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Republic of Madagascar: Third Review Under the Extended Credit Facility and Request for Modification of Performance Criteria-Press Release; Staff Report; and Statement by the Executive Director for Republic of Madagascar

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REPUBLIC OF MADAGASCAR

July 2018

THIRD REVIEW UNDER THE EXTENDED CREDIT FACILITY AND REQUEST FOR MODIFICATION OF PERFORMANCE CRITERIA—PRESS RELEASE; STAFF REPORT; AND STATEMENT BY THE EXECUTIVE DIRECTOR FOR REPUBLIC OF MADAGASCAR

In the context of the Third Review Under the Extended Credit Facility and Request for Modification of Performance Criteria, the following documents have been released and are included in this package:

- A **Press Release** including a statement by the Chair of the Executive Board.
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on July 11, 2018, following discussions that ended on April 20, 2018, with the officials of Republic of Madagascar on economic developments and policies underpinning the IMF arrangement under the Extended Fund Facility. Based on information available at the time of these discussions, the staff report was completed on [June 26, 2018.
- A **Debt Sustainability Analysis** prepared by the staffs of the IMF and the World Bank.
- A **Staff Statement** updating information on recent developments.
- 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*
*Also included in Staff Report

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

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July 11, 2018

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IMF Executive Board Completes Third Review of Extended Credit Facility Arrangement for Madagascar and Approves US$44.25 Million Disbursement

The Executive Board of the International Monetary Fund (IMF) today completed the third review under the Extended Credit Facility (ECF) Arrangement for Madagascar. The completion of this review enables the disbursement of SDR 31.43 million (about US$44.25 million), bringing total disbursements under the arrangement to SDR 156.26 million (about US$220.02 million).

Madagascar's 40-month arrangement for SDR 220 million (about US$304.7 million, or 90 percent of Madagascar's quota), was approved on July 27, 2016 (see Press Release No.16/370). Additional access of 12.5 percent of Madagascar's quota was approved by the Executive Board in June 28, 2017, bringing Madagascar's access under the ECF arrangement to SDR 250.55 million (about US$347.1 million) at that time. This arrangement aims to support the country's efforts to reinforce macroeconomic stability and boost sustainable and inclusive growth.

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

"Madagascar's performance under its economic program supported by the Extended Credit Facility arrangement has remained generally strong. Recent economic developments were favorable, and the structural reform agenda is advancing. The outlook also remains positive, with risks arising from higher oil prices, other terms of trade shocks and natural disasters.
"The authorities have continued to strengthen revenue mobilization and the quality of spending. A small, one-off reduction in the primary domestic fiscal surplus is appropriate for 2018, considering higher oil prices and the need to address social pressures. Further action will be needed to improve the quality of spending, including increased investment capacity, automatic fuel price adjustments, and sustained reforms of the public utility company (JIRAMA) to reduce its need for transfers. New tax incentives for investment should be carefully managed to safeguard revenue mobilization. These efforts will create fiscal space

for high-priority investment and social spending which are central to the strategy for growth and poverty reduction.

“Reforms underway to promote financial sector development and inclusion will enhance growth. These reforms include strengthening supervision, modernizing the banking law, enhancing the monetary policy operational framework, and developing the foreign exchange market.

“The authorities’ efforts to enhance governance and fight corruption remain central to the success of their program. Completing the modernization of the legal framework by enacting draft laws on AML/CFT and asset recovery is a priority. Moreover, it is vital to develop the institutions necessary for effective enforcement. Continuing improvements in public financial management can play a key role in enhancing economic governance.”

REPUBLIC OF MADAGASCAR

June 26, 2018

THIRD REVIEW UNDER THE EXTENDED CREDIT FACILITY AND REQUEST FOR MODIFICATION OF PERFORMANCE CRITERIA

EXECUTIVE SUMMARY

Context. The gradual economic recovery in this fragile state has persisted, with solid growth for the second consecutive year. Fiscal performance has been strong, inflation contained, and the external position robust. Implementation of the authorities' economic program, supported by an Extended Credit Facility (ECF) arrangement approved in July 2016, has been generally strong, buttressing the recovery.

Review. All quantitative performance criteria (PCs) and indicative targets (ITs) at end-December 2017 were met, most with substantial margins, and the structural agenda is advancing, with six of eight structural benchmarks (SB) met. Staff recommends the (i) modification of the end-December 2018 PCs, particularly the primary balance; (ii) establishment of new end-June 2019 PCs; (iii) modification of the continuous PCs on new non-concessional external debt; and (iv) completion of the third review under the ECF arrangement. Completion of the review leads to a disbursement equivalent to SDR 31.43 million, bringing total disbursements under the current arrangement to SDR 156.26 million (about $220 million).

Focus. The discussions focused on maintaining momentum on the key objectives of the program, especially promoting inclusive growth, creating fiscal space for priority investment and social spending, and advancing key structural reforms, particularly in economic governance and the financial sector. The discussions on fiscal policy centered on efforts to contain losses by the public utility JIRAMA and government liabilities to the oil distributors due to fuel pricing policy.

Outlook and risks. The macroeconomic outlook remains generally positive, although higher oil prices are weighing on the economy. In addition, political uncertainty related to the Presidential elections planned for late 2018 has complicated reform implementation, for example in adjusting fuel prices, and risks further limiting policy execution or hampering private sector activity. Madagascar is also vulnerable to exogenous shocks (such as natural disasters or terms of trade).

Approved By
David Owen and Vitaliy Kramarenko

Discussions on the authorities' economic and financial program took place in Antananarivo during March 14-28, 2018 and in Washington DC during April 17-20, 2018. The IMF staff team included Messrs. Mills (head), Alonso, Engstrom, Léost (all AFR), Ms. Esquivel Soto (LEG), and Mr. Behar (SPR). The mission was assisted by Mr. Imam (Resident Representative) and Ms. Rasoamanana (local economist). Messrs. Razafindramanana and Alle (both OED) participated in the discussions. The IMF team met with President Rajaonarimampianina, Minister of Finance and Budget Andriambololona, Minister of Economy and Plan Raveloharison, Central Bank of Madagascar Governor Rasolofondraibe, and other senior officials, as well as private sector representatives, and development partners.

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BACKGROUND

1. **Madagascar is a low-income country with a fragile political situation, posing major development challenges.** It has experienced recurrent political crises, extra-constitutional changes in power, and weak governance, eroding the foundations for economic progress. Economic growth has struggled to keep up with rapid population growth. Consequently, poverty has risen to high levels (76 percent in 2017[1]).

2. **The authorities have embarked on an ambitious economic reform program since 2014, supported by an ECF arrangement since mid-2016.** Following the return to constitutional government in 2014, the international community resumed cooperation, supporting a gradual rise in public investment. To promote sustained and inclusive growth, the government launched a 40-month ECF arrangement in July 2016 with total access of SDR 250.55 million (about $350 million). Implementation of the ECF-supported economic program has been generally strong to date.

3. **Continuing economic progress depends on successfully staging presidential elections planned for late 2018**. It is crucial to avoid the past cycle of political instability and economic deterioration. Preparations for the elections have proven contentious, however, with street demonstrations and heightened uncertainty. The formation of a consensus government in June is expected to calm the political situation and facilitate a peaceful electoral process. In an indication of support for the economic reform program, the minister of finance was re-appointed in the consensus government, which also reiterated its commitment to the reform program supported by the ECF arrangement.

RECENT ECONOMIC DEVELOPMENTS AND OUTLOOK

4. **In 2017, the economy grew by more than 4 percent for the second year in a row**. The recovery was sustained despite several shocks—a drought followed by a major cyclone in the first quarter of 2017, and an outbreak of plague in late 2017. Growth was driven mainly by transport, manufactured exports, and other services, offsetting lower-than-expected growth linked to public investment and tourism (the latter because of the plague).

5. **Inflation remained under control, notwithstanding a temporary uptick due to a spike in rice prices** (Figure 1). Although inflation accelerated to 9 percent (y-o-y) at end-2017 owing to a poor rice harvest (linked to bad weather, MEFP, ¶2), underlying inflationary pressures remained moderate, with core inflation at only 6 percent. With the stabilization of rice prices, inflation fell to 7.4 percent (y-o-y) in April 2018, consistent with current projections.

6. **The execution of the 2017 budget was broadly in line with program targets**:

- Tax revenue performance exceeded program targets, rising to 11.5 percent of GDP—its highest level since 2008.

[1] Poverty headcount ratio at $1.90 a day (2011 PPP), World Bank.

- Expenditure execution was generally satisfactory, protecting priorities while respecting limits in the supplementary budget. The wage bill was contained at 5.8 percent of GDP; transfers to JIRAMA were limited to budgeted amounts (1.2 percent of GDP); and past government domestic arrears were paid off as planned (0.6 percent of GDP). However, JIRAMA faced significantly larger cash needs than planned (by 0.4 percent of GDP), owing to payment of past liabilities and higher fuel prices. JIRAMA covered these requirements by issuing promissory notes, which increases its needs for budget transfers in 2018-20 (¶13). Moreover, foreign-financed investment fell significantly short of targets (¶20).

7. The external position was stronger than expected in 2017. At only 0.3 percent of GDP, the current account deficit was smaller than projected, thanks largely to robust export earnings for manufactured goods and vanilla. The substantial positive vanilla price shock is taking time to unwind but is still considered to be largely temporary. The central bank (BFM) purchased $272 million in foreign exchange, and reserves rose by $414 million to reach 4.0 months of import cover by end-2017. The real effective exchange rate appreciated by 3.6 percent by end-year.

8. The BFM has actively managed the liquidity generated by the foreign exchange purchases linked largely to the vanilla shock. Reserve money growth and bank liquidity were largely contained through deposit auctions, albeit with some volatility. Growth in credit to the private sector has remained at healthy levels (8.9 percent y-o-y in real terms, end-March 2018). The policy rate was raised from 8.3 percent to 9.5 percent during 2017, in reaction to higher inflation (Figures 2-3).

9. The medium-term outlook remains favorable (Figure 4). Supported by agriculture, manufacturing, and public investment, growth is projected to reach 5 percent this year and surpass that level for the next three years. The authorities stressed that the medium-term growth impact of investment scaling up could be stronger than projected (MEFP, ¶10). Inflation should gradually decline toward 5-6 percent. The current account deficit is expected to exceed 4 percent of GDP by 2020, reflecting rising investment financed by concessional loans and falling vanilla prices. External sustainability continues to be robust, with a moderate risk of debt distress (see DSA). The outlook and program are subject to significant risks (¶36).

PERFORMANCE UNDER THE PROGRAM

10. Performance under the ECF-supported program has been generally strong, with all quantitative performance criteria and indicative targets met at end-December 2017 (Table 9). The floor on the domestic primary balance, the program's fiscal anchor,[2] was observed with a significant margin. The targets for central bank net foreign assets (floor) and net domestic assets

[2] A primary surplus excluding foreign-financed investment helps ensure the authorities can cover essential spending needs without recourse to external borrowing, while allowing for flexibility concerning volatile foreign financed investment.

(ceiling) were similarly observed with substantial margins, while PCs related to external debt were also observed.[3] Priority social spending surpassed its indicative target (floor).

11. The program's structural agenda is advancing (Table 10). Of the five structural benchmarks (SBs) for end-December 2017, four were fully met, with progress in reforms to *promote inclusive growth* (strategy to enhance public investment management capacity and new law on social protection), *mobilize fiscal revenue* (a new Tax Identification Number), and *strengthen financial sector development* (implementing the law on electronic money). The action envisioned in the fifth SB, the submission of the new statistics law to parliament, was completed in February 2018 (rather than December 2017 as planned). In addition, the two continuous benchmarks on *economic governance* (on transparency in PPPs and JIRAMA's procurement) were also met. However, the continuous benchmark on fuel pricing was not observed starting in January 2018, since prices were not adjusted (¶15 and Annex I).

POLICY DISCUSSIONS

12. Policy discussions focused on policies to advance the main objectives of the authorities' program in the face of difficulties. The improvement in spending quality has come under pressure this year in the face of new spending pressures, and it will require continuing efforts to sustain over the medium-term. While maintaining stable inflation and strengthening macroeconomic stability remain priorities, enhancing growth prospects will require sustained reform of the financial sector, public investment capacity, and governance, especially fighting corruption.

A. Safeguarding the Objectives of the 2018 Budget

13. To respond to evolving fiscal needs, the authorities submitted a revised supplementary budget to parliament on May 25, 2018. The proposed budget is in line with the revised program targets and the overall objectives of the program. While lower than in the initial budget by 0.6 percent of GDP, the projected domestic primary balance remains positive (0.1 percent of GDP), still represents a significant consolidation, and remains consistent with strong fiscal sustainability. The quality of spending is improving more slowly under the supplementary budget but remains consistent with the key objectives of full financing and increasing priority spending (Figure 5). Transfers (mainly to JIRAMA), which account for much of the revisions, nonetheless continue a downward trend. Moreover, there is no significant net effect on macroeconomic stability or debt sustainability, since the overall budget deficit is smaller, as foreign-financed investment is lower than planned. In addition, overperformance on key program targets in 2016 and 2017 has helped achieve more progress in the past on these fronts than initially anticipated. The supplementary budget contains the following main changes:

- An additional 0.25 percent of GDP in transfers to JIRAMA, two-thirds of it related to the repayment of promissory notes issued in late 2017 (¶6); higher-than-expected fuel prices explain

[3] 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.

the rest. In June, JIRAMA's Board adopted a new 2018 budget, revised in consultation with World Bank and Fund staff, to align its needs with the new budgeted transfer (MEFP, ¶11). JIRAMA also hiked tariffs by 10 percent on average in January 2018, slightly higher than inflation in 2017. Transfers also include new temporary support for some textile companies in financial distress (0.05 percent of GDP).

- An additional 0.15 percent of GDP for wages and salaries, and 0.1 percent of GDP in transfers for the civil service pension fund. These slippages, explained by previously identified weaknesses in forecasting, have been limited by offsetting measures, including postponement of the annual salary increase and the removal of about 1,000 "ghost workers" from the payroll (MEFP, ¶11).

14. Higher revenue projections and official budget support partly offset this additional spending, with the rest covered by domestic financing. Based on overperformance in the first quarter, revenue projections were revised upwards by 0.16 percent of GDP, to reach 12.0 percent of GDP (the target for 2019 in the program request); the overperformance is attributable to improved tax administration (especially at customs) and the effects of higher oil prices. However, as part of an agreement with oil distributors (¶15), tax payments of 0.2 percent of GDP are expected to be delayed until 2019.[4] The additional financing needs (0.5 percent of GDP) should be comfortably covered by domestic financing and additional budget support (0.1 percent of GDP, granted in light of heightened difficulties).

15. Incomplete fuel price adjustments are generating liabilities to the fuel distributors, and the authorities are working to avoid a lasting budget impact (MEFP, ¶11 and Annex I). Due to disagreements with the distributors on their margins, the authorities did not adjust prices in early 2018, opening a significant gap with market-based reference prices, thereby generating a liability. Despite a reduction in the margins in February (by about 4 percent of the reference price) and price increases totaling about 5 percent in March and April, the gap has widened as world prices have risen and reached about 6 percent by end-May. Out of concern for political instability, the authorities also postponed price adjustments in May. In late May, the authorities and the fuel distributors reached an agreement to: (i) contain liabilities at end-2018 (to 0.25 percent of GDP) through price adjustments and/or margin reductions, which started with 1.3 percent price increase in June (prior action); (ii) align pump prices with the reference price by end-2018 through price adjustments and/or margin reductions, after which prices would adjust automatically (with a smoothing formula); (iii) pay off the liability in 2019 through a price surcharge;[5] and (iv) mitigate the financial impact on the distributors by deferring payment of taxes into 2019 (for an amount comparable to the liability). While staff welcomed an agreement on a realistic plan for managing the liability without a permanent budget impact, staff also emphasized the demonstrated value of adjusting fuel prices automatically and the risks of a lasting budget impact if the agreed actions are not implemented.

[4] The delay in the payment of these taxes is reflected as spending under the line "Treasury operations," offset in 2019.

[5] For example, paying off 0.25 percent of GDP would require a surcharge of about 5 percent.

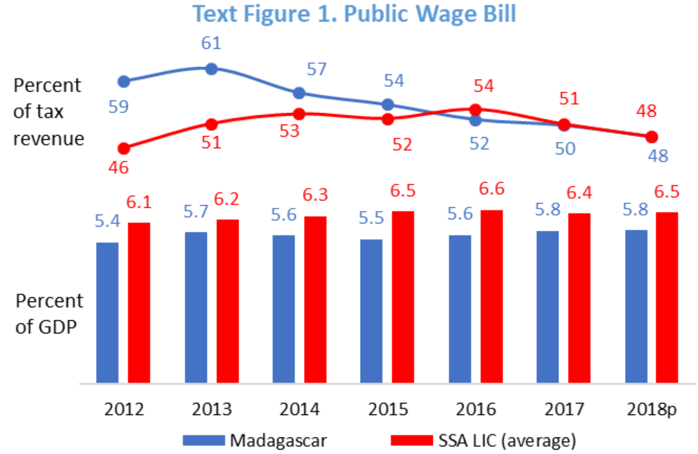
B. Boosting Priority Spending over the Medium-Term

16. Discussions addressed ongoing efforts to increase priority public spending over the medium-term to promote inclusive growth. The program aims progressively to: increase the share of higher priority spending, especially for public investment and social needs; reduce the share of lower priority spending, such as transfers to JIRAMA; control the wage bill while meeting basic needs; and increase revenue mobilization.

17. Achieving the authorities' objective of phasing out transfers to JIRAMA for operating losses by 2020 remains challenging. Lowering costs—the preferable means to this goal—has advanced more slowly than planned. Technical transmission losses will be reduced by improving the distribution network with World Bank support. Actions are underway to cut non-technical losses, especially theft and unpaid bills, but results may take time. JIRAMA recently installed 3,600 smart meters (meeting in advance the end-June 2018 SB), is planning for 30,000 prepaid meters, and has begun referring cases of electricity theft to the judicial system. Nevertheless, under current projections, it will be necessary to raise tariffs substantially in real terms to eliminate operating losses. Moreover, JIRAMA's large stock of liabilities from past losses will require attention once operating losses are brought under control. The reform of JIRAMA also needs to be integrated in the overall reform strategy for the electricity sector, which aims to significantly increase access to electricity and the share of renewable energy.

