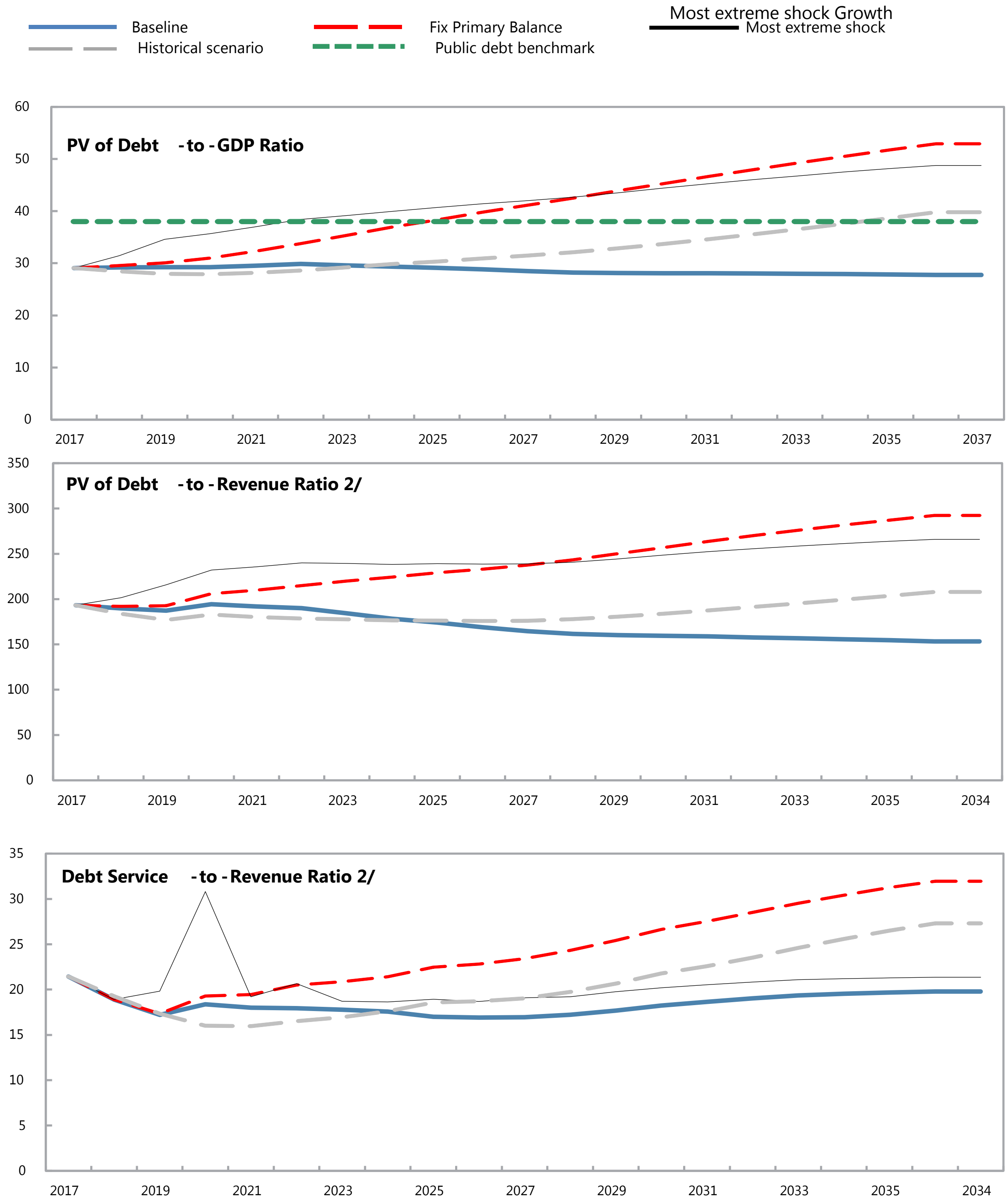
3/ Exports values are assumed to remain permanently at the lower level, but the current account as a share of GDP is assumed to return to its baseline level after the shock (implicitly assuming an offsetting adjustment in import levels).

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, 2017-2037



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 2027.
2/ Revenues are defined inclusive of grants.