18. The wage bill should be accurately forecast, sufficient to cover compensation commitments, and restrained, while meeting essential needs. At less than 6 percent of GDP, the size of the wage bill is not excessive, compared to Madagascar's peers and considering its needs for security, education, and health (Text Figure 1). Going forward, wage bill forecasts need to be more comprehensive and accurate, fulfilling existing compensation commitments. The authorities and staff discussed the challenge of creating an affordable and productive civil service that ensures essential public services with adequate compensation.

Text Figure 1. Public Wage Bill



Source: IMF.

19. Other transfers also need to be rationalized. In the near-term, the budget transfers allocated to the civil servant pension fund need to cover its deficit (similarly to the wage bill), while its needs are reduced over the medium-term through concrete reforms (MEFP ¶12). It is important to avoid new demands for transfers, especially by automatically adjusting fuel prices, fully implementing the agreement with fuel distributors to pay off this year's liabilities, and ensuring that support to textile companies remains temporary.

20. The success of the authorities' growth strategy depends critically on increasing the capacity for efficient public investment. The scaling up has fallen short of ambitions due to constrained implementation capacity, especially for projects financed by foreign loans. In 2017, the authorities adopted a strategy and launched the Organization for the Coordination and Monitoring of Investments and their Financing (OCSIF). Determined implementation of the strategy, with the cooperation of external development partners, is necessary to step up public investment successfully. The authorities are also committed to maintaining a moderate risk of debt distress (including primarily relying on concessional financing) and carefully managing any risks to macroeconomic stability, such as overheating. External financing is also supporting increasing social spending; over the medium-term, the authorities aim to finance a growing share from their own resources.

21. Raising priority spending also depends on continuing success in revenue mobilization. Recent progress in tax revenue (2 percentage points of GDP since 2015) has been largely attributable to enhanced tax administration, accompanied by improvements in the VAT refund process and better relations with businesses. Recent IMF TA noted significant potential for further improvement, stressing the need for stronger control. Tax revenue forecasts and policy design can also be improved, with the new tax policy unit becoming operational in September 2017.

22. To continue progress on revenue mobilization, it is crucial however to manage the medium-term risks associated with new tax incentives for private investment. The new laws on Special Economic Zones and on Industrial Development (adopted in December 2017 and April 2018 respectively) aim to promote new investment through improved infrastructure, flexible regulation, and generous tax incentives. Pointing to international experience, staff reiterated that tax incentives need to be carefully designed to attract additional investment with the minimum of foregone revenue and noted concerns over the granting of long stability clauses and the apparent redundancy of investment regimes. The authorities committed to begin implementation on a limited pilot basis offering cost-based incentives and restricting eligibility (MEFP, ¶16).

C. Maintaining Stable Inflation

23. The authorities have successfully maintained inflation in single digits despite challenges in managing liquidity. In particular, the persistence of the vanilla price shock and a related accumulation of international reserves created volatility in banks' excess reserves, which decline when un-banked farmers demand cash and increase when the central bank purchases foreign exchange. The management of this volatility nevertheless avoided any inflationary pressures (¶8 and Figure 2).

24. To further strengthen the monetary policy framework, BFM is focusing on improving liquidity management. It aims to encourage banks to be more active in the interbank market and gradually move toward a more forward-looking framework over the medium term. The main measures envisioned include: (i) introducing deterrent penalty rates for repeated violations of reserve requirements; (ii) increasing the interest rate on its standing lending facility; and (iii) submitting draft legislation to the Parliament to promote repo transactions by end-December 2018 (SB). As an additional tool for liquidity management, BFM introduced foreign exchange swaps in 2017; staff stressed that these swaps should be performed only through competitive auctions and under exceptional circumstances.

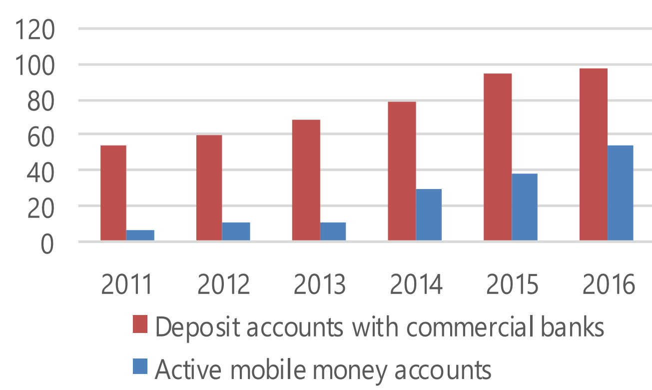
25. BFM is working to further develop the foreign exchange market. The market is shallow, with periods of exchange rate volatility. Against this background, the authorities maintain a partial surrender requirement on export proceeds to support liquidity in the foreign exchange market. The measure limits capital outflows and is considered a capital flow management measure under the IMF's Institutional View.[6] Staff reiterated the view that the requirement should be temporary and phased out, in line with the Institutional View. While the authorities agreed on this goal and are developing a plan to achieve it, they considered that the surrender requirement currently remains necessary given the shallow market. More broadly, supported by IMF TA, the authorities are working to modernize the existing legislation and regulations of the foreign exchange market.

D. Building a Sound Financial Sector Supporting Growth

26. Reforms for financial stability and supervision are advancing, in line with recommendations from the 2016 Financial Sector Assessment Program (FSAP) (Annex II). The new microfinance law, including a resolution framework, was adopted in 2017, and the authorities plan to submit a new banking law—the first overhaul in 20 years—to Parliament by end-December 2018 (SB). Being developed with IMF TA, the new banking law will enhance the powers and independence of the financial supervisor (CSBF) and reinforce the framework for corrective bank supervisory measures. Subsequently, a law on financial stability aiming to prevent systemic risks and managing financial crises will be submitted to Parliament in 2019.

27. Financial inclusion poses substantial challenges in Madagascar, although electronic money services hold promise. The penetration of traditional banking services is low in Madagascar, which lags many other low-income countries in Sub-Saharan Africa. Electronic money services, which nearly doubled every year over 2010-16, offer a promising path for financial inclusion (Text Figure 2). A new law on electronic money was adopted in 2016, with the related decrees issued in 2017. However, this dynamic environment poses challenges for traditional state-owned savings institutions, such as the postal savings and the public savings fund (*Caisse d'Epargne de Madagascar, CEM*). The authorities are

Text Figure 2. Deposit Accounts and Mobile Money Accounts (Per 1,000 adults)



Source: 2017 Financial Access Survey, IMF.

[6] IMF Country Report No. 17/223.

formulating new strategies for these institutions; for example, the CEM has proposed to be reclassified as a micro-financial institution.

E. Promoting Economic Governance and Combating Corruption

28. Efforts to strengthen the legal framework for governance and the fight against corruption are advancing. New laws will update the legal framework with international standards (Annex III). Parliament has adopted all but two: the draft laws on anti-money laundering/combating the financing of terrorism (AML/CFT) and asset recovery. Staff stressed the importance of approving the remaining draft laws, which will *inter alia* help reduce the risks of international censure ("grey listing") and the loss of correspondent banking relationships.

29. While legislative reform is a key first phase in the authorities' strategy, it must be followed by effective enforcement of the anti-corruption laws. The first anti-corruption center (specialized in the prosecution and adjudication of corruption cases) opened in June 2018, and a second center is planned to be opened by end-2018. To monitor enforcement, the authorities are enhancing the reporting on corruption cases, and all final court decisions by the anti-corruption centers will be published starting end-December 2018 (SB). Senior government officials are required to declare assets, and the anti-corruption agency (BIANCO) will introduce a formal mechanism to verify asset disclosures in 2018. The authorities are also preparing a strategy to ensure that the declarations are sufficiently comprehensive and eventually published, which is important to make them fully effective.

30. Ongoing public financial management (PFM) reforms also remain a priority for enhancing economic governance. A Public Expenditure and Financial Accountability (PEFA) self-assessment in December 2017 found broadly satisfactory implementation of reform plans (MEFP, ¶19), although weaknesses remain. The priorities for future action are: (i) budget execution; (ii) budget coverage, including better integration of autonomous entities, State Owned Enterprises (SOEs), and Public Private Partnerships; (iii) implementation of the Public Procurement Code passed in 2017 and the recommendations of the 2017 audit of the review agency for procurement; (iv) rein-forcement of ex-post controls; and (v) debt management strategy, in line with recommendations from the recent DEMPA (Debt Management Performance Assessment).

PROGRAM ISSUES, SAFEGUARDS, AND RISKS

31. Several modifications are proposed regarding program monitoring going forward:

- *An upgrade in debt monitoring capacity has prompted a proposed change to specifying debt limits in present value terms.* In February 2018, Madagascar's debt monitoring capacity was upgraded from weak to adequate. Under the IMF debt limits policy, Madagascar will move to a performance criterion on ceilings on the present value of new debt contracted, rather than the previous one on ceilings on new non-concessional debt contracted in nominal terms. At the request of the authorities, the nominal ceilings would remain but in the form of indicative targets (MEFP, ¶31 and TMU, ¶15-16). These ceilings are consistent with the previous targets and compatible with the authorities' borrowing plans, which remain consistent with debt sustainability and macroeconomic projections.

- Modifications of several other performance criteria and indicative targets are also proposed for end-September and end-December 2018 (MEFP, Table 1). The proposed changes include: (i) a slight reduction in the domestic primary fiscal balance (floor), to be consistent with the supplementary budget and an adjustment in the definition[7] while still advancing program objectives (¶13); and (ii) strengthened targets for net foreign assets (floor), net domestic assets (ceiling), and tax revenue (floor), based on good past performance.[8] All proposed targets have also been extended until end-June 2019, the last test date under the current arrangement.

32. The structural agenda focuses on implementation of existing commitments, supported by IMF technical assistance. The authorities' ambitious reform agenda, including structural benchmarks, supports program objectives, and the main challenge is achieving full implementation given capacity constraints. Madagascar benefits from intensive IMF technical assistance linked to these program priorities, including for revenue administration, public financial management, monetary and foreign exchange policy, financial sector development, governance, and statistics (Annex IV, Capacity Development Strategy).

33. Data provision is adequate for surveillance and program purposes. A new statistics law, modernizing and regulating data collection, was adopted by Parliament in March 2018 (MEFP, ¶27). However, the level of resources devoted to the statistical system remains a constraint.

34. Firm financing assurances are in place for the remainder of the program, and Madagascar's capacity to repay the Fund is strong. The 2018 budget is fully financed. Prospects for full financing in 2019 are also good, with the first half of 2019 already fully financed. Madagascar has a strong capacity to repay the Fund, with outstanding obligations based on existing and prospective drawings that would peak at 3.3 percent of GDP in 2019, while annual repayments would peak at 0.4 percent of GDP in 2024 (Table 14).

35. The 2017 update safeguards assessment of the central bank found that progress had been made in key areas, such as strengthening the legal framework and establishing an audit committee. The BFM now publishes its audited financial statements in a timely manner, and capacity in the internal audit and reserves management functions has been enhanced through technical assistance. The May 2018 safeguards monitoring mission found that procurement practices related to currency operations are being strengthened, however, the transparency of the bank's financial reporting practices continue to lag, and thus BFM is developing an action plan to fully adopt IFRS for the accounts of end-December 2020, starting with pro-forma IFRS financial statements for 2018. TA will be needed as part of the revised roadmap. The bank expects to eliminate the stockpile of old

[7] It is proposed to modify the definition of the domestic primary balance to exclude external budget grants (MEFP, ¶31); as they increased substantially, it became more consistent with the principle of the program's anchor to exclude them.

[8] End-September 2018 targets are indicative and end-December 2018 targets are performance criteria, except the tax revenue targets, which are indicative also at end-December 2018.

bank notes by end-June 2018 and undertake periodic internal audits of the implementation of the bank-wide procurement policy.

36. Risks to the program and outlook are mainly political or exogenous (Annex V, Risk Assessment Matrix). Presidential elections are planned for November and December, and political instability has already risen in the pre-electoral period. It is important to avoid the past pattern of political instability reversing economic progress. This instability could intensify in coming months, further hampering reform implementation capacity and economic activity and accentuating fiscal risks. For example, larger than anticipated transfers to JIRAMA would reduce space for higher priority expenditure, while slower than expected scaling up of investment would delay an acceleration in growth. Terms of trade shocks (e.g., higher import prices for oil) or natural disasters could weigh on external accounts and could lead to fiscal slippages.

STAFF APPRAISAL

37. Madagascar's gradual economic recovery continues, supported by generally strong performance under the ECF arrangement. After rising by more than 4 percent in both 2016 and 2017, real GDP is projected to grow by about 5 percent in 2018, with inflation contained, a sustainable and improving fiscal situation, and a strong external position. All quantitative performance criteria and indicative targets under the ECF arrangement were met at end-December, most by substantial margins, and the structural agenda is advancing with six of eight structural benchmarks fully met. Maintaining growth momentum depends on achieving program objectives while avoiding a recurrence of political crisis.

38. Despite difficulties, the authorities' fiscal strategy for 2018 maintains progress toward steadily raising revenue and gradually improving the quality of public spending. While some additional spending needs—primarily for the wage bill and JIRAMA—have been accommodated in a supplementary budget for 2018, progress is continuing toward the program's objectives. In particular, the improvement in the quality of spending persists, although more slowly than previously targeted. In addition, revenue performance is improving faster than expected. While the domestic primary surplus is smaller, the budget remains fully financed, with lower domestic financing than 2017 and no crowding out of the private sector expected. Since the overall budget deficit is smaller, there is no significant net effect on macroeconomic stability or debt sustainability. Overall, staff considers that the policy mix remains adequate to maintain progress toward program goals. Indeed, the authorities have achieved more progress on several goals than initially anticipated, due in part to overperformance on key program targets in 2016 and 2017.

39. Going forward, further efforts will be necessary to create fiscal space for priority spending, particularly for fuel pricing, JIRAMA, and the wage bill. Staff urges the authorities to limit the growing liability to fuel distributors and to implement an automatic pricing formula (with cost-recovery pricing and a smoothing mechanism) as soon as possible, to avoid future liabilities. While reforms underway at JIRAMA are beginning to bear fruit, they need to accelerate to meet the authorities' goal of eliminating operating losses by 2020. Maintaining this goal will require a gradual increase in tariffs in real terms, as well as a readiness to adjust tariffs if costs rise in the interim. The wage bill should be realistic, affordable, and adequate to meet key social objectives.

40. It is also essential to continue improving revenue mobilization, and the risks posed by new tax incentives for investment warrant careful management. Continued reforms in tax administration remain vital, notwithstanding the impressive progress to date. The authorities' plans for limited pilot projects on special economic and industrial zones with tax incentives are reassuring to some degree; nevertheless, it is critical to restrict the geographic and sectoral scope, to rely on cost-based incentives, and to prevent abuse. Eroding the tax base would deprive the budget of the resources needed for critical infrastructure and social needs, in turn undercutting the authorities' growth strategy.

41. A successful scaling up of public investment—also central to the growth strategy—depends on enhancing implementation capacity. Execution has fallen short of ambitious targets; going forward, enhancing implementation capacity, especially coordination, will be critical for maintaining current plans and ensuring investment efficiency. Staff welcomes the authorities' debt strategy and commitment to preventing the risk of debt distress from deteriorating from a moderate risk. It also remains important to actively manage any risks to macroeconomic stability from scaling up, such as overheating.

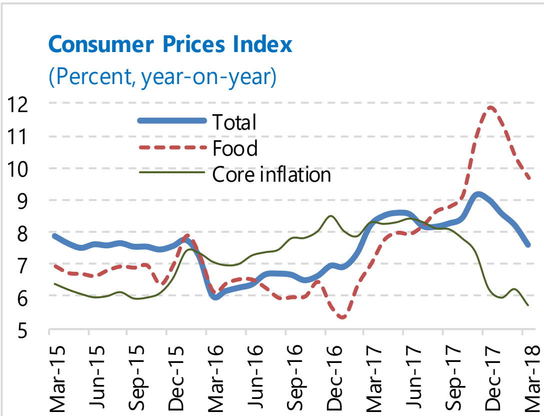
42. Enhancing governance and fighting corruption also remain central to the success of the program. Concrete results in fighting corruption can take time, and it requires sustained efforts on many levels. The authorities have strengthened anti-corruption legislation, and it is crucial to complete upgrading the legal framework to international standards, including AML/CFT and asset recovery laws. Moreover, legislative reforms are only effective if they are enforced by independent institutions, such as the anti-corruption centers.

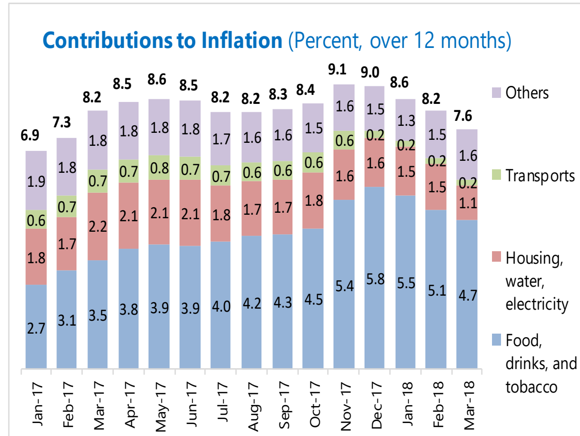
43. Improved access to finance is an important ingredient of inclusive growth in Madagascar. Financial sector reforms rightly aim to combine financial inclusion with stronger supervision and modernization of the banking law, monetary policy framework, and foreign exchange market.

44. Based on Madagascar's performance and commitments under the program, staff recommends the completion of the third review under the ECF arrangement. Staff also supports the authorities' request for (i) the modification of the end-December 2018 PCs, (ii) the establishment of new end-June 2019 PCs, and (iii) the modification of the continuous PCs on new non-concessional external debt contracted by the central government or BFM with an original maturity of (a) more than one year and (b) up to and including one year.

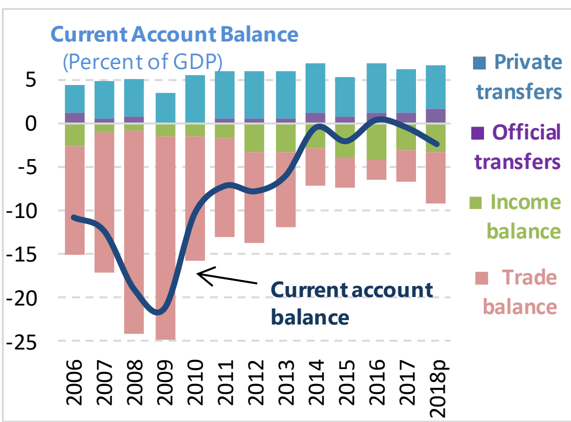
Figure 1. Madagascar: Inflation and External Developments, 2004-18

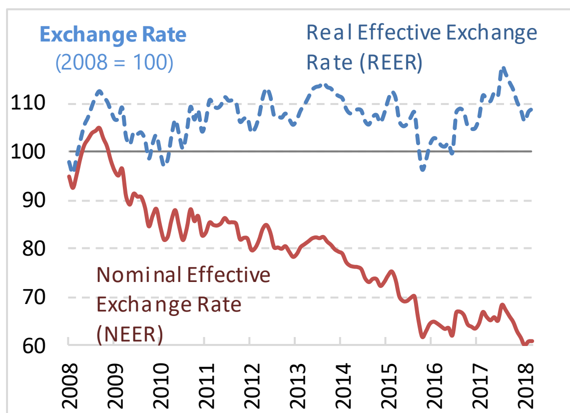
After peaking in late 2017 because of soaring rice prices, inflation started to decline in 2018, with core inflation at its lowest level in the last three years.



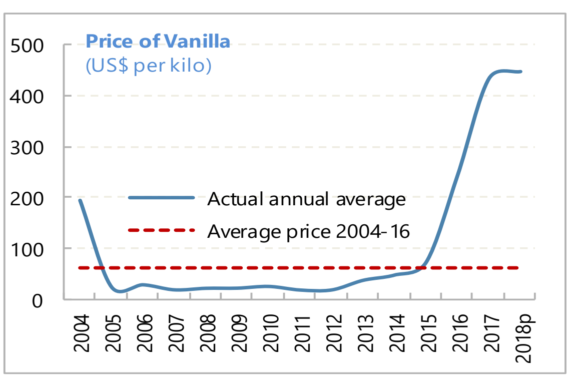


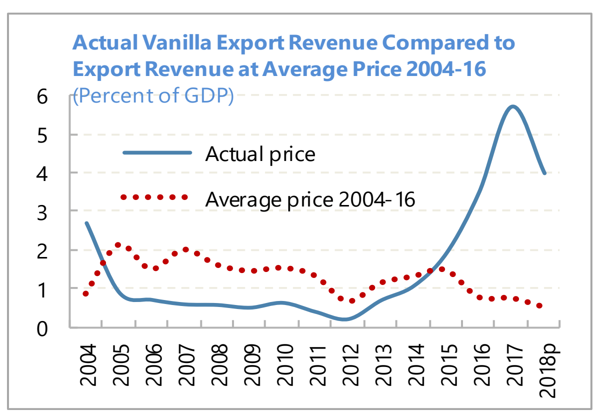
Growing mining exports improved the current account after 2009, but it is now declining because of scaled-up public investment; it would have weakened more if vanilla prices had not boomed. A roughly stable NEER since 2016 has triggered an REER appreciation because inflation is higher than the average of Madagascar's trading partners.





The jump in vanilla prices boosted export revenues by about 5 percent of GDP in 2017.

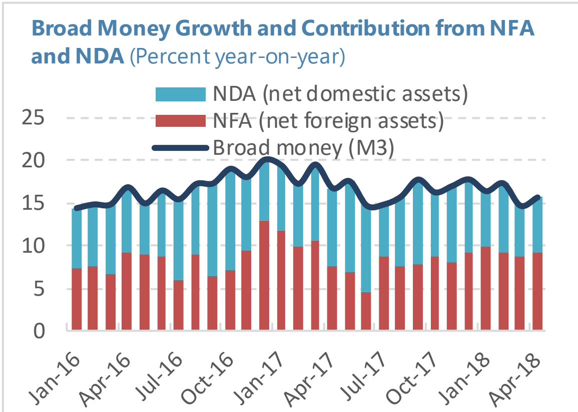


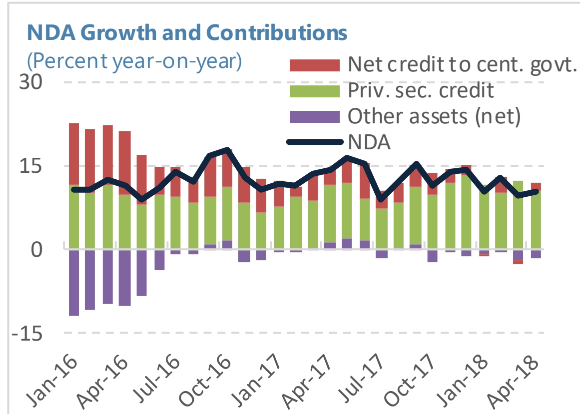


Sources: Malagasy authorities; and IMF staff estimates.

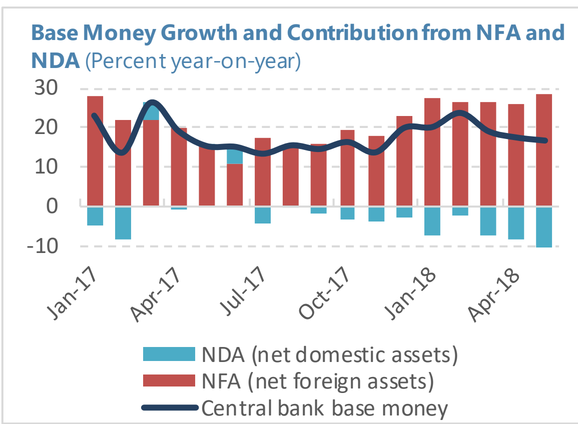
Figure 2. Madagascar: Monetary Developments, 2016-18

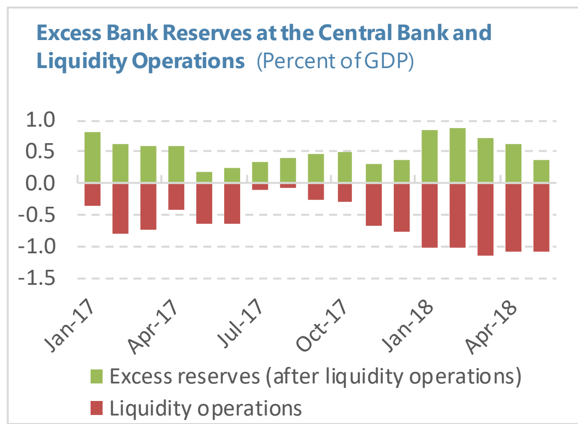
Broad money growth is primarily driven by the accumulation of net foreign assets and credit to the private sector.



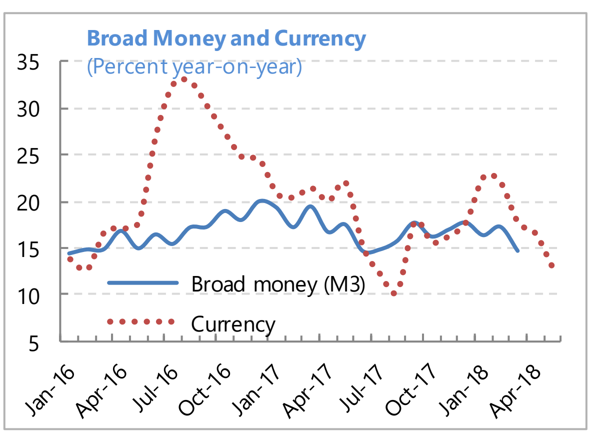


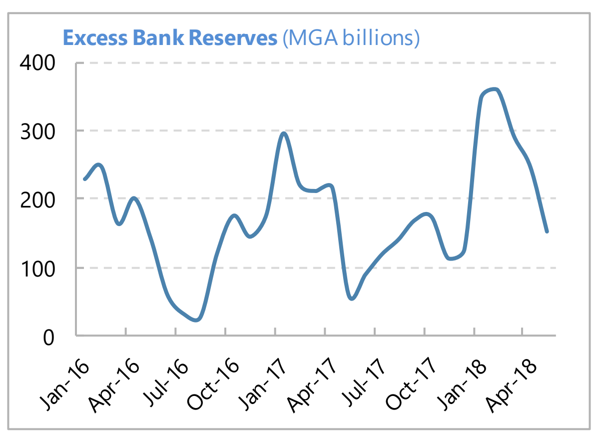
Base money growth is also driven by net foreign assets. The central bank has undertaken significant liquidity operations in the first half of 2018 to control bank liquidity.





High vanilla prices have increased the demand for currency because small-scale farmers with limited access to bank accounts keep much of their savings in cash. Bank reserves have fluctuated significantly partly in response to the demand for currency (reducing reserves) and central bank purchases of foreign exchange (increasing reserves).

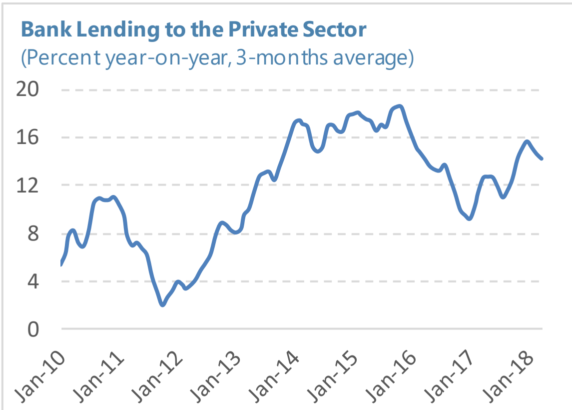


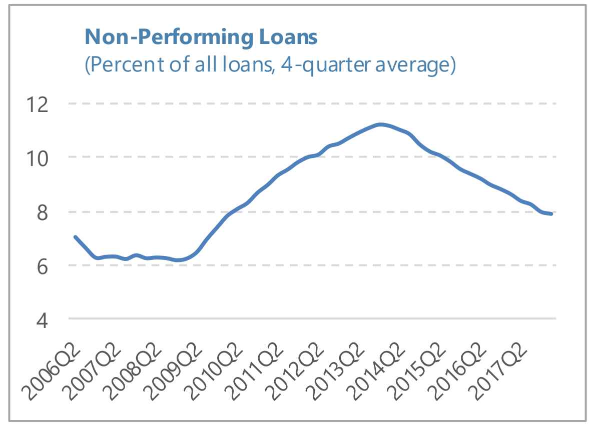


Sources: Malagasy authorities; and IMF staff estimates.

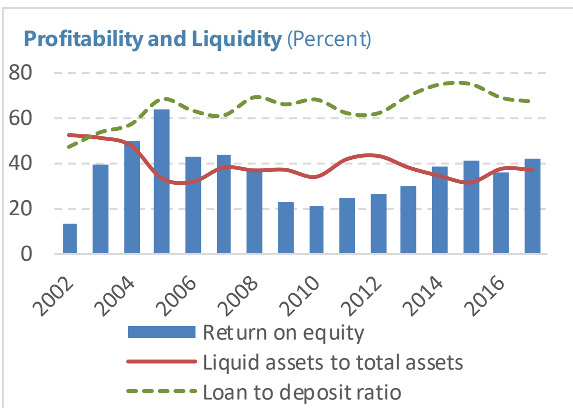
Figure 3. Madagascar: Financial Sector Developments, 2002-18

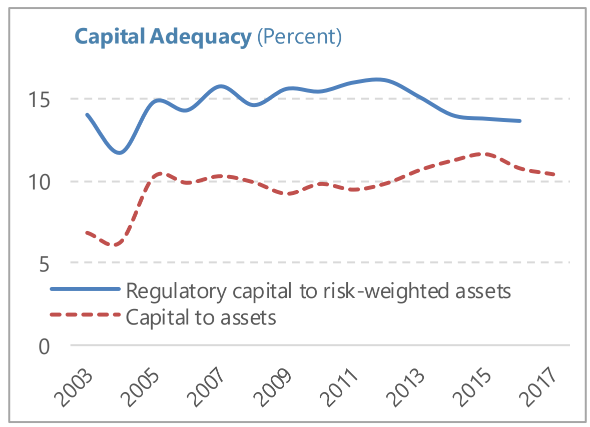
Credit growth started to accelerate in 2012, with rising expectations of an end to the years of isolation and economic stagnation. Non-performing loans peaked in late 2013 and have been decreasing since then.



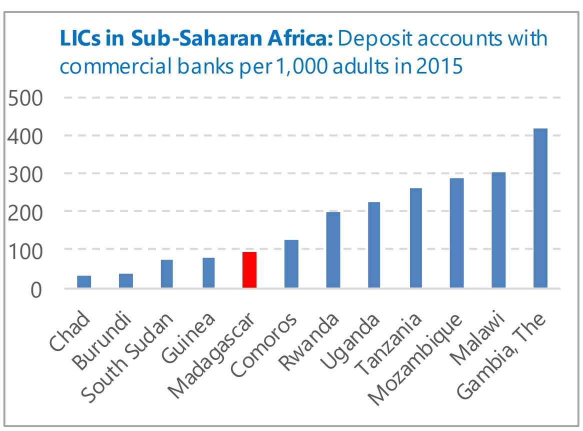


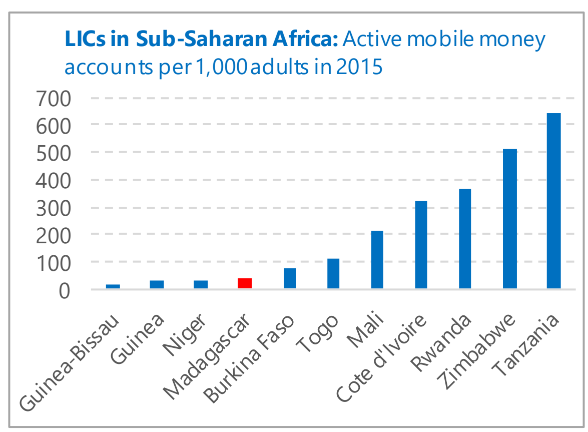
Banks are on average sufficiently capitalized, liquid, and very profitable (although with differences among banks).





Financial sector development is accelerating and the number of active mobile money accounts grew by 89 percent a year over 2010-16, but Madagascar is lagging many low-income countries (LICs) in Sub-Saharan Africa.

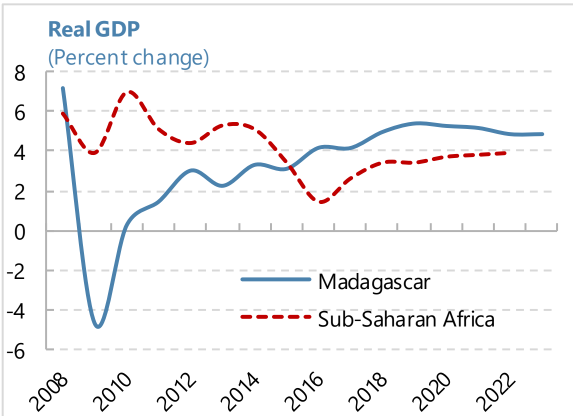


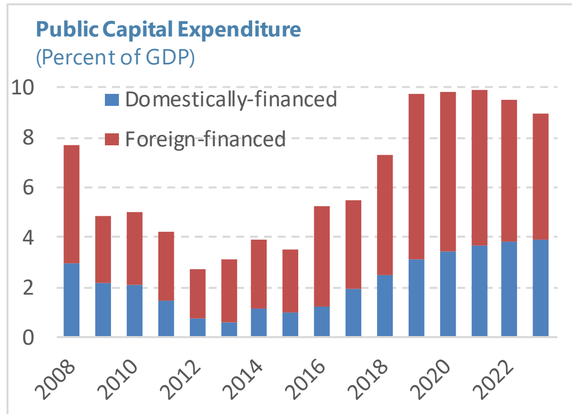


Sources: Malagasy authorities; and IMF staff estimates.

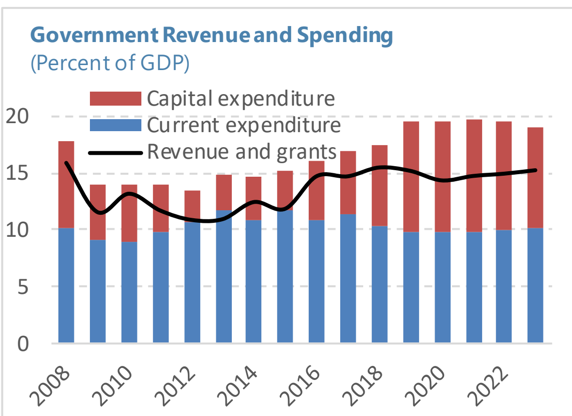
Figure 4. Madagascar: Medium-Term Macroeconomic Prospects, 2008-23

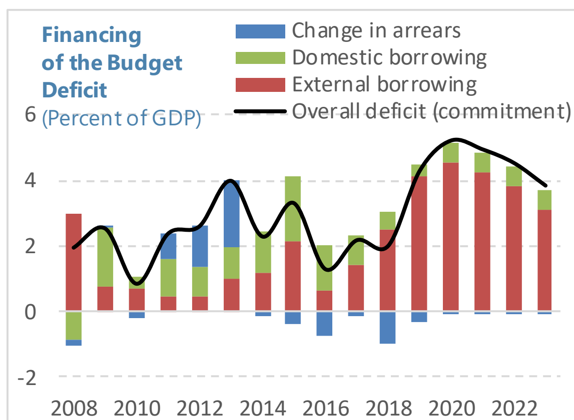
Reforms and scaled-up public investment should sustain growth above the Sub-Saharan African average.





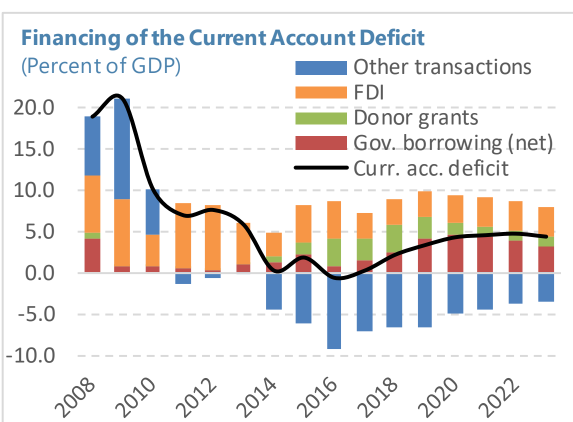
The fiscal deficit will peak in 2020 because of scaled-up spending on capital expenditure.