Table 5. Madagascar: Public Sector Debt Sustainability Framework, Baseline Scenario, 2017-37

(In percent of GDP; unless otherwise indicated)

	Actual			Average 5/	Standard Deviation 5/	Projections									
	2014	2015	2016			2017	2018	2019	2020	2021	2022	2017-22 Average	2027	2037	2023-37 Average
Public sector debt 1/	35.8	41.3	38.7	34.4	3.2	41.3	42.2	43.2	43.5	43.9	44.3	43.1	40.7	37.1	39.5
of which: foreign-currency denominated	24.4	28.4	27.0	24.8	1.7	29.6	31.9	33.9	34.8	35.4	35.8	33.6	32.1	25.3	29.8
Change in public sector debt	1.9	5.5	-2.5			2.5	1.0	0.9	0.3	0.4	0.4		-0.8	0.1	
Identified debt-creating flows	1.8	4.4	-2.8			1.5	0.8	0.6	0.1	0.3	0.3		-0.9	-1.0	
Primary deficit	1.7	2.4	0.4	1.5	0.9	4.2	3.6	3.4	2.8	2.5	2.4	3.2	1.0	0.7	1.0
Revenue and grants	12.4	11.8	14.7	12.9	2.0	15.1	15.4	15.6	15.1	15.4	15.7	15.4	17.3	18.2	17.5
of which: grants	2.3	1.5	3.4	2.3	1.1	3.5	3.6	3.4	2.4	2.3	2.2	2.9	2.0	1.8	2.0
Primary (noninterest) expenditure	14.1	14.3	15.1	14.4	1.6	19.2	19.0	19.1	17.8	17.9	18.1	18.5	18.3	18.9	18.5
Automatic debt dynamics	0.9	2.5	-2.0			-2.1	-2.3	-2.6	-2.4	-2.2	-2.1		-2.0	-1.7	
Contribution from interest rate/growth differential	-1.5	-1.3	-1.9			-2.0	-2.4	-2.5	-2.4	-2.4	-2.4		-2.2	-1.8	
of which: contribution from average real interest rate	-0.4	-0.2	-0.2			-0.4	-0.3	-0.2	-0.1	-0.3	-0.3		-0.2	0.0	
of which: contribution from real GDP growth	-1.1	-1.1	-1.7			-1.6	-2.1	-2.3	-2.2	-2.1	-2.1		-2.0	-1.8	
Contribution from real exchange rate depreciation	2.4	3.8	-0.1			-0.1	0.0	-0.1	-0.1	0.2	0.3		...	...	
Other identified debt-creating flows	-0.7	-0.5	-1.2			-0.7	-0.5	-0.2	-0.2	0.0	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	-0.7	-0.5	-1.2			-0.7	-0.5	-0.2	-0.2	0.0	0.0		0.0	0.0	
Residual, including asset changes	0.1	1.1	0.3	-0.5	1.3	1.1	0.2	0.3	0.2	0.1	0.1	0.3	0.1	1.2	0.4
Other Sustainability Indicators															
PV of public sector debt	...	...	27.2			29.1	29.2	29.2	29.2	29.5	29.9		28.5	28.0	
of which: foreign-currency denominated	...	...	15.5			17.4	18.8	20.0	20.5	21.0	21.3		19.9	16.2	
of which: external	...	...	15.5			17.4	18.8	20.0	20.5	21.0	21.3		19.9	16.2	
Gross financing need 2/	9.3	10.5	9.3	8.2	1.5	12.6	11.8	10.7	9.7	9.2	9.1	10.5	7.9	9.5	8.6
PV of public sector debt-to-revenue and grants ratio (in percent)	...	...	185.3			193.3	189.8	187.3	194.2	191.8	190.1		164.6	153.7	
PV of public sector debt-to-revenue ratio (in percent)	...	...	241.9			251.4	248.2	239.1	230.5	225.2	221.7		186.6	170.8	
of which: external 3/	...	...	137.6			150.3	160.1	163.3	161.9	160.0	158.2		130.5	99.1	
Debt service-to-revenue and grants ratio (in percent) 4/	20.5	24.5	21.1	19.5	3.5	21.4	18.9	17.2	18.4	18.0	17.9	18.6	16.9	19.9	18.4
Debt service-to-revenue ratio (in percent) 4/	25.2	28.0	27.6	23.5	3.6	27.9	24.7	22.0	21.8	21.1	20.9	23.1	19.2	22.1	20.7
Primary deficit that stabilizes the debt-to-GDP ratio	-0.2	-3.1	2.9	-0.1	3.0	1.7	2.7	2.5	2.5	2.1	2.0	2.2	1.9	0.5	1.5
Key macroeconomic and fiscal assumptions															
Real GDP growth (in percent)	3.3	3.1	4.2	2.7	3.3	4.3	5.3	5.9	5.5	5.2	5.0	5.2	5.0	5.0	5.0
Average nominal interest rate on forex debt (in percent)	1.1	1.1	1.1	1.3	0.2	1.2	1.3	1.4	1.3	1.3	1.3	1.3	1.3	1.4	1.3
Average real interest rate on domestic debt (in percent)	-2.7	-1.5	-0.8	-0.1	1.5	-1.5	-0.6	0.2	1.3	1.6	1.7	0.5	1.9	1.9	1.9
Real exchange rate depreciation (in percent, + indicates depreciation	10.8	16.1	-0.3	2.8	8.6	-0.2	...	...	...	...	...	...	...	...	...
Inflation rate (GDP deflator, in percent)	6.6	7.6	6.7	7.6	1.6	7.8	6.8	6.5	5.5	5.4	5.0	6.1	5.0	5.0	5.0
Growth of real primary spending (deflated by GDP deflator, in percer	3.2	4.3	10.1	1.7	3.3	33.2	4.2	6.0	-1.4	5.8	5.8	8.9	5.9	4.9	5.3
Grant element of new external borrowing (in percent)	...	...	...	...	...	36.2	43.1	47.8	45.0	45.3	43.7	43.5	40.4	37.0	39.1