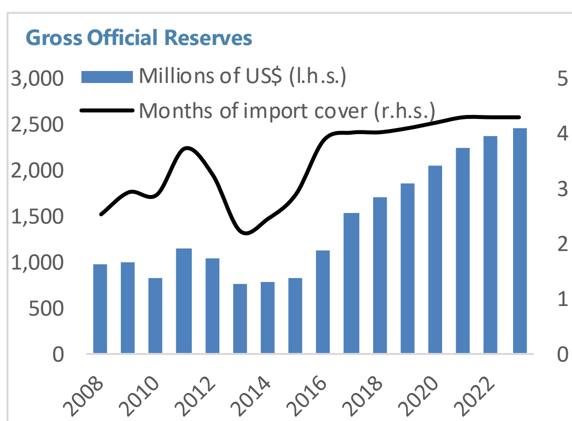




Official lending for the scaling up will finance the current account deficit over the medium term.

The import cover is projected to stabilize at 4.3 months over the medium term.

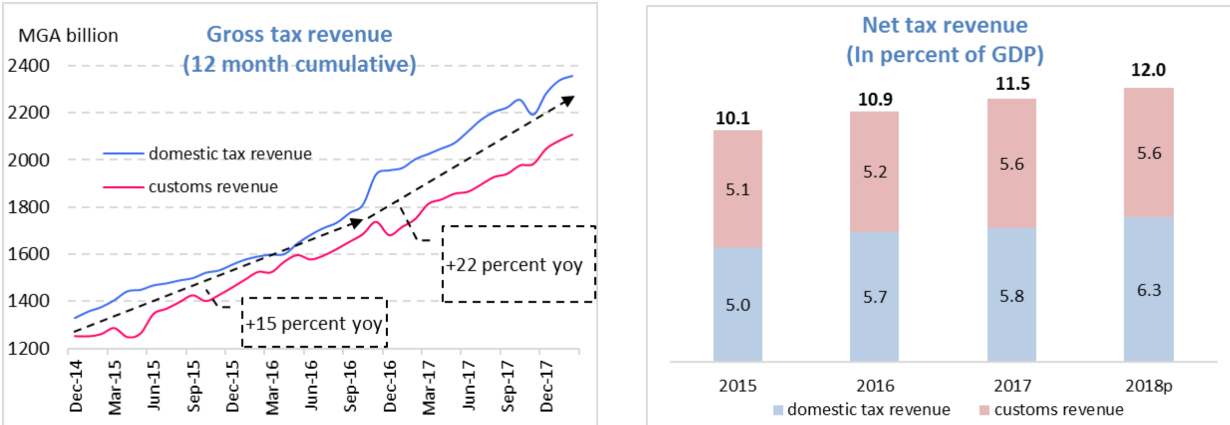




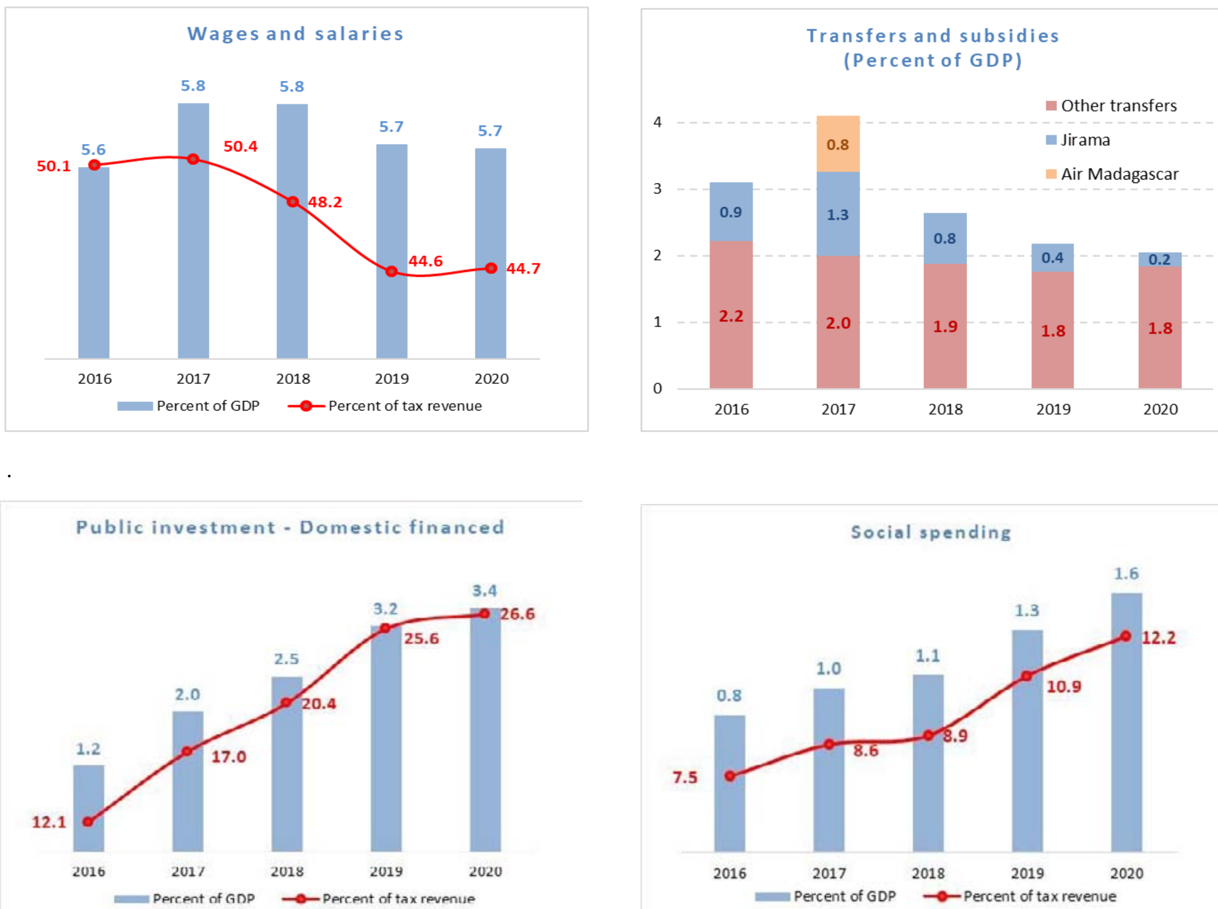
Sources: Malagasy authorities; and IMF staff estimates.

Figure 5. Madagascar: Government Revenue and Spending, 2015-20

Tax revenue has risen steadily over the past three years, by almost 1.5 percentage points of GDP between 2015 and 2017, and is forecast to increase by another 0.5 percent of GDP in 2018.



Despite unexpected needs for wages and transfers (mainly to JIRAMA), spending composition continues to improve.



Sources: Malagasy authorities; and IMF staff estimates.

Table 1. Madagascar: Selected Economic Indicators, 2016-23

	2016	2017		2018		2019		2020	2021	2022	2023
	Actuals	EBS 17/110	Prel. Est.	EBS 17/110	Proj.	EBS 17/110	Proj.	Projections			
	(Percent change; unless otherwise indicated)										
National account and prices											
GDP at constant prices	4.2	4.1	4.2	5.1	5.0	5.6	5.4	5.3	5.2	4.9	4.9
GDP deflator	6.7	8.1	8.3	7.8	7.8	6.8	7.2	6.3	5.5	5.2	5.0
Consumer prices (end of period)	7.0	8.1	9.0	7.9	7.7	6.2	6.4	6.0	5.4	5.0	5.0
Money and credit											
Reserve money	25.4	18.5	18.6	12.4	11.3	7.1	11.3	12.8	12.8	12.9	11.6
Broad money (M3)	20.1	18.1	17.8	12.5	12.8	14.2	12.9	16.1	15.8	13.5	13.2
	(Growth in percent of beginning of period money stock (M3))										
Net foreign assets	13.0	4.3	9.2	4.8	4.0	5.8	3.6	6.7	6.4	4.9	4.9
Net domestic assets	7.0	13.8	8.5	7.6	8.8	8.4	9.3	9.4	9.4	8.6	8.4
of which: Credit to the private sector	4.1	5.9	8.4	7.3	6.4	7.1	7.1	7.1	6.7	6.5	6.5
	(Percent of GDP)										
Public finance											
Total revenue (excluding grants)	11.2	11.7	11.8	12.1	12.2	12.3	12.5	13.0	13.4	13.6	13.9
of which: Tax revenue	10.9	11.4	11.5	11.9	12.0	12.1	12.3	12.8	13.2	13.4	13.7
Grants	3.5	3.3	2.9	3.0	3.4	2.7	2.7	1.4	1.4	1.4	1.4
of which: budget grants	0.7	0.9	0.8	0.9	1.3	0.4	0.6	0.0	0.0	0.0	0.0
Total expenditures	16.0	18.5	17.1	18.0	18.0	20.1	19.6	19.8	20.0	19.8	19.5
Current expenditure	10.8	12.2	11.7	9.9	10.7	9.6	9.8	10.0	10.1	10.2	10.5
Wages and salaries	5.6	5.8	5.8	5.7	5.8	5.4	5.7	5.7	5.7	5.7	5.7
Interest payments	0.9	0.8	0.8	1.0	0.9	1.0	0.8	0.9	1.0	1.0	1.1
Other	3.7	4.9	4.9	3.2	3.6	3.0	3.2	3.2	3.3	3.3	3.6
Goods and Services	0.6	0.8	0.8	0.9	0.9	1.0	1.0	1.1	1.2	1.3	1.5
Transfers and Subsidies	3.1	4.1	4.1	2.2	2.6	2.0	2.2	2.1	2.1	2.0	2.1
Treasury operations (net)	0.6	0.6	0.2	0.1	0.4	0.2	0.1	0.2	0.2	0.2	0.2
Capital expenditure	5.2	6.3	5.5	8.1	7.3	10.5	9.8	9.8	9.9	9.5	9.0
Domestic financed	1.2	2.1	2.0	2.4	2.5	3.0	3.2	3.4	3.7	3.8	3.9
Foreign financed	4.0	4.2	3.5	5.7	4.8	7.5	6.6	6.4	6.2	5.7	5.1
Overall balance (commitment basis)	-1.3	-3.5	-2.4	-3.0	-2.3	-5.1	-4.3	-5.4	-5.2	-4.7	-4.1
Float (variation of accounts payable, + = increase)[1]	0.5	-0.2	0.7	0.0	-0.4	0.0	-0.1	0.0	0.0	0.0	0.0
Variation of domestic arrears (+ = increase)	-1.2	-0.7	-0.6	-0.6	-0.6	-0.2	-0.2	-0.1	-0.1	0.0	0.0
Overall balance (cash basis)	-2.0	-4.3	-2.3	-3.5	-3.2	-5.3	-4.6	-5.5	-5.2	-4.8	-4.2
Domestic primary balance (new program definition) [2]	0.1	-1.7	-1.0	0.8	0.1	0.7	0.4	0.6	0.6	0.6	0.6
Total financing	2.0	4.3	2.3	3.5	3.2	5.2	4.5	5.3	5.0	4.5	3.8
Foreign borrowing (net)	0.7	2.3	1.4	3.1	2.5	4.8	4.1	4.6	4.3	3.8	3.1
Domestic financing	1.4	2.1	0.9	0.4	0.7	0.4	0.4	0.7	0.7	0.7	0.7
Excess financing [3]	0.0	0.0	0.0	0.0	0.0	-1.7	-0.6	-2.5	-3.1	-3.1	-3.3
of which: budget support to be programmed	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.3	-0.3	-0.4
Savings and investment											
Investment	14.8	15.9	15.2	17.4	17.1	19.8	19.0	19.1	19.3	19.0	18.5
Gross national savings	15.4	12.5	14.8	13.4	14.9	15.0	15.5	14.8	14.7	14.2	14.1
External sector											
Exports of goods, f.o.b.	21.6	20.8	24.4	20.2	23.6	20.7	23.1	23.1	23.2	23.3	23.4
Imports of goods, c.i.f.	28.6	31.0	31.4	30.1	32.1	31.5	31.5	32.2	32.6	32.6	32.4
Current account balance (exc. grants)	-2.9	-6.7	-3.1	-7.0	-5.6	-7.5	-6.0	-5.8	-6.0	-6.2	-5.8
Current account balance (inc. grants)	0.6	-3.4	-0.3	-4.0	-2.2	-4.8	-3.4	-4.3	-4.6	-4.8	-4.4
Public debt	38.4	36.2	36.0	36.2	35.1	37.1	36.5	39.0	41.3	43.4	44.9
External	26.7	24.4	25.3	25.9	25.5	27.8	27.8	30.7	33.3	35.5	37.0
Domestic	11.7	11.8	10.7	10.3	9.6	9.3	8.6	8.3	8.0	7.9	7.9
	(Units as indicated)										
Gross official reserves (millions of SDRs)	834	991	1,087	1,104	1,180	1,265	1,280	1,403	1,527	1,612	1,673
Months of imports of goods and services	3.9	3.7	4.0	4.0	4.1	4.2	4.1	4.2	4.3	4.3	4.3
Real effective exchange rate	0.3	…	7.4	…	…	…	…	…	…	…	…
Terms of trade (percent change, deterioration -)	22.3	-6.9	17.7	2.5	-1.8	-3.1	0.7	0.9	0.6	0.3	0.7
Memorandum items											
GDP per capita (U.S. dollars)	401	448	449	479	475	501	501	525	547	566	585
Nominal GDP at market prices (billions of ariary)	31,769	35,755	35,835	40,507	40,548	45,672	45,809	51,251	56,857	62,717	69,062

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

[1] The increase in the float in 2017 is largely due to delays in completing transfers linked to Air Madagascar that will now be paid in 2018.

[2] Primary balance excl. foreign-financed investment and grants. Commitment basis.

[3] A negative value indicates allocated financing with the disbursement schedule to be agreed.

Table 2. Madagascar: National Accounts, 2016-23

	2016	2017		2018		2019		2020	2021	2022	2023
	Actuals	EBS 17/110	Prel. Est.	EBS 17/110	Proj.	EBS 17/110	Proj.	Projections			
					(Percent change)						
Real supply side growth											
Primary sector	1.6	-1.8	-1.0	3.2	2.8	2.7	2.7	2.6	2.3	2.3	2.1
Agriculture	1.4	-5.9	-6.6	4.9	4.5	3.7	3.7	3.7	3.0	3.0	3.0
Cattle and fishing	1.9	2.1	4.5	2.0	1.9	2.0	2.0	1.9	1.9	1.9	1.4
Forestry	1.0	1.0	1.0	1.0	-0.9	1.0	1.0	1.0	1.0	1.0	1.0
Secondary sector	5.5	7.7	8.9	6.0	6.7	7.5	7.4	7.5	6.7	6.8	6.8
Food and drink	6.4	6.0	6.4	5.6	5.6	5.7	5.7	5.8	3.9	3.9	3.9
Export processing zone	24.7	13.6	25.2	12.5	14.5	12.5	14.5	12.5	12.5	12.5	12.5
Energy	8.3	6.5	6.6	8.4	8.4	13.5	11.5	11.5	9.5	9.5	8.5
Extractive industry	-1.6	9.5	9.8	3.5	5.4	6.5	6.5	7.5	7.5	7.5	7.5
Other	5.8	5.5	4.7	5.5	4.7	5.7	4.6	4.3	3.7	3.8	4.2
Tertiary sector	4.8	5.8	5.2	5.7	5.4	6.4	6.1	5.9	6.1	5.3	5.4
Transportation	2.1	8.3	6.4	6.9	5.8	8.6	8.2	6.8	6.7	6.7	6.7
Services	5.2	4.7	6.4	5.2	6.6	5.1	5.7	5.7	5.3	5.3	5.3
Trade	3.1	3.0	4.1	3.0	4.5	2.1	3.0	3.0	3.0	3.0	3.0
Public administration	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Public works/construction	18.6	10.5	3.8	11.5	6.5	14.0	10.0	12.0	14.0	7.6	7.6
Indirect taxes	5.7	5.4	5.4	5.4	5.4	5.7	5.7	5.0	5.0	5.0	5.0
Real GDP at market prices	4.2	4.1	4.2	5.1	5.0	5.6	5.4	5.3	5.2	4.9	4.9
Nominal demand side composition					(Percent of GDP)						
Resource balance	-2.3	-7.2	-3.6	-7.0	-5.9	-7.2	-6.1	-6.4	-6.5	-6.5	-6.0
Imports of goods and nonfactor services	35.8	38.3	39.0	37.0	40.7	37.6	40.1	40.0	39.9	39.8	39.1
Exports of goods and nonfactor services	33.5	31.1	35.4	30.0	34.8	30.4	34.0	33.6	33.4	33.2	33.0
Current account balance (including grants) = (S-I)	0.6	-3.4	-0.3	-4.0	-2.2	-4.8	-3.4	-4.3	-4.6	-4.8	-4.4
Consumption	87.5	91.3	88.5	89.6	88.8	87.4	87.1	87.3	87.2	87.5	87.5
Government	9.9	11.3	10.9	9.0	9.7	8.6	9.0	9.1	9.1	9.2	9.4
Nongovernment	77.5	79.9	77.6	80.6	79.1	78.8	78.1	78.2	78.1	78.3	78.0
Investment (I)	14.8	15.9	15.2	17.4	17.1	19.8	19.0	19.1	19.3	19.0	18.5
Government	5.2	6.3	5.5	8.1	7.3	10.5	9.8	9.8	9.9	9.5	9.0
Nongovernment	9.6	9.6	9.7	9.3	9.8	9.3	9.2	9.3	9.4	9.5	9.6
Of which: foreign direct investment	4.5	3.6	3.1	3.4	3.1	3.4	3.2	3.3	3.4	3.4	3.5
National savings (S)	15.4	12.5	14.8	13.4	14.9	15.0	15.5	14.8	14.7	14.2	14.1
Government	3.9	2.8	3.0	5.2	5.0	5.4	5.5	4.4	4.7	4.8	4.8
Nongovernment	11.5	9.7	11.8	8.3	9.9	9.6	10.1	10.4	10.0	9.4	9.3
Memoranda items:											
					(Billions of Ariary)						
Nominal GDP (at market prices)	31,769	35,755	35,835	40,507	40,548	45,672	45,809	51,251	56,857	62,717	69,062
Net factor income	-4.1	-3.3	-3.1	-3.5	-3.2	-3.4	-3.1	-3.0	-3.0	-3.0	-3.0
Transfers	6.9	7.1	6.4	6.5	6.9	5.8	5.7	5.1	4.9	4.7	4.6
Nominal GNP	31,772	35,759	35,838	40,510	40,552	45,674	45,811	51,253	56,859	62,718	69,064

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

Table 3. Madagascar: Fiscal Operations of the Central Government, 2017-23

(Billions of Ariary)

	2017		2018								2019				2020	2021	2022	2023
	Dec		March		June		Sep		Dec		March	June	Dec		Dec	Dec	Dec	Dec
	EBS 17/110	Prel. Est.	EBS 17/110	Prel. Est.	EBS 17/110	Proj.	EBS 17/110	Proj.	EBS 17/110	Proj.	Proj.	Proj.	EBS 17/110	Proj.	Projections			
Total revenue and grants	5,361	5,280	1,244	1,371	2,775	2,814	4,364	4,469	6,111	6,363	1,438	3,210	6,859	6,999	7,392	8,426	9,427	10,596
Total revenue	4,192	4,240	1,036	1,162	2,356	2,416	3,544	3,622	4,902	4,966	1,213	2,727	5,628	5,741	6,665	7,622	8,554	9,633
Tax revenue [1]	4,092	4,118	1,033	1,134	2,304	2,365	3,473	3,550	4,811	4,876	1,199	2,675	5,526	5,639	6,551	7,496	8,415	9,480
Domestic taxes	2,115	2,094	537	581	1,253	1,277	1,846	1,887	2,555	2,580	648	1,511	3,085	3,128	3,780	4,511	5,244	6,134
Taxes on international trade and transactions	1,977	2,024	496	553	1,052	1,088	1,626	1,663	2,256	2,296	552	1,163	2,441	2,511	2,771	2,985	3,171	3,346
Non-tax revenue	100	122	3	28	52	52	72	72	90	90	14	52	102	102	114	126	139	153
Grants	1,169	1,040	208	210	419	397	820	847	1,209	1,397	225	483	1,231	1,258	727	804	872	963
Current grants	337	298	1	99	2	100	189	249	362	541	65	104	202	260	0	0	0	0
Capital grants	833	742	207	110	418	297	631	598	847	856	160	379	1,029	998	727	804	872	963
Total expenditure and lending minus repayments	6,607	6,143	1,538	1,367	3,408	3,211	5,270	5,235	7,309	7,282	1,882	4,241	9,184	8,969	10,170	11,380	12,392	13,436
of which: Social priority spending	355	355	61	38	163	163	265	265	434	434	80	228	577	615	802	1,058	1,197	1,420
Current expenditure	4,358	4,187	917	978	2,006	2,159	3,062	3,290	4,022	4,329	1,082	2,302	4,381	4,495	5,124	5,742	6,408	7,249
Wages and salaries	2,074	2,076	572	528	1,144	1,145	1,717	1,730	2,290	2,350	663	1,325	2,463	2,598	2,900	3,214	3,543	3,902
Interest payments	302	285	77	65	174	178	247	255	392	378	85	185	447	374	483	547	637	732
Foreign	85	70	19	17	57	64	77	80	119	125	23	63	149	114	159	226	303	384
Domestic	218	215	59	49	117	114	170	175	273	253	62	122	298	260	325	321	334	348
Other	1,769	1,749	239	316	629	728	1,040	1,102	1,284	1,450	302	735	1,368	1,462	1,630	1,858	2,093	2,464
Goods and services	299	282	76	60	152	152	303	284	379	379	92	185	461	462	579	684	843	1,036
Transfers and subsidies	1,470	1,467	163	256	478	576	737	818	905	1,071	210	550	907	1,000	1,052	1,174	1,250	1,428
of which: Air Madagascar	303	303	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
of which: JIRAMA	450	447	41	112	166	209	188	286	209	309	49	98	159	195	110	50	0	0
Treasury operations (net) [1]	212	77	29	69	58	108	58	203	56	151	32	57	103	60	110	122	135	150
Capital expenditure	2,249	1,957	621	389	1,403	1,052	2,208	1,945	3,288	2,952	801	1,939	4,803	4,475	5,046	5,639	5,983	6,187
Domestic financed	739	700	93	62	348	319	580	646	967	994	188	505	1,370	1,443	1,743	2,104	2,383	2,693
Foreign financed	1,510	1,256	528	328	1,054	733	1,628	1,299	2,320	1,959	613	1,434	3,433	3,032	3,304	3,535	3,600	3,493
Overall balance (commitment basis)	-1,245	-864	-294	4	-634	-397	-906	-766	-1,198	-919	-444	-1,031	-2,325	-1,971	-2,778	-2,954	-2,965	-2,839
Float (variation of accounts payable, + = increase)	-71	259	30	-144	155	-264	166	-192	0	-167	-25	6	0	-40	0	0	0	0
Variation of domestic arrears (+ = increase)	-235	-231	-175	-173	-192	-192	-212	-212	-225	-225	-16	-44	-94	-94	-48	-30	-30	-30
Overall balance (including grants, cash basis)	-1,552	-835	-439	-313	-671	-853	-953	-1,170	-1,423	-1,310	-485	-1,069	-2,419	-2,105	-2,825	-2,984	-2,995	-2,869
Domestic primary balance (new program definition) [2]	...	...	...	...	...	...	0	-59	305	22	29	105	323	178	282	324	400	423
Domestic primary balance (old program definition) [3]	38	240	104	286	177	217	...	...	...	...	...	...	...	...	...	...	...	...
Total financing	1,552	837	439	313	671	853	952	1,170	1,423	1,310	485	1,070	2,357	2,050	2,704	2,827	2,796	2,600
Foreign borrowing (residency principle)	809	502	270	169	527	473	831	681	1,247	1,019	406	958	2,191	1,879	2,346	2,429	2,387	2,137
External borrowing, Gross	1,080	751	321	242	637	589	997	854	1,473	1,257	453	1,054	2,404	2,083	2,576	2,731	2,728	2,530
Budget support loans	403	236	0	24	0	153	0	153	0	153	0	0	0	49	0	0	0	0
of which: Air Madagascar	124	0	0	0	0	131	0	131	0	131	0	0	0	0	0	0	0	0
Project loans	678	515	321	217	637	435	997	700	1,473	1,103	453	1,054	2,404	2,034	2,576	2,731	2,728	2,530
Amortization on a due basis (-)	-272	-249	-51	-72	-110	-115	-165	-173	-227	-237	-47	-96	-213	-204	-230	-302	-340	-393
Domestic borrowing (residency principle)	743	335	169	1	144	380	121	489	176	291	79	111	166	171	358	398	409	463
Monetary sector	532	151	-1	2	-9	293	-27	384	98	239	63	81	137	143	306	341	346	394
of which: Air Madagascar	49	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Non-monetary sector	211	276	170	-2	154	87	148	105	78	52	16	30	29	28	51	57	63	69
of which: Air Madagascar	131	133	0	0	0	0	0	0	-52	-53	0	0	-51	-52	-32	0	0	0
Treasury correspondent accounts (net)	0	-97	0	138	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Excess financing [4]	0	2	0	0	0	0	0	0	0	3	-95	-254	-793	-279	-1,297	-1,744	-1,950	-2,251
of which: budget support to be programmed	0	2	0	0	0	0	0	0	0	0	0	1	-62	-55	-122	-158	-199	-269

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

[1] Domestic taxes include MGA 72 bn (0.2 percent of GDP) in 2017 corresponding to tax arrears of Air Madagascar used for its recapitalization, offset in the line Treasury operations (net).

[2] Primary balance excl. foreign-financed investment and grants. Commitment basis.

[3] Up to June 2018, primary balance excl. foreign-financed investment (but grants included). In 2017 adjusted for financial assistance to Air Madagascar (MGA 303 billion) and the shortfall of program grants (MGA 8 billion).

[4] A negative value indicates allocated financing with the disbursement schedule to be agreed.

Table 4. Madagascar: Fiscal Operations of the Central Government, 2016-23

(Percent of GDP)

	2016	2017		2018		2019		2020	2021	2022	2023
	Prel. Est.	EBS 17/110	Prel. Est.	EBS 17/110	Proj.	EBS 17/110	Proj.	Projections			
Total revenue and grants	14.7	15.0	14.7	15.1	15.7	15.0	15.3	14.4	14.8	15.0	15.3
Total revenue	11.2	11.7	11.8	12.1	12.2	12.3	12.5	13.0	13.4	13.6	13.9
Tax revenue [1]	10.9	11.4	11.5	11.9	12.0	12.1	12.3	12.8	13.2	13.4	13.7
Domestic taxes	5.7	5.9	5.8	6.3	6.4	6.8	6.8	7.4	7.9	8.4	8.9
Taxes on international trade and transactions	5.2	5.5	5.6	5.6	5.7	5.3	5.5	5.4	5.2	5.1	4.8
Non-tax revenue	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Grants	3.5	3.3	2.9	3.0	3.4	2.7	2.7	1.4	1.4	1.4	1.4
Current grants	0.7	0.9	0.8	0.9	1.3	0.4	0.6	0.0	0.0	0.0	0.0
Capital grants	2.8	2.3	2.1	2.1	2.1	2.3	2.2	1.4	1.4	1.4	1.4
Total expenditure and lending minus repayments	16.0	18.5	17.1	18.0	18.0	20.1	19.6	19.8	20.0	19.8	19.5
of which: Social priority spending	0.8	1.0	1.0	1.1	1.1	1.3	1.3	1.6	1.9	1.9	2.1
Current expenditure	10.8	12.2	11.7	9.9	10.7	9.6	9.8	10.0	10.1	10.2	10.5
Wages and salaries	5.6	5.8	5.8	5.7	5.8	5.4	5.7	5.7	5.7	5.7	5.7
Interest payments	0.9	0.8	0.8	1.0	0.9	1.0	0.8	0.9	1.0	1.0	1.1
Foreign	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.4	0.5	0.6
Domestic	0.7	0.6	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.5	0.5
Other	3.7	4.9	4.9	3.2	3.6	3.0	3.2	3.2	3.3	3.3	3.6
Goods and services	0.6	0.8	0.8	0.9	0.9	1.0	1.0	1.1	1.2	1.3	1.5
Transfers and Subsidies	3.1	4.1	4.1	2.2	2.6	2.0	2.2	2.1	2.1	2.0	2.1
of which: Air Madagascar	0.0	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
of which: JIRAMA	0.9	1.3	1.2	0.5	0.8	0.3	0.4	0.2	0.1	0.0	0.0
Treasury operations (net) [1]	0.6	0.6	0.2	0.1	0.4	0.2	0.1	0.2	0.2	0.2	0.2
Capital expenditure	5.2	6.3	5.5	8.1	7.3	10.5	9.8	9.8	9.9	9.5	9.0
Domestic financed	1.2	2.1	2.0	2.4	2.5	3.0	3.2	3.4	3.7	3.8	3.9
Foreign financed	4.0	4.2	3.5	5.7	4.8	7.5	6.6	6.4	6.2	5.7	5.1
Overall balance (commitment basis)	-1.3	-3.5	-2.4	-3.0	-2.3	-5.1	-4.3	-5.4	-5.2	-4.7	-4.1
Float (variation of accounts payable, + = increase)	0.5	-0.2	0.7	0.0	-0.4	0.0	-0.1	0.0	0.0	0.0	0.0
Variation of domestic arrears (+ = increase)	-1.2	-0.7	-0.6	-0.6	-0.6	-0.2	-0.2	-0.1	-0.1	0.0	0.0
Overall balance (including grants, cash basis)	-2.0	-4.3	-2.3	-3.5	-3.2	-5.3	-4.6	-5.5	-5.2	-4.8	-4.2
Domestic primary balance (new program definition) [2]	…	…	…	0.8	0.1	0.7	0.4	0.6	0.6	0.6	0.6
Total financing	2.0	4.3	2.3	3.5	3.2	5.2	4.5	5.3	5.0	4.5	3.8
Foreign borrowing (residency principle)	0.7	2.3	1.4	3.1	2.5	4.8	4.1	4.6	4.3	3.8	3.1
External borrowing, gross	1.4	3.0	2.1	3.6	3.1	5.3	4.5	5.0	4.8	4.3	3.7
Budget support loans	0.2	1.1	0.7	0.0	0.4	0.0	0.1	0.0	0.0	0.0	0.0
Project loans	1.2	1.9	1.4	3.6	2.7	5.3	4.4	5.0	4.8	4.3	3.7
Amortization on a due basis (-)	-0.7	-0.8	-0.7	-0.6	-0.6	-0.5	-0.4	-0.4	-0.5	-0.5	-0.6
Domestic borrowing (residency principle)	1.4	2.1	0.9	0.4	0.7	0.4	0.4	0.7	0.7	0.7	0.7
Monetary sector	0.7	1.5	0.4	0.2	0.6	0.3	0.3	0.6	0.6	0.6	0.6
Non-monetary sector	0.9	0.6	0.8	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Treasury correspondent accounts (net)	-0.2	0.0	-0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Excess financing [3]	0.0	0.0	0.0	0.0	0.0	-1.7	-0.6	-2.5	-3.1	-3.1	-3.3
of which: budget support to be programmed	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.3	-0.3	-0.4

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

[1] Domestic taxes include MGA 90bn (0.3 percent of GDP) in 2016 and MGA 72 bn (0.2 percent of GDP) in 2017 corresponding to tax arrears of Air Madagascar used for its recapitalization, offset in the line Treasury operations (net).

[2] Primary balance excl. foreign-financed investment and grants. Commitment basis.

[3] A negative value indicates allocated financing with the disbursement schedule to be agreed.

Table 5. Madagascar: Balance of Payments, 2016-23

	2016	2017		2018		2019		2020	2021	2022	2023
	Prel. Est.	EBS 17/110	Prel. Est.	EBS 17/110	Proj.	EBS 17/110	Proj.	Projections			
	(Millions of SDRs)										
Current account	40.9	-281.4	-25.3	-361.2	-184.8	-465.8	-316.0	-430.9	-486.1	-535.6	-524.4
Goods and services	-162.8	-595.7	-300.0	-627.5	-504.8	-696.2	-563.0	-637.8	-689.9	-732.4	-713.9
Trade balance of goods	-190.0	-584.1	-322.3	-586.3	-470.4	-648.4	-504.9	-610.9	-670.1	-697.8	-708.4
Exports, f.o.b.	1,556.4	1,724.1	2,020.9	1,804.2	2,029.2	1,990.3	2,138.6	2,289.1	2,453.7	2,612.3	2,766.2
Of which: Mining	388.2	447.6	510.3	514.8	588.6	530.6	617.6	639.0	669.2	700.4	733.7
Imports, f.o.b.	-1,746.4	-2,308.3	-2,343.2	-2,390.5	-2,499.6	-2,638.7	-2,643.5	-2,900.0	-3,123.8	-3,310.1	-3,474.6
Of which: Petroleum products	-241.7	-283.9	-292.0	-303.7	-347.2	-326.1	-342.1	-343.6	-351.8	-365.3	-383.4
Of which: Food	-191.2	-234.3	-339.0	-192.9	-232.6	-199.5	-208.0	-210.4	-215.2	-223.3	-230.3
Of which: Intermediate goods and capital	-609.4	-719.3	-785.6	-794.3	-884.2	-927.2	-925.0	-1,050.3	-1,124.5	-1,165.6	-1,187.0
Services (net)	27.2	-11.6	22.3	-41.2	-34.5	-47.8	-58.1	-26.9	-19.8	-34.5	-5.5
Receipts	854.0	862.7	917.2	881.1	952.8	928.0	1,008.5	1,042.5	1,076.6	1,110.7	1,143.9
Payments	-826.8	-874.3	-894.9	-922.3	-987.3	-975.8	-1,066.6	-1,069.4	-1,096.5	-1,145.2	-1,149.4
Income (net)	-293.2	-273.1	-255.2	-313.9	-271.6	-330.7	-284.4	-297.8	-314.4	-333.2	-351.6
Receipts	24.3	26.4	27.5	29.2	29.0	32.2	33.3	38.3	44.1	50.6	58.2
Payments	-317.5	-299.6	-282.7	-343.1	-300.6	-362.9	-317.7	-336.1	-358.5	-383.9	-409.8
Of which: interest on public debt	-14.8	-19.7	-16.1	-26.2	-17.6	-31.3	-23.0	-30.8	-42.1	-54.0	-65.9
Current transfers (net)	496.9	587.5	529.9	580.2	591.6	561.1	531.3	504.7	518.2	529.9	541.1
Official transfers	100.3	140.6	104.0	148.5	160.7	116.1	88.7	53.8	57.2	61.2	65.4
Of which: Budget aid [1]	50.4	77.0	63.8	80.1	114.2	42.6	40.9	0.0	0.0	0.0	0.0
Of which: Other (net)	49.9	63.6	40.2	68.5	46.5	73.5	47.7	53.8	57.2	61.2	65.4
Private transfers	396.6	446.9	425.9	431.6	430.9	445.0	442.6	450.9	461.0	468.7	475.7
Capital and financial account	169.7	348.9	194.1	417.9	221.5	554.0	345.2	536.0	592.8	603.7	579.5
Capital account	199.8	193.3	170.3	187.1	180.7	216.5	201.8	140.9	149.5	155.8	165.1
Of which: Project grant [1]	199.8	193.3	170.3	187.1	180.7	216.5	201.8	140.9	149.5	155.8	165.1
Financial account	-3.8	155.6	39.8	230.8	40.8	337.5	143.4	395.1	443.4	448.0	414.4
Foreign direct and portfolio investment	324.2	301.6	258.1	302.3	266.3	327.6	296.6	327.6	355.8	384.4	414.5
Other investment	-328.0	-146.0	-218.3	-71.5	-225.5	9.8	-153.2	67.5	87.5	63.6	-0.1
Government	48.7	189.3	116.7	274.7	214.8	461.1	379.8	454.6	451.7	426.3	366.4
Drawing	99.2	252.3	174.1	324.8	265.0	505.8	421.1	499.2	507.9	487.1	433.8
Project drawings [1]	86.8	157.5	118.9	324.8	232.3	505.8	411.1	499.2	507.9	487.1	433.8
Budgetary support [1]	12.4	94.8	55.2	0.0	32.7	0.0	10.0	0.0	0.0	0.0	0.0
Amortization	-50.5	-63.0	-57.4	-50.0	-50.2	-44.8	-41.3	-44.6	-56.2	-60.8	-67.4
Private sector	-147.4	-146.7	-98.1	-153.6	-129.1	-146.0	-246.8	-137.4	-141.6	-146.9	-151.6
Banks	-5.1	-39.1	1.8	-5.3	-5.3	-2.6	-2.6	0.0	0.0	0.0	0.0
Other (inc. unrepatriated export revenues)	-224.2	-162.7	-238.7	-187.4	-306.0	-302.6	-283.5	-249.7	-222.6	-215.9	-214.9
Errors and omissions	-26.3	0.0	-16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overall balance	210.6	67.5	168.8	56.7	36.7	88.1	29.1	105.1	106.7	68.1	55.1
Financing	-210.8	-67.5	-168.7	-56.7	-36.8	-101.3	-40.2	-128.7	-136.0	-103.6	-101.3
Central bank (net; increase = –)	-210.8	-67.5	-168.7	-56.7	-36.8	-101.3	-40.2	-128.7	-136.0	-103.6	-101.3
Use of IMF credit (net)	20.9	88.6	83.5	56.7	57.0	59.5	59.8	-6.1	-12.2	-18.5	-40.3
Other assets, net (increase = –) [2]	-231.7	-156.1	-252.3	-113.4	-93.7	-160.8	-100.0	-122.6	-123.8	-85.0	-61.0
Debt relief and cancellation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financing gap	0.2	0.0	0.0	0.0	0.0	13.1	11.0	23.5	29.3	35.5	46.2
	(Percent of GDP; unless otherwise indicated)										
Memorandum items:											
Grants	3.5	3.3	2.8	3.0	3.4	2.7	2.6	1.4	1.4	1.4	1.4
Loans	1.4	3.0	2.1	3.6	3.1	5.3	4.5	5.0	4.8	4.3	3.7
Direct investment	4.5	3.6	3.1	3.4	3.1	3.4	3.2	3.3	3.4	3.4	3.5
Current account											
Excluding net official transfers	-2.9	-6.7	-3.1	-7.0	-5.6	-7.5	-6.0	-5.8	-6.0	-6.2	-5.8
Including net official transfers	0.6	-3.4	-0.3	-4.0	-2.2	-4.8	-3.4	-4.3	-4.6	-4.8	-4.4
Debt service (percent of exports of goods)	29.4	27.2	21.8	23.5	19.2	19.8	16.6	14.7	13.5	12.3	11.3
Export of goods volume (percent change)	1.3	-8.5	-8.5	3.1	-0.8	13.4	6.2	7.1	7.0	6.3	5.2
Import of goods volume (percent change)	19.7	1.7	11.3	4.6	3.5	9.9	7.3	10.8	8.2	6.2	5.0
Gross official reserves (millions of SDR)	834	991	1,087	1,104	1,180	1,265	1,280	1,403	1,527	1,612	1,673
Months of imports of goods and nonfactor services	3.9	3.7	4.0	4.0	4.1	4.2	4.1	4.2	4.3	4.3	4.3
Terms of Trade (estimated)	22.3	-6.9	17.7	2.5	-1.8	-3.1	0.7	0.9	0.6	0.3	0.7