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 2017-37

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
		Projections																			
PV of Debt-to-GDP Ratio																					
Baseline	29	29	29	29	30	30	30	29	29	29	28	28	28	28	28	28	28	28	28	28	28
A. Alternative scenarios																					
A1. Real GDP growth and primary balance are at historical averages	29	28	28	28	28	29	29	30	30	31	31	32	33	34	35	36	37	38	39	40	41
A2. Primary balance is unchanged from 2017	29	30	30	31	32	34	35	37	38	40	41	43	44	45	47	48	49	51	52	53	54
A3. Permanently lower GDP growth 1/	29	29	30	30	31	32	32	33	33	33	34	35	35	37	38	39	40	41	42	44	45
B. Bound tests																					
B1. Real GDP growth is at historical average minus one standard deviations in 2018-2019	29	31	35	36	37	38	39	40	41	41	42	43	44	44	45	46	47	48	48	49	50
B2. Primary balance is at historical average minus one standard deviations in 2018-2019	29	28	28	28	28	29	28	28	28	28	27	27	27	27	27	27	27	27	27	27	27
B3. Combination of B1-B2 using one half standard deviation shocks	29	29	29	30	32	33	33	34	35	35	36	36	37	37	38	39	39	40	41	41	42
B4. One-time 30 percent real depreciation in 2018	29	36	35	34	34	34	33	33	32	32	32	31	31	31	31	31	31	31	31	30	31
B5. 10 percent of GDP increase in other debt-creating flows in 2018	29	36	36	35	35	36	35	35	34	34	33	33	32	32	32	32	31	31	31	31	31
PV of Debt-to-Revenue Ratio 2/																					
Baseline	193	190	187	194	192	190	184	178	174	169	165	162	160	159	159	158	157	156	155	153	154
A. Alternative scenarios																					
A1. Real GDP growth and primary balance are at historical averages	193	184	177	183	180	179	178	177	176	176	176	178	181	184	188	191	195	199	204	208	215
A2. Primary balance is unchanged from 2017	193	192	193	206	210	215	220	224	229	233	238	243	250	257	264	270	276	282	287	292	299
A3. Permanently lower GDP growth 1/	193	191	190	200	200	201	199	196	196	195	194	196	200	205	210	215	221	226	232	238	245
B. Bound tests																					
B1. Real GDP growth is at historical average minus one standard deviations in 2018-2019	193	202	216	232	236	240	239	238	239	239	239	241	244	248	252	256	259	261	264	266	270
B2. Primary balance is at historical average minus one standard deviations in 2018-2019	193	185	178	185	183	182	177	171	167	162	158	156	155	154	154	153	152	151	150	149	150
B3. Combination of B1-B2 using one half standard deviation shocks	193	188	185	199	203	207	206	204	204	203	203	204	207	210	214	216	219	221	223	225	228
B4. One-time 30 percent real depreciation in 2018	193	234	223	226	218	213	206	199	193	187	182	179	177	176	175	174	172	171	170	168	168
B5. 10 percent of GDP increase in other debt-creating flows in 2018	193	235	231	235	230	226	219	211	205	198	192	187	184	182	180	178	176	174	172	170	169
Debt Service-to-Revenue Ratio 2/																					
Baseline	21	19	17	18	18	18	18	18	17	17	17	17	18	18	19	19	19	20	20	20	20
A. Alternative scenarios																					
A1. Real GDP growth and primary balance are at historical averages	21	19	17	16	16	17	17	18	19	19	19	20	21	22	23	24	25	26	27	27	28
A2. Primary balance is unchanged from 2017	21	19	17	19	19	20	21	21	22	23	23	24	25	27	28	29	30	30	31	32	33