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

[1] Only includes external financial support with a disbursement schedule.
[2] Includes reserve accumulation.

Table 6. Madagascar: Monetary Accounts, 2016-23[1]

(Billions of Ariary; unless otherwise indicated)

	2016	2017		2018		2019		2020	2021	2022	2023
	Dec	Dec		Dec		Dec		Dec	Dec	Dec	Dec
	Actuals	EBS 17/110	Actuals	EBS 17/110	Proj.	EBS 17/110	Proj.	Projections			
Net foreign assets	3,587	3,977	4,420	4,492	4,839	5,190	5,267	6,169	7,172	8,056	9,057
Net foreign assets (BCM)	2,709	2,944	3,530	3,375	3,875	4,012	4,247	5,106	6,065	6,903	7,855
Net foreign assets (deposit money banks)	878	1,034	890	1,117	964	1,178	1,020	1,063	1,107	1,152	1,202
Net domestic assets	5,421	6,665	6,188	7,478	7,125	8,480	8,241	9,511	10,982	12,546	14,273
Domestic credit	6,174	7,279	7,001	8,167	8,016	9,137	9,022	10,297	11,704	13,236	14,982
Net credit to government	1,993	2,533	2,093	2,642	2,430	2,790	2,585	2,902	3,254	3,610	4,019
BCM	1,028	1,292	886	1,198	918	1,191	870	772	729	686	643
DMBs	644	912	938	1,104	1,145	1,248	1,336	1,741	2,125	2,514	2,956
Gross credits (mainly BTAs)	1,052	1,322	1,327	1,541	1,559	1,692	1,777	2,208	2,618	3,032	3,500
Deposits	-408	-410	-389	-437	-414	-443	-441	-467	-493	-518	-545
Other credits	320	329	269	340	367	351	379	390	401	411	421
Credit to the economy	4,182	4,745	4,907	5,525	5,586	6,347	6,437	7,395	8,451	9,626	10,962
Credit to public enterprises	70	43	42	43	42	43	42	42	42	42	42
Credit to private sector	4,094	4,621	4,846	5,401	5,525	6,223	6,376	7,334	8,389	9,564	10,901
Other credits	18	81	19	81	19	81	19	19	19	19	19
Other items (net)	-754	-613	-813	-689	-891	-657	-781	-786	-722	-690	-709
BCM	305	503	403	515	410	545	518	611	671	699	677
Other	-1,059	-1,117	-1,216	-1,204	-1,301	-1,202	-1,299	-1,397	-1,393	-1,389	-1,386
Money and quasi-money (M3)	9,007	10,643	10,608	11,971	11,964	13,670	13,508	15,680	18,155	20,602	23,330
Foreign currency deposits	955	1,121	1,006	1,204	1,080	1,265	1,136	1,179	1,224	1,269	1,318
Short term obligations of commercial banks	45	34	51	34	51	34	51	51	51	51	51
Broad money (M2)	8,007	9,488	9,551	10,733	10,833	12,371	12,321	14,450	16,880	19,282	21,961
Currency in circulation	2,632	3,195	3,101	3,572	3,498	3,731	3,911	4,373	4,889	5,533	6,150
Demand deposits in local currency	2,847	3,271	3,506	3,740	3,821	4,545	4,404	5,311	6,354	7,312	8,436
Quasi-money including time deposits	2,528	3,023	2,943	3,421	3,514	4,095	4,007	4,766	5,637	6,437	7,375
	(Percentage change relative to broad money at beginning of the year)										
Net foreign assets	14.8	4.9	10.4	5.4	4.4	6.5	4.0	7.3	6.9	5.2	5.2
Net domestic assets	8.0	15.5	9.6	8.6	9.8	9.3	10.3	10.3	10.2	9.3	9.0
Domestic credit	9.3	13.8	10.3	9.4	10.6	9.0	9.3	10.4	9.7	9.1	9.1
Net credit to government	4.5	6.7	1.3	1.2	3.5	1.4	1.4	2.6	2.4	2.1	2.1
Credit to the economy	4.8	7.0	9.1	8.2	7.1	7.7	7.9	7.8	7.3	7.0	6.9
Credit to public enterprises	0.1	-0.3	-0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Credit to private sector	4.7	6.6	9.4	8.2	7.1	7.7	7.9	7.8	7.3	7.0	6.9
Other items (net; asset = +)	-1.3	1.8	-0.7	-1.8	-0.8	0.3	1.0	0.0	0.4	0.2	-0.1
	(Percentage change year-on-year)										
Broad money (M2)	21.3	18.5	19.3	13.1	13.4	15.3	13.7	17.3	16.8	14.2	13.9
Currency in circulation	24.4	21.4	17.8	11.8	12.8	4.5	11.8	11.8	11.8	13.2	11.1
Demand deposits in local currency	24.6	14.9	23.2	14.4	9.0	21.5	15.3	20.6	19.6	15.1	15.4
Quasi-money in local currency	14.9	19.5	16.4	13.2	19.4	19.7	14.0	19.0	18.3	14.2	14.6
Credit to the private sector (in nominal terms)	8.2	12.9	18.4	16.9	14.0	15.2	15.4	15.0	14.4	14.0	14.0
Credit to the private sector (in real terms)	1.2	4.8	9.4	9.0	6.3	9.0	9.0	9.0	9.0	9.0	9.0
Memorandum items:											
Money multiplier (M3/reserve money)	2.3	2.3	2.3	2.3	2.4	2.5	2.4	2.5	2.5	2.5	2.6
Velocity of money (GDP/end-of-period M3)	3.53	3.36	3.38	3.38	3.39	3.34	3.39	3.27	3.13	3.04	2.96

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

[1] End of period.

Table 7. Madagascar: Balance Sheet of the Central Bank, 2016-19[1]

(Billions of Ariary; unless otherwise indicated)

	2016	2017		2018								2019		
	Dec	Dec		March		June		Sep		Dec		March	June	Dec
	Actuals	EBS 17/110	Actuals	EBS 17/110	Actuals	EBS 17/110	Proj.	EBS 17/110	Proj.	EBS 17/110	Proj.	Proj.	Proj.	Proj.
Net foreign assets	2,709	2,944	3,530	2,949	3,547	2,932	3,435	3,148	3,650	3,375	3,875	3,879	3,877	4,247
Gross foreign assets	3,744	4,360	4,988	4,369	5,042	4,512	4,944	4,741	5,318	5,135	5,713	5,738	5,910	6,468
Gross foreign liabilities	-1,035	-1,416	-1,458	-1,419	-1,495	-1,581	-1,509	-1,593	-1,668	-1,760	-1,838	-1,858	-2,034	-2,220
Net domestic assets	1,136	1,611	1,029	1,457	913	1,733	967	1,618	1,088	1,746	1,198	1,099	1,212	1,399
Credit to government (net)	1,028	1,292	886	1,231	887	1,220	1,042	1,209	1,053	1,198	918	760	749	870
Claims on central government	1,323	1,388	1,275	1,327	1,134	1,316	1,207	1,305	1,288	1,294	1,269	1,102	1,091	1,070
Statutory advances	298	260	174	210	84	210	158	210	210	210	212	55	55	55
Securitized debt (T-bonds and bills)	829	786	786	776	776	765	765	754	754	743	743	733	722	701
Discounted bills of exchange	78	78	39	78	0	78	9	78	49	78	39	39	39	39
On-lending of funds	117	262	275	262	273	262	273	262	273	262	273	273	273	273
Other credits	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Government deposits	-295	-96	-389	-96	-248	-96	-166	-96	-236	-96	-352	-342	-342	-200
Claims on other sectors	12	18	15	19	17	20	18	21	19	22	19	21	22	23
Claims on banks: Liquidity operations (+ = injection)	-210	-202	-276	-300	-465	-18	-445	-126	-363	11	-149	-249	-33	-13
Other items (net; asset +)	305	503	403	507	474	511	353	514	380	515	410	567	474	518
Reserve money	3,845	4,555	4,559	4,406	4,460	4,664	4,402	4,767	4,738	5,122	5,073	4,978	5,089	5,646
Currency in circulation	2,632	3,195	3,101	2,920	2,971	3,192	3,032	3,261	3,193	3,572	3,498	3,382	3,495	3,911
Bank reserves	1,212	1,360	1,457	1,485	1,488	1,471	1,370	1,505	1,544	1,549	1,574	1,595	1,593	1,735
Currency in banks	202	209	236	226	217	236	211	231	236	277	236	253	262	293
Deposits	1,009	1,151	1,221	1,259	1,271	1,235	1,159	1,274	1,308	1,272	1,338	1,342	1,331	1,442
	(Cumulative annual flows)													
Memorandum items:														
Net foreign assets	946	235	821	6	17	-12	-95	205	120	431	345	4	2	373
Millions of SDRs	207	65	165	-8	-12	-21	-43	17	-15	57	23	-8	-17	37
Net domestic assets	-168	475	-107	-154	-116	122	-62	7	59	135	169	-99	14	201
Credit to government (net)	-21	263	-142	-61	1	-72	156	-83	167	-93	32	-158	-169	-48
Reserve money	778	710	714	-149	-99	109	-156	212	179	567	514	-94	16	574
	(Millions of SDRs)													
Net foreign assets	604	669	769	661	757	648	726	686	754	726	793	785	776	830

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

[1] End of period.

Table 8. Madagascar: Financial Soundness Indicators, 2009-18[1]

(Ratios, percent)

	2009 Dec	2010 Dec	2011 Dec	2012 Dec	2013 Dec	2014 Dec	2015 Dec	2016 Dec	2017 Mar	2017 June	2017 Sep	2017 Dec	2018 Mar
Capital Adequacy													
Regulatory capital to risk-weighted assets	15.6	15.5	16.0	16.2	15.1	14.0	13.8	13.6	...	...	...	...	...
Capital to assets	9.2	9.8	9.4	9.8	10.6	11.2	11.6	10.7	10.8	9.9	10.2	10.4	10.7
Regulatory Tier 1 capital to risk-weighted assets	16.2	16.1	17.0	16.9	16.0	14.6	14.8	14.1	...	...	...	...	...
Tier 1 to assets	7.8	8.2	7.9	8.1	8.6	8.5	8.7	8.0	...	...	...	...	...
Non-performing loans net of provisions to capital	25.0	25.3	26.0	22.0	25.6	20.9	19.5	16.5	16.3	18.7	17.9	15.5	16.9
Net open position in equities to capital	5.2	4.8	5.2	4.4	4.8	5.2	5.4	5.1	4.8	5.4	4.6	4.6	4.3
Asset Quality													
Non-performing loans to total gross loans	8.1	9.6	10.7	11.1	11.6	10.1	9.0	8.4	8.2	8.2	8.3	7.3	7.9
Earnings and Profitability													
Return on assets	2.2	2.1	2.4	2.6	3.0	4.2	4.6	3.9	4.0	4.1	4.1	4.4	4.5
Return on equity	22.5	21.2	24.5	26.2	30.0	38.9	41.5	35.9	36.8	39.2	39.5	41.9	43.2
Interest margin to gross income	58.1	59.3	59.2	60.5	60.9	56.5	55.0	60.5	63.8	63.3	62.9	62.0	63.6
Non-interest expenses to gross income	59.5	60.5	61.5	65.1	62.2	55.2	55.0	58.4	58.2	57.6	56.8	55.5	53.6
Trading income to total income	7.9	7.8	5.7	4.9	3.8	8.2	8.1	4.9	3.0	3.0	3.3	3.8	4.0
Personnel expenses to non-interest expenses	29.9	31.0	30.1	31.4	32.8	34.2	33.1	32.9	33.6	34.0	33.7	33.0	34.1
Liquidity													
Liquid assets to total assets (liquid asset ratio)	36.8	33.8	41.6	42.9	37.8	34.1	31.3	37.3	38.2	34.7	35.3	36.8	40.2
Liquid assets to short-term liabilities	56.0	50.7	60.4	64.0	56.4	51.5	46.9	54.6	57.2	50.1	51.7	53.4	59.7
Customer deposits to total (non-interbank) loans	163.8	164.5	164.9	177.7	150.4	144.7	137.4	145.6	149.6	145.0	148.5	146.3	144.6
Sensitivity to Market Risk													
Net open position in foreign exchange to capital	18.2	18.4	13.7	9.6	12.8	10.9	11.7	8.6	5.2	4.9	7.4	9.0	6.7
Spread between reference lending and deposit rates (basis point)	1,065	1,120	1,167	1,186	1,245	1,202	1,162	1,180	1,157	1,164	1,183	1,187	1,146
Foreign currency-denominated loans to total loans	20.8	23.6	20.5	20.7	16.1	15.6	15.8	12.8	14.4	14.3	13.9	15.0	12.2
Foreign currency-denominated liabilities to total liabilities	17.8	19.3	18.3	17.5	16.3	17.5	16.6	15.7	16.6	16.2	15.1	15.0	14.6

Source: Malagasy authorities.

[1] Ratios only concern banking sector.

Table 9. Madagascar: Quantitative Performance Criteria and Indicative Targets for the ECF Arrangement, September 2017-March 2018

	2017								2018			
	End-September				End-December				End-March			
	Indicative Targets	Adjusted	Estimation	Status	Performance Criteria	Adjusted	Estimation	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 2]	-241	-423	86	Met	48	16	240	Met	104	104	286	Met
External												
Ceiling on accumulation of new external payment arrears (US$ millions) [3]	0		0	Met	0		0	Met	0		0	Met
Ceiling on new nonconcessional external debt with original maturity of more than one year, contracted or guaranteed by the central government or BFM (US$ millions) [4]												
Grant element of less than 35 percent	383		173	Met	383		173	Met	383		213	Met
Grant element of less than 20 percent	100		55	Met	100		55	Met	100		95	Met
Ceiling on new nonconcessional external debt with original maturity of up to and including one year, contracted or guaranteed by the central government or BFM (US$ millions) [3]	0		0	Met	0		0	Met	0		0	Met
Central bank												
Floor on net foreign assets (NFA) of BFM (millions of SDRs) [5]	506	464	615	Met	537	480	782	Met	630	605	793	Met
Ceilings on net domestic assets (NDA) of BFM [5]	1,999	2,185	1,406	Met	1,967	2,221	1,083	Met	1,533	1,645	935	Met
Indicative targets												
Floor on social priority spending [1]	174		214	Met	298		358	Met	56		38	Not met
Floor on gross tax revenue [1 2]	2,997		3,094	Met	4,132		4,328	Met	1,083		1,149	Met
Memorandum items												
Official external program support (millions of SDRs) [4]	161		119		239		182		235		210	
Official external program grants (millions of SDRs) [1]	41		0		71		64		0		23	
New concessional loans, contracted or guaranteed by the central government or BFM (US$ millions) [4]	1,025		967		1,168		1,155		1,407		1,156	
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] Fiscal spending and gross tax revenues exclude operations for Air Madagascar (budget transfers and mutual tax cancellation) in 2017.

[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 rates.