A3. Permanently lower GDP growth 1/	21	19	17	19	19	19	19	19	19	19	20	20	21	23	24	25	25	26	27	28	29
B. Bound tests																					
B1. Real GDP growth is at historical average minus one standard deviations in 2018-2019	21	20	19	22	23	23	23	23	23	23	24	24	25	26	27	28	29	29	30	30	31
B2. Primary balance is at historical average minus one standard deviations in 2018-2019	21	19	17	16	16	17	17	17	17	16	16	17	17	18	18	19	19	19	19	19	20
B3. Combination of B1-B2 using one half standard deviation shocks	21	20	18	17	17	20	20	21	20	20	20	21	22	23	24	24	25	26	26	26	27
B4. One-time 30 percent real depreciation in 2018	21	20	20	22	22	22	22	22	22	22	22	22	23	24	25	25	26	26	26	26	26
B5. 10 percent of GDP increase in other debt-creating flows in 2018	21	19	20	31	19	21	19	19	19	19	19	19	20	20	21	21	21	21	21	21	21

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 Mr. Sembene, Executive Director for Madagascar,
Mr. Razafindramanana, Alternate Executive Director, and
Mr. Ismael, Advisor to the Executive Director
June 28, 2017

The Malagasy authorities are thankful to staff for the insightful set of balanced reports and productive discussions during and after the review mission to Antananarivo. They broadly agree with staff's assessment and appreciate the policy recommendations. The ECF-supported program is providing a solid framework aimed at preserving macroeconomic stability and putting economic growth on a higher trajectory. This is crucial to sustain social stability and to achieve permanent gains in the fight against poverty.

Recent Developments and Program Performance

Madagascar is making good progress in the implementation of its ambitious reform program supported by an ECF, despite adverse climate-related developments. Indeed the country has suffered from two large shocks since last year, notably a severe drought and the most violent cyclone in recent history which struck the island in March 2017. The cyclone caused the loss of more than 80 lives, destroyed the homes of about a quarter million people, and resulted in considerable physical damages estimated at about 4 percent of GDP.

Nevertheless, the Malagasy authorities have steadfastly pursued their program of reforms, with encouraging results. Real GDP growth accelerated to 4.2 percent in 2016 from 3.1 percent in 2015, supported mainly by higher investment, stronger exports from the export processing zones and improved agricultural output supported by higher vanilla prices. Inflation remained contained at about 7 percent at end-2016, and the external sector strengthened.

Performance under the ECF was strong. All end-December 2016 performance criteria (PCs) and indicative targets were observed, some with considerable margins. However, servicing debt to Libya was delayed due to technical problems beyond the authorities' control, leading to a temporary breach of the continuous performance criterion on the accumulation of new external payment arrears. All arrears have since been cleared and the Malagasy authorities are seeking a waiver for non-observance of this continuous performance criterion.