Table 10. Madagascar: Structural Benchmarks, October-December 2017

Action	Tentative Dates	Status
Promoting inclusive growth		
Adopt by the Cabinet a medium-term strategy to enhance public investment management capacity.	End-Dec. 2017	**Met.**
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	**Met.**
Mobilizing fiscal revenue		
Employ the new Tax Identification Number (TIN) throughout all departments of the Ministry of Finance and Budget and CNAPS.	End-Dec. 2017	**Met.**
Improving the composition and quality of fiscal spending		
Adopt and implement an automatic fuel pricing formula with a smoothing mechanism by end-September 2018, while avoiding any budget costs from fuel pricing in the interim.	Continuous benchmark	**Not met.** Liabilities to fuel distributors started to accumulate in January 2018.
Enhancing economic governance		
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	**Met.**
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	**Met.**
Strengthening financial sector development		
Issue the implementing decrees and regulations for the new law on electronic money.	End-Dec. 2017	**Met.**
Improving quality of statistics		
Submit to Parliament a new statistics law modernizing and regulating data collections.	End-Dec. 2017	**Not met.** Submitted to Parliament in February.

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

(Millions of U.S. Dollars)

	2015	2016	2017	2018	2019	2018-19
		Prel. Est.		Projections		Proj.
Total financing requirements	859	911	963	1,131	1,454	2,585
Current account deficit	184	-57	35	270	463	732
Net repayment of private sector debt	173	205	136	188	361	550
Repayment of government debt	39	70	80	73	60	134
Gross reserves accumulation (+ = increase) [1]	90	326	349	137	146	283
IMF repayments	-17	15	12	9	4	13
Other (inc. unrepatriated export revenues)	389	352	351	454	419	873
Available financing	859	911	963	1,131	1,438	2,569
Foreign direct and portfolio investment	436	452	358	389	434	823
Budget support loans	134	17	77	48	15	62
Project support	246	398	401	603	897	1,500
Project grants	130	278	236	264	295	559
Project drawings	116	121	165	339	602	941
IMF: RCF disbursement and ECF arrangement	43	44	128	92	92	184
Budget support to be programmed	0	0	0	0	16	16
Memorandum items:						
Gross official reserves [1]	839	1,160	1,506	1,723	1,874	...

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

[1] The change in gross official reserves can deviate from the gross reserves accumulation because of exchange rate movements.

Table 12. Madagascar: Projected External Borrowing, 2018-19

Public and publicly-guaranteed external debt contracted	Volume of new debt		PV of new debt (program purposes)	
	USD million	Percent	USD million	Percent
By sources of debt financing	**1372**	**100**	**781**	**100**
Concessional debt, of which	**1243**	**91**	**674**	**86**
Multilateral debt	731	53	342	44
Bilateral debt	512	37	332	43
Other	0	0	0	0
Non-concessional debt, of which	**129**	**9**	**106**	**14**
Grant element between 0 and 35 percent	85	6	62	8
Commercial terms	44	3	44	6
By Creditor Type	**1372**	**100**	**781**	**100**
Multilateral	763	56	366	47
Bilateral - Paris Club	22	2	12	2
Bilateral - Non-Paris Club	547	40	362	46
Other	40	3	40	5
Uses of debt financing	**1372**	**100**	**781**	**100**
Infrastructure	1100	80	629	81
Social Spending	0	0	0	0
Budget Financing	53	4	45	6
Other 1/	218	16	106	14

1/ Includes Agriculture and Financial Sector Development.

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

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

Availability Date	Disbursement (In percent of quota)	Disbursement (In SDRs)	Conditions for Disbursement
July 27, 2016	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 14. Madagascar: Indicators of Capacity to Repay the Fund, 2018-32

(As at June 1, 2018)

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
							(Millions of SDRs)								
Fund obligations based on existing credit															
Principal	2.2	3.1	6.1	12.2	18.5	37.2	34.1	31.1	25.0	18.7	0.0	0.0	0.0	0.0	0.0
Charges and interest	0.5	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Fund obligations based on existing and prospective credit															
Principal	2.2	3.1	6.1	12.2	18.5	37.2	49.9	56.2	50.1	43.8	25.1	9.4	0.0	0.0	0.0
Charges and interest	0.5	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Total obligations based on existing and prospective credit															
Millions of SDRs	2.7	4.1	7.2	13.3	19.6	38.2	50.9	57.3	51.2	44.9	26.2	10.5	1.1	1.1	1.1
Billions of Ariary	12.7	20.3	37.0	71.4	109.5	223.0	308.6	361.0	335.3	305.7	185.5	77.2	8.0	8.4	8.7
Percent of exports of goods and services	0.1	0.1	0.2	0.4	0.5	1.0	1.2	1.2	1.0	0.9	0.5	0.2	0.0	0.0	0.0
Percent of debt service	2.1	3.5	5.2	8.4	11.2	19.8	22.7	21.0	16.3	12.1	6.2	2.2	0.2	0.2	0.2
Percent of GDP	0.0	0.0	0.1	0.1	0.2	0.3	0.4	0.4	0.4	0.3	0.2	0.1	0.0	0.0	0.0
Percent of government revenue	0.3	0.4	0.6	0.9	1.3	2.3	2.8	3.0	2.5	2.0	1.1	0.4	0.0	0.0	0.0
Percent of quota	1.1	1.7	2.9	5.4	8.0	15.6	20.8	23.4	20.9	18.4	10.7	4.3	0.4	0.4	0.4
Outstanding IMF credit based on existing and prospective drawings															
Millions of SDRs	248.8	308.6	302.5	290.3	271.7	234.6	184.7	128.5	78.4	34.6	9.4	0.0	0.0	0.0	0.0
Billions of Ariary	1,178.0	1,526.5	1,561.2	1,560.7	1,521.7	1,368.1	1,120.0	809.9	513.6	235.4	66.7	0.0	0.0	0.0	0.0
Percent of exports of goods and services	8.3	9.8	9.1	8.2	7.3	6.0	4.2	2.8	1.6	0.7	0.2	0.0	0.0	0.0	0.0
Percent of debt service	191.4	263.9	218.8	183.7	155.7	121.6	82.5	47.0	25.0	9.3	2.2	0.0	0.0	0.0	0.0
Percent of GDP	2.9	3.3	3.0	2.7	2.4	2.0	1.5	1.0	0.6	0.2	0.1	0.0	0.0	0.0	0.0
Percent of government revenue	23.7	26.6	23.4	20.5	17.8	14.2	10.3	6.6	3.8	1.6	0.4	0.0	0.0	0.0	0.0
Percent of quota	101.8	126.3	123.8	118.8	111.2	96.0	75.6	52.6	32.1	14.1	3.9	0.0	0.0	0.0	0.0
Net use of IMF credit (millions of SDRs)	60.7	59.8	-6.1	-12.2	-18.5	-37.2	-49.9	-56.2	-50.1	-43.8	-25.1	-9.4	0.0	0.0	0.0
Disbursements	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	0.0
Repayments and repurchases	2.2	3.1	6.1	12.2	18.5	37.2	49.9	56.2	50.1	43.8	25.1	9.4	0.0	0.0	0.0
Memorandum items:							(Billions of Ariary, unless otherwise indicated)								
Exports of goods and services (millions of SDRs)	2,982	3,147	3,332	3,530	3,723	3,910	4,353	4,616	4,900	5,207	5,535	5,888	6,258	6,661	7,095
Debt service	615.3	578.4	713.5	849.8	977.3	1,125.4	1,357.9	1,722.2	2,053.4	2,524.6	3,007.3	3,494.2	4,038.0	4,647.9	5,359.7
Nominal GDP (at market prices)	40,548	45,809	51,251	56,857	62,717	69,062	76,027	83,670	92,048	101,281	111,376	122,419	134,475	147,664	162,134
Government revenue	4,966	5,741	6,665	7,622	8,554	9,633	10,855	12,209	13,524	15,184	16,920	18,745	20,752	22,965	25,409
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.

REPUBLIC OF MADAGASCAR

Annex I. Fuel Price Subsidies

Fuel subsidies were introduced in 2010, with the stated objective of preserving the purchasing power of the population against the sharp rise in international oil prices. Subsidies took several forms, such as the reduction or suspension of taxes or a preferential exchange rate for oil imports, to compensate the fuel distributors.

While compensation was initially negotiated on vague grounds, an agreed reference price was defined in 2013, calculated monthly according to international oil prices, exchange rate, costs of transport and distributions, and taxes. Based on the volume of oil sold, the fuel distributors were owed a subsidy equal to the difference between pump and reference prices.

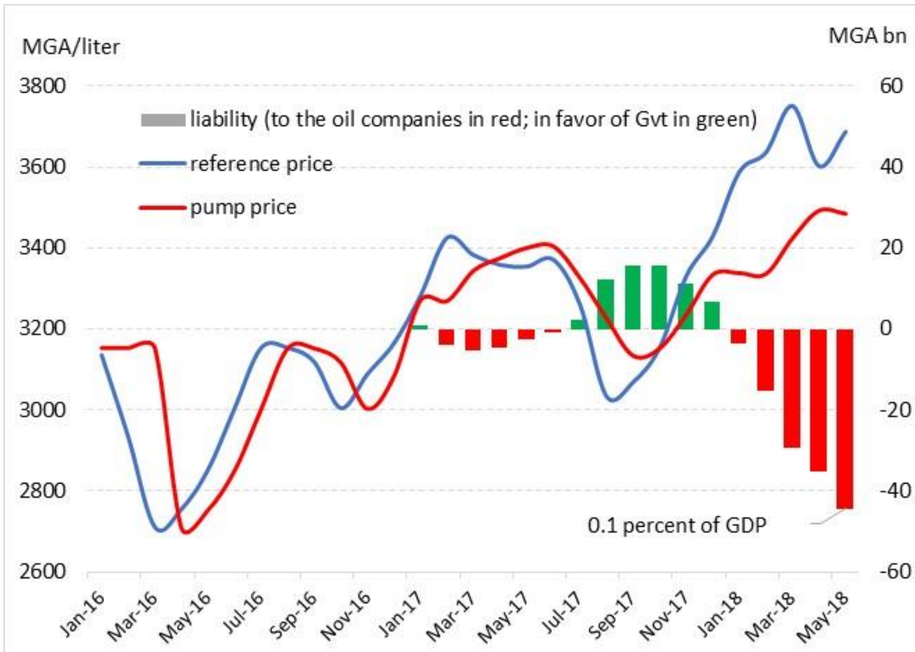
The system of fuel price administration has proven to be costly and its beneficial impact is largely questionable. It cost up to 1.5 percent of GDP per year between 2010 and 2012, and up to 0.8 percent of GDP each year between 2013 and 2015, which was higher than the total budget allocated for priority social spending over the same period. Its social impact in Madagascar is questionable: while kerosene is widely consumed by the poorest (for basic heating or lighting), this product represents only a small part of total consumption (and therefore of subsidies). On the other hand, consumption of gasoline and diesel is concentrated in the top welfare quintile. In total, fuel subsidies in Madagascar disproportionally benefited the wealthier households and were highly regressive. More globally, it is largely documented that fuel price subsidies generally do not reach those people most in need and could advantageously be replaced by more cost-effective and well targeted social safety net instruments. In a context of severe budget constraints, financing this cost also led to fiscal anomalies, including forcing the cost onto the Central Bank (through a preferential exchange rate for fuel distributors that has been fully removed at the end of 2015), the accumulation of government arrears in the payment of subsidies, and the suspension of payment of certain taxes owed by fuel distributors.

With the return to constitutional government and the sharp fall in international oil price starting in 2014, the government initiated the process of removing fuel subsidies. Gradual increases of pump prices took place starting July 2014, and the government instituted an automatic price adjustment mechanism in February 2016, to clear the gap between the reference prices and the pump prices. This new scheme worked satisfactorily in 2016 and 2017 (Text Figure). Pump prices were adjusted regularly, closely following the evolution of the reference prices, although occasionally with a small ad hoc deviation. Any liability to the oil distributors in case of temporary gap between the pump prices and the reference prices was settled through further increases in pump prices in following months, avoiding any budget cost. This approach limited the liability to oil distributors to a very low level. The gap was even in favor of the government in the second half of 2017, as prices at the pump remained above the reference price for several months.

However, this favorable situation reversed in early 2018: while the reference price increased significantly due to the upward reversal of international oil prices, pump prices were frozen in

January and February 2018. Despite an agreement on a reduction in oil companies' margins found in February and increases in pump prices in March and April, the gap with the reference price has significantly increased. The liability to the oil distributors is still limited (0.1 percent of GDP at the end of May 2018), but would increase if the gap between pump and reference prices is not reduced in coming months.

Figure 1. Madagascar: Oil Prices and Liability to Oil Companies



Source: Malagasy authorities, and IMF Staff

Annex II. Summary FSAP Action Plan

Key recommendations	Actions
Perform more frequent and penetrating supervision of banks and nonbanks to reduce the risks to stability. Regulators need to be better resourced and more independent and certain regulatory gaps need to be filled (for example, with regard to related-party lending).	The new banking law planned to be submitted to Parliament by end-2018 will enhance the powers and independence of the financial supervisory authority (CSBF), which is recruiting new staff and building capacity with the aim of fully implementing risk-based supervision by end-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 efforts to reduce corruption.	The new anti-money laundering law is pending approval by the Parliament.
Establish a legal and operational framework to intervene in and eventually resolve problem institutions to help contain moral hazard, limit the government's contingent liabilities, and protect savers.	The framework for corrective bank supervisory measures is being reinforced through the new microfinance law adopted in 2017 and the new banking law planned to be submitted to Parliament by end-2018.
Each government-owned non-bank financial institution should: (i) undergo a detailed operational and financial audit; (ii) be covered by independent prudential oversight; and (iii) according to international best practices, many should eventually be privatized.	Following audits in 2017, new strategies are being formulated for the public savings fund (CEM) and the postal financial services. Responsibility for insurance supervision to be fully transferred to CSBF by end-2019.
Promote modern payment methods—particularly forms of electronic money—to help reduce transaction costs and facilitate financial inclusion.	The law on electronic money and electronic money institutions was adopted in 2016 and a law regulating the national payment system is under preparation.
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 new central credit registry for banks, microfinance, and financial establishments was established in 2016. The law regulating the establishment and supervision of a private credit bureau was adopted in 2017.

Annex III. Actions to Combat Corruption

Several new laws have strengthened the anti-corruption legal framework:

- *The anti-corruption law* is essential for the prevention and detection of the laundering of the proceeds of corruption. The law criminalized corruption offences in line with UNCAC (United Nations Convention against Corruption) standards and facilitates the use of asset declarations.
- *The law on anti-corruption centers* established specialized, more independent tribunals.
- *The law on international cooperation and the draft law on asset recovery* ensures that judicial authorities can confiscate the instrumentalities and proceeds of crime in line with the standards of the Financial Action Task Force (FATF) and that the concerned government agencies can effectively participate in international cooperation in line with FATF and UNCAC standards.
- *The draft law on Anti-Money Laundering/Combating the Financing of Terrorism (AML/CFT)* aims to (i) allow concerned government agencies to investigate and prosecute the laundering of proceeds of corruption; (ii) require financial and non-financial institutions and professionals to carry out customer due diligence (CDD) and report suspicious activity; (iii) require enhanced CDD of politically exposed persons (PEPs), including domestic and foreign, as well as PEPs of international organizations; and (iv) require transparency on beneficial ownership.

New legislation
-*Law against the traffic of precious woods (2015)* -*Anti-corruption law (2016)* -*Law on anti-corruption centers (2016)* -*Law on international cooperation:* ensures that anti-corruption agencies can effectively participate in international cooperation (2017) -*Law on asset recovery:* ensures that judicial authorities can confiscate illegally acquired assets (pending approval in Parliament) -*AML/CFT law:* requires that financial and non-financial institutions carry out customer due diligence and report suspicious activity (pending approval in Parliament)
New and reinforced institutions for effective enforcement
-First anti-corruption center became effective in June 2018 -Increased budget allocation to the anti-corruption agency BIANCO -Special institution (comprising a public prosecutor's office, an examining chamber, and a trial court) to fight the trafficking of precious woods soon to become operational -Reinforced internal control systems in the public sector, including inspections of magistrates, clerks, prison officers
Political campaign financing
-Implementation decree under preparation for the administration of asset declarations including procedures for verifications and consultations

Annex IV. Capacity Development Strategy

The main macro challenge is to create the foundation for a sustained economic recovery and poverty reduction while maintaining macroeconomic stability and debt sustainability. The Fund and development partners re-engaged with the government in 2014, following elections that ended international isolation. Overall macroeconomic performance has improved in recent years, supported by strong implementation of the ECF-supported program. However, many challenges remain. Madagascar has a fragmented political system with governance problems, and is vulnerable to external shocks. While fiscal revenues have improved, they remain weak in comparison with many other African countries and transfers, especially to SOEs, continue crowding out more productive high-priority spending. Against this background, policies aim to (i) increase the fiscal space through improved revenue mobilization and re-prioritized fiscal spending; (ii) improve economic governance through stronger public financial management and anti-corruption measures; (iii) improve the business climate and increase public spending on social priority areas and investment; and (iv)°strengthen institutions that support stability and advance financial sector development.

Madagascar was an intensive user of IMF technical assistance (TA) in 2016-17 and is expected to remain so over the next few years. The catch-up of TA after years of isolation and a political crisis that weakened capacity is welcome and reflected in the high level of ownership of TA recommendations, particularly at the technical level. Central bank reforms are progressing according to plan and aim to: (i) strengthen the central bank's independence; (ii) modernize the monetary policy operational framework, including by improving liquidity management and forecasting; (iii) develop foreign exchange markets; (iv) strengthen banking supervision; and (v) improve central bank internal audit functions and bring them to international standards. Reforms in tax and customs administration have been effective and reversed the decline in revenue collections. PFM reforms have advanced in line with plans and the authorities are implementing a comprehensive PFM action plan. LEG has provided valuable TA in the drafting of anti-corruption legislation. Statistic reforms are lagging behind plans because of limited staffing and financial resources.

Going forward, IMF and World Bank staff will continue to co-operate closely to provide a wide range of TA and support reforms identified in the ECF program (see Table IV.1). Key priorities include: (i) modernizing the customs and tax revenue administrations to improve compliance and reduce tax evasion; (ii) strengthening PFM through tougher internal controls, better control of fiscal risks (pensions, PPPs, and SOEs), effective management of payment arrears, improved management of public investment and the wage bill, and enhanced forecasting and budgeting; (iii) advancing monetary policy operations through improved policy formulation and establishing more effective markets and instruments; (iv) strengthening financial sector stability and development through better supervision and a resolution framework; and (v) improving governance by strengthening the legal framework and judicial enforcement. Continued progress in statistics is also important for economic policy making and its impact would benefit from the authorities devoting more budget resources to this area.