Progress was also made in the implementation of the ambitious structural reform program, although not all benchmarks were met through end-February 2017. Two benchmarks were met with delays. These include the establishment of the Council of Budget and Financial Discipline and the law on asset recovery which was only submitted to Parliament recently, due to the need for further revision and consultations.

The fuel pricing formula was implemented—albeit not automatically but with no budgetary costs. Negotiations are ongoing among stakeholders on a new price structure and mechanism which will ensure automatic adjustments. The continuous benchmark on the prior notification of Fund and World Bank regarding the signing of any single source contracts by JIRAMA was not met as one contract was signed as a matter of urgency to meet a deadline agreed upon with the investor. The new management team at the JIRAMA has renewed the commitment to competitive and transparent procurement practices.

Macroeconomic performance in 2016 was much better than programmed in many ways. Total revenues were 11.2 percent of GDP, higher than the 11 percent budgeted, while overall expenditure was kept within the program target. As a result, the overall balance (on a commitment basis) registered a deficit of 1.3 percent of GDP, significantly less than the 3.2 percent programmed. More importantly, the primary balance, excluding foreign financed investment, registered a surplus of 0.8 percent of GDP compared to a projected deficit of 0.6 percent. Performance in the monetary sector was also strong, with the level of international reserves growing to an equivalent of 3.9 months of imports compared to 3.3 months in the program. Monetary policy was prudent, and the inflation rate was kept under control. The current account balance was far stronger than projected, with a surplus of 0.8 percent of GDP.

Economic Outlook and Macroeconomic and Structural Policies

The economic recovery is gaining strength. The authorities are slightly more optimistic than staff about growth prospects. Their growth forecasts are predicated on increased public and private investments, prudent macroeconomic policies, sustained structural reforms, and strong contribution from the mining, agricultural and tourism sectors. The authorities view the scaling up of public investment as central to their strategy to resolve the pressing social and infrastructure needs, to attract private investment and to sustain strong inclusive growth. Priority investments will encompass several areas, including social sectors, infrastructure, and agricultural development. In this connection, the authorities have developed a prioritized investment program through a broad consultative process, with careful attention being given to debt sustainability and absorptive capacity. The Investment Program, which is consistent with the National Development Plan (NDP) and the Sustainable Development Goals (SDGs) was presented to international donors and investors in December 2016, catalyzing strong financial pledges of over $6 billion. Priority is being given to grants and concessional borrowing, with a view to maintaining debt sustainability.

The authorities recognize that the rapid increase in investment can pose risks, and they are therefore taking steps to reinforce implementation capacity, strengthen supervision of projects, and improve donors' coordination, among others. A new PPP law has been enacted, and the application decrees were adopted by the Cabinet in March 2017, with the view to executing properly the PPP projects in the investment program. To reduce fiscal risks and strengthen oversight of projects, a dedicated unit will be responsible for project coordination. In addition, the Fund and the World Bank are called upon to help build capacities within the Ministry of Finance and Budget which will retain the right to disapprove or stop projects that may entail fiscal risks. The terms and conditions of all PPP contracts will be published within one month of the date of signature on the web site of the Ministry of Finance and Budget.

The authorities are also taking measures with World Bank assistance to improve social conditions and reduce poverty, especially for the poorest members of society. These consist, among others, projects that involve cash transfers and cash for work. The authorities are also undertaking agricultural and rural development projects which are aimed at helping to raise income of the rural population. Projects in the education and health sectors are ongoing.

Fiscal performance is also improving, in spite of unexpected expenses this year. Thanks to the authorities' continuous reform efforts supported by Fund's technical assistance, revenue mobilization continues to improve. In 2017, efforts will continue to improve efficiency at the tax and customs administrations. In this respect, the authorities will maintain the efforts to recover outstanding tax arrears. They are also working to broaden the use of tax identification number (TIN) throughout all departments of the Ministry of Finance and Budget by year-end, and to all other ministries by end-2018. Performance contracts will be extended to the anti-fraud units at Customs by end-September 2017. On the expenditure side, efforts to reduce low-priority spending will be sustained. However, the climate-related emergency spending, higher transfers to the utility company, JIRAMA, and the national airline, Air Madagascar, will cause an increase in government expenditure in 2017.

As regards JIRAMA, the deterioration in the financial position was due to the exceptional drought that affected significantly the production of hydro-electricity, causing an increased reliance on more expensive imported diesel for electricity generation. Making the situation more challenging were delays in ensuring the conversion to new generators from the use of diesel to less expensive heavy fuel oil, and in putting in place measures to improve enforcement of customer payments and control procedures. The authorities are taking important measures to address the situation. A new management team for JIRAMA has been put in place and has developed a multi-year business plan along with a timetable and a list of concrete measures to reverse the deteriorating financial situation. The measures are expected to reduce the need for government transfers gradually over the medium term with an objective of zero transfer by 2020.

As regards Air Madagascar, an agreement has been reached with a strategic partner, Air Austral, that will help to put the airline on a financially sound and commercially viable position, while allowing it to continue to provide vital domestic services. As part of the agreement, there will be an injection of new capital from the new partner, with the government having to assume past net liabilities.

Overall, the fiscal deficit and borrowing requirements will increase this year, compared to the original program. However, these additional expenses are being accompanied by strong reforms that will lead to permanent improvements in these two strategic SOEs, and enable them to contribute solidly to economic growth and government revenue, over the medium- to long-term.

Improving economic governance continues to be an important objective of the authorities. Steps have been taken to strengthen existing institutions, including the adoption of legislation aimed at promoting assets disclosure for a wider range of public officials, setting up specialized anti-corruption centers, and combatting the traffic of precious wood. In addition, two new laws are in an advanced stage of preparation for submission to Parliament. They are in regards to anti-money laundering, and the cooperation with other countries on the exchange of mutual legal assistance in criminal matters. Our authorities are confident that the reforms they are taking will lead to significant improvement in governance.

Monetary policy remains prudent, allowing for greater exchange rate flexibility while helping to contain inflation and re-build external reserves. The increase in export prices of vanilla led to large cash payments to the small farmers, thus drawing liquidity from banks, which, in turn, reduced their lending to the government and the private sector. To restore normal liquidity and credit conditions in the system, the central bank undertook foreign exchange purchases and domestic liquidity operations. As a result, the Central Bank was able to stabilize bank liquidity and credit conditions, while inflation remained contained at about 7 percent at end-2016. Higher export proceeds also helped to reduce the current account deficit.

Going forward, the authorities will pursue a tight monetary policy consistent with the objectives of money growth and inflation. The central bank will also continue to take measures to enhance the effectiveness of monetary policy, in particular through the enhancing of the transmission mechanisms. The aim is to move gradually from monetary targeting towards an interest-rate based framework over the medium- to long-term.

Madagascar's financial sector is sound and resilient, as confirmed by the 2016 FSAP. However, the FSAP also drew the authorities' attention on some gaps, notably in the area of financial oversight. The authorities are following up on staff recommendations. In addition, they are also taking measures to improve financial inclusion. In this regard, the law on electronic money was passed in February and the associated decrees and regulations are expected to be issued by year-end. The authorities are also working closely with the World Bank on a new financial inclusion project that will focus on the digitalization of transactions and access to credit. In the same vein of improving financial inclusion, the laws on banking and microfinance are being redrafted.

Conclusion

In spite of significant shocks, Madagascar has continued to implement steadfastly its economic and financial program with encouraging results: growth has rebounded, macroeconomic stability has strengthened, and the medium-term outlook is improving. The Malagasy authorities remain strongly committed to the program's objectives and will continue to implement the policies needed to achieve them.

Based on the good performance under the program, and the commitment to continue the adjustment efforts over the period ahead, the Malagasy authorities request the completion of this first review under the ECF as well as a waiver for the non-observance of the continuous performance criterion on external payment arrears, and the modification of the performance criterion on the primary balance, excluding foreign-financed investment, for end-June 2017. Moreover, in view of the additional balance of payments needs due to climate-related shocks, the authorities are requesting an augmentation of access under the ECF arrangement.

In light of the above, we would appreciate Directors' support for the authorities' requests.