Table 1. Madagascar: Planned World Bank and IMF TA	
Reform area	**TA provider**
Tax and customs administration	World Bank and IMF
Public financial management (PFM)	World Bank, IMF, and African Development Bank
Economic governance and corruption	World Bank and IMF
Public investment and debt management	World Bank and IMF
Public enterprise reform	World Bank
Business environment	World Bank and IMF
Service delivery and social safety nets	World Bank
Monetary policy operations	Primarily IMF
Financial sector stability	World Bank and IMF
Financial access and inclusion	World Bank
Statistics	World Bank and IMF

TA intensity could increase somewhat, especially in the form of long-term experts. Short-term TA has been growing, in line with deepening engagement, but is approaching the limits of current absorption constraints in many areas. Complementing intermittent TA with the placement of long-term advisors could help better leverage existing capacity, dependent on the availability of funding.

The main risks to future TA are lingering political instability, capacity constraints, lack of resources, and weak governance. Fund staff has recognized these issues and are discussing the implementation and sequencing of TA both with technical counterparts and political decision makers. Development partners are increasingly placing resident advisors in key areas (e.g., revenue, budget execution), which may help relax capacity constraints. Where appropriate, interactions and communications with the private sector could build support for recommended reforms and outreach to Madagascar's development partners could increase available funding.

Authorities' View

Since the official resumption of relations with the Fund in 2014, we have received extensive TA. The initial focus of that TA was aimed at macro-critical areas in the fiscal and monetary areas that would help sustain the economic recovery and poverty reduction, while maintaining macro-stability. Positive results were achieved. We have progressed on several fronts: fiscal space was augmented, the quality of expenditure has improved, and central bank independence strengthened, allowing for more successful management of monetary operations. Based on recent discussion with the Fund, and in light of the program needs, we have asked that future capacity development assistance be focused on the following areas: revenue administration (increase revenue, reinforcement of the tax Policy Unit, better coordination between the revenue departments); PFM (SOE oversight, public investment management, fiscal risk management, salaries forecasting, pension funds); monetary operations (IFRS implementation, liquidity management, exchange rate management, analysis); financial stability, financial inclusion, financial development, and statistics.

We have started tackling governance issues through the adoption of three new laws that will provide us with necessary legal arsenal to fight corruption, with technical support from the IMF and development partners. We are also putting in place procedures to better manage public resources, including performance-based contracts, drawing on TA from the Fund and others. In addition, measures have been put in place to reform loss-making SOEs, with tangible results starting to show. Although, these are important steps, the effort needs to be sustained to make ongoing reforms effective. For instance, the new laws still need the corresponding implementation decrees to make them effective. These important efforts may give rise to further TA needs in the future.

While the TA strategy is appropriate for Madagascar and has been extremely useful for our reform program, we believe that the mode of delivery could be modified to increase absorptive capacity further. The frequency between TA missions could oftentimes be lengthened, to ensure that the advice can be internalized and absorbed sufficiently. The period between the investigation/analysis mission and the review mission should be reasonable to allow the department which is concerned to implement and execute the actions related to the recommendations provided by the analysis mission. The availability of more long-term experts in some areas (notably in revenue administration and tax policy, medium-term budget framework) would also be beneficial in our view. Given the challenges that arise from the implementation of the new economic reform agenda, TA needs are still expected to be important in the coming years.

Annex V. Risk Assessment Matrix[1]

Source of Risks	Relative Likelihood	Potential Impact	Policy response
		Domestic Risks	
Weak project implementation capacity.	High	High: Slower economic growth.	Monitor available domestic capacity (particularly in construction) 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. Encourage authorities and development partners to protect social priority spending. 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 social priority spending.
Failure to tackle corruption	High	High: Reduced inflow of FDI and donor support.	Step-up anti-corruption and 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 make appeal to donors for post-disaster financing.
		External Risks	
Structurally weak growth in key advanced economies	High	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.
Retreat from cross-border integration	Medium	High: Reduced inflows from FDI and donor support. 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.

Appendix I. Letter of Intent

Antananarivo, Madagascar

June 25, 2018

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

Dear Madam Managing Director:

1. The attached Memorandum of Economic and Financial Policies (MEFP) reviews recent economic developments and performance under the Extended Credit Facility (ECF) arrangement. It also updates the government's policies and objectives for the rest of 2018 and 2019. These policies are based on the government's National Development Plan (NDP).

2. The Republic of Madagascar continues to make good progress to strengthen macroeconomic stability, foster sustainable and inclusive growth, and reduce poverty. The economic recovery is continuing notwithstanding several shocks during the last year, and inflation remains under control. The medium-term outlook is broadly favorable with projected solid economic growth, driven by the planned scaling up of public investment and rising private sector activity. Our external situation is robust, and the risk of debt distress comfortably remains moderate under current projections.

3. Notwithstanding this progress, significant challenges remain. In particular, we aim to make further headway in increasing spending on public investment and social needs, containing spending on lower priority spending, and enhancing revenue mobilization. In addition, reforms are continuing to build a sound financial sector supporting growth and enhance economic governance. Capacity constraints risk delaying the ongoing and much needed scaling-up of public investment. Against the background of these current challenges, continued financial and technical support from the IMF remains essential, and we hope that the ECF arrangement will catalyze financial support of donors.

4. As documented in the attached MEFP, we have met all end-December 2017 performance criteria under the program. Our structural reform agenda is advancing. Of the five structural benchmarks for end-December 2017, four were fully achieved. The action envisaged in one structural benchmark was completed with a delay of two months. Two of the three continuous benchmarks were also met. While the continuous benchmark on implementation of an automatic fuel price mechanism was not met, we still intend to avoid any subsequent budget costs. Discussions with the

fuel distributing companies on a new price structure are continuing, and we plan to increase pump prices progressively to eliminate the difference between them and the reference prices and avoid future budget costs.

4. The attached MEFP describes government policies for 2018-19 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, we request the IMF Executive Board to approve: (i) a modification of the performance criteria at end-December 2018 on the primary balance excluding foreign-financed investment (floor), new nonconcessional external debt with original maturity of more than one year (ceiling), new nonconcessional external debt with original maturity of up to and including one year (ceiling), the net foreign assets (floor), and the net domestic assets (ceiling); and (ii) the request for the completion of the third review. In this context, at the third review we are seeking total financial support from the Fund equivalent to 12.9 percent of our quota, or SDR 31.4 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 arrangement under the ECF, including the Debt Sustainability Analysis, after approval by the Executive Board of the IMF.

Sincerely yours,

/s/
Ms. Vonintsalama Sehenosoa Andriambololona
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 2018-19

This Memorandum of Economic and Financial Policies (MEFP) updates the one outlined for the completion of the second review approved by the IMF Executive Board on December 6, 2017. It describes recent economic developments, implementation of the ECF-supported program, the economic outlook and risks, and macroeconomic policies.

I. RECENT ECONOMIC DEVELOPMENTS

1. **Economic growth has remained solid, despite several external shocks.** In the past year, Madagascar has successively coped with a drought that lasted into early 2017, the worst cyclone in 13 years in March 2017, and an epidemic in the last quarter of 2017. On the latter, swift action by the government, with support from our partners, brought the outbreak under control. Nevertheless, we estimate that the epidemic dragged down growth by as much as 0.3 percent of GDP, particularly in tourism and transportation, as evidenced by a drop in passenger arrivals in October and November, lower hotel activity, and a significant decrease in transportation, including domestic. However, some other sectors posted higher than expected growth, notably the manufacturing export sector of the free-trade zone, with annual growth of around 25 percent. Overall, the economy grew by an estimated 4.2 percent in 2017 for the second year in a row, despite the succession of shocks.

2. **The weather shocks have pushed up rice prices sharply, leading inflation up slightly.** Inflation reached 9 percent year-on-year at the end of 2017, one percentage point higher than expected earlier in the year, but without calling into question our objective of maintaining single digit-inflation. The acceleration in inflation was entirely due to the single factor of rice prices, which rose strongly in the first and last quarters, reaching nearly 29 percent y-o-y in December 2017. This increase is explained by the drought and the cyclone, which dragged down local food production (with rice production estimated about 20 percent below the 2016 level and 10 percent below the five-year average). In response, imports of food increased, including a doubling of rice imports to 591,000 tons in 2017, to maintain supply near average levels in most of the regions. While sensitive to the social impact of rising rice prices, there are no generalized inflationary pressures evident at this stage. On the contrary, core inflation (without food and energy), was at 6.3 percent y-o-y in December 2017, its lowest level in more than two years. The price of imported products, which rose by only 5.2 percent y-o-y at the end of 2017, also helped moderate inflation.

3. **Fiscal performance continued to improve in 2017, with execution of the budget in line with plans announced at the time of the second review under the ECF arrangement:**

- Revenue performance has been strong, exceeding targets and reflecting the efforts we have made to strengthen tax administrations. In 2017, both tax and customs revenue rose by more than 20 percent compared to 2016. Non-tax revenue was also well above expectations, due to a sharp rise in dividends from the State's shareholdings in some banks and oil companies.
- On the expenditure side, we have contained wages and salaries within the agreed envelope, although the deficit of the civil servants and military pension fund slightly exceeded plans (about

MGA 10 billion). The transfers to JIRAMA were limited as planned at MGA 450 billion (1.3 percent of GDP), despite larger than planned operating losses, which in turn creates challenges for 2018 (see section IV-A). Despite low commitments in the first part of the year, we managed to accelerate capital expenditure later in the year. Domestically financed investment reached about 90 percent of the planned amount under the program, while externally financed investment reached 83 percent of the MGA 1510 billion (4.2 percent of GDP) envisaged at the time of the second review of the ECF-supported program. Lastly, priority social spending reached 1 percent of GDP, above the indicative target (see section II).

4. **External developments have been more positive than expected, despite an acceleration in imports.** Significantly higher vanilla prices and growing exports of labor-intensive manufactured goods boosted export revenues in 2017, while imports also grew, mainly driven by weather shocks and capital goods. Overall, these developments created room for the central bank (BFM) to accumulate more foreign exchange reserves than originally projected, taking import coverage above 4 months. The exchange rate was nearly stable in nominal effective terms for the second year in a row, which led to an appreciation in real effective terms considering the inflation differential with trading partners.

5. **At the same time, the positive external developments created challenges for managing bank liquidity**. Commercial bank excess reserves fluctuated in 2017. Bank reserves fell in June and July, when traders bought vanilla for cash from small-scale un-banked farmers, who continued to hold the currency. Subsequently, bank reserves increased as the central bank bought foreign exchange in the market. In response, the central bank largely sterilized this liquidity. In reaction to the slight increase in inflation, the policy rate (*taux directeur*) was raised from 8.3 percent to 9.5 percent during 2017.

II. PERFORMANCE UNDER THE ECF-SUPPORTED PROGRAM

6. **Performance on the program's quantitative targets continued to be strong through end-2017.** We have observed all quantitative performance criteria (PC) and indicative targets (IT) through end-December 2017, most of them with significant margins. The floor on primary balance (excluding foreign financed investments), which constitutes the fiscal anchor of the program, has been met by a large margin (0.5 percent of GDP). The IT for gross tax revenue (revised upward within the second review) was also exceeded by a significant margin: total gross tax revenue reached MGA 4,328 billion (against a target of MGA 4,132 billion, for a margin of 5 percent). Priority social spending also surpassed the corresponding IT (floor), at MGA 358 billion against 298 billion (a 20 percent margin). The overperformance was also substantial on the targets for the central bank's net foreign assets ($427 million above the floor) and its net domestic assets (51 percent below the ceiling). Finally, the ceilings for new non-concessional external debt were also observed, as well as the zero ceilings for external arrears.

7. **Progress in the implementation of the structural reform agenda is continuing.** All structural benchmarks (SBs) were met at end 2017, except for the submission of the new statistics law to parliament. This draft law was submitted in January 2018, and adopted in March. Also, in the context of ongoing negotiations with oil distributors on their margins, we did not raise fuel prices for

January and February 2018, which meant that the continuous benchmark on fuel pricing was not observed. We remain committed to the principle of cost-recovery pricing, and on May 30, 2018, we reached an agreement with the distributors on a plan to limit the existing liability to MGA 100 billion by the end of 2018 before eliminating it entirely by the end of 2019 (¶11).

III. ECONOMIC OUTLOOK AND RISKS

8. The macroeconomic outlook continues to be favorable. In line with the government objectives, growth is anticipated to reach around 5 percent this year, and it is expected to stay at least at this level for several years, driven by the planned scaling up of public investment and increasing private sector activity, especially tourism, light manufacturing, mining, and agriculture, where gradually enhancing the productivity of smallholder agriculture and developing export-oriented agribusiness should also support inclusive growth. We continue to target 6 percent growth and will assess the need for further growth-enhancing structural reforms going forward. Barring shocks, we are also confident that inflation will decline, to fall under 8 percent in 2018, then gradually towards 5 percent per year.

9. We are aware of the risks faced by Madagascar, as a low-income country and in the context of upcoming elections. The succession of weather shocks in the recent period, as well as the plague outbreak, highlight Madagascar's specific vulnerabilities. In addition, implementation capacity is a leading source of domestic risks. Delays in reforms of major state-owned enterprises (SOEs) could lead to both the need for increased transfers from the budget and impediments to growth. The government is working to identify, monitor and, where possible, to mitigate these fiscal risks (¶11).

10. We believe that there are also upside risks, particularly for growth. We are convinced that our efforts to accelerate the scaling-up of public investment will bear fruit, and are targeting a growth rate of 6 percent per year in the medium term. In addition, current projections for private investment, including foreign direct investment, could prove to be conservative, if many announced plans materialize.

IV. MACROECONOMIC AND STRUCTURAL POLICIES

A. Creating More Fiscal Space to Continue Improving the Quality of Spending

11. We are taking decisive actions to safeguard the improving composition of spending, ensure the full financing of the 2018 budget, and avoid new liabilities for the future:

- **Fuel pricing.** To avoid any budget costs, we remain fully committed to avoid a persistent liability towards oil distributors due to differences between the reference and the pump prices. With this objective, we concluded in late February 2018 a provisional agreement with the distributors to reduce their margins (lowered by MGA140 per liter). Discussions continue on possible further modifications to these margins. Based on a joint study underway, we expect to conclude with the distributors an agreement to apply a new price structure, to reduce their margins and subsequently to implement the automatic formula with an integrated smoothing mechanism.

In addition, we have already increased pump prices in March, April and June by an average of MGA 205/liter: *87 in March, 68 in April, and 50 in June (*prior action for conclusion of the third ECF review). Furthermore, based on current projections for world oil prices and exchange rates, we plan to increase pump prices in order to progressively eliminate the difference between them and reference prices by December 2018.

To help ensure the avoidance of any budget costs from fuel pricing, the government intends to limit the existing liability, through new price structure and adjustments to pump prices, to MGA 100 billion by the end of 2018, before eliminating it entirely by the end of 2019 (in line with an existing agreement with the distributors).

- **JIRAMA.** The Board of JIRAMA adopted a revised 2018 budget on June 13, 2018, limiting projected operational losses and financial needs to agreed government transfers of MGA 309 billion. This revised budget includes the planned repayment of MGA 82 billion of promissory notes issued in 2017, as well as the additional costs implied by higher than projected oil prices. We have benefitted from technical support from World Bank staff on the development of this budget, including cost reduction measures and efforts to increase revenue. On the latter, efforts continue to improve bill collection, including through the installation of smart meters (SB for end-June 2018). Transfers to JIRAMA for operating losses will be phased out progressively by 2020
- **Wage bill and additional pension fund deficit.** Revised projections show that the budgetary allocation in 2018 for wages and salaries was insufficient. By crosschecking the payroll and the workforce declared by ministries, we plan to eliminate at least 1,000 workers in irregular situations, yielding savings of at least MGA 6 billion in 2018. The budgeted increases for salaries and pensions were also postponed to May 2018. However, the additional needs amount to MGA 76 billion (0.16 percent of GDP). In addition, the civil servants pension fund shows an additional deficit in 2018 requiring a minor increase in the budget allocation of MGA 33 billion (0.08 percent of GDP).
- **Domestic revenue upward revision.** To offset part of these additional budget needs, additional efforts will be made on revenue mobilization, with an increase of MGA 65 billion in net tax revenue compared to the original Budget Law.
- **Revised budget law.** A Revised Budget Law, consistent with the performance criteria and indicative targets of the ECF arrangement in Table 1 was submitted to Parliament on May 25.

12. More broadly, over the medium term, we remain committed to increasing fiscal space for priority spending while controlling lower priority spending and fiscal risks:

- We aim to contain the wage bill at a sustainable level, bringing it back to about 5.7 percent of GDP in 2019. With technical assistance from AFRITAC South and building on our IT tool for payroll management (AUGURE), we are improving the accuracy and comprehensiveness of the budget in this area, including taking into account the "promotion debt."

- Total transfers are highly dependent on the amounts allocated to the civil servants and military pension fund (0.6 percent of GDP in 2018). With technical support from the World Bank, we are assessing the impact of potential parametric changes, including the calculation of pensions (contribution rates, years of eligible service, highest average remuneration, age of retirement, and the applicable yearly accrual rate), which could be implemented from 2019.
- Domestically financed investments are planned to gradually increase from 2.0 percent of GDP in 2017 to 3.2 percent of GDP in 2019, while priority social spending should increase from 1.0 percent of GDP in 2017 to 1.1 percent of GDP this year, and 1.3 percent of GDP in 2019.
- **Fiscal risks.** We are strengthening our fiscal risk management, including the publication of an annex to the 2018 budget, and we are determined to respond with timely and appropriate measures if these risks materialize. In addition, given the expected increase in public guarantees, we will take stock of all public-sector guarantees (including those to SOEs). We are studying the feasibility of provisioning for all new guarantees (for instance for 15 percent) starting with the 2019 budget. It is particularly important to manage the fiscal risks associated with public-private partnerships (PPPs), which can at the same time provide valuable expertise and financing. Procedures and the institutional framework is in place to manage these risks and ensure the benefits; our staff have the technical skills to assess the financial viability of each project. We plan to set limits on overall guarantees for PPPs. Supported by the World Bank and the African Development Bank, we are developing standard guidelines to be used within the Ministry under the Presidency for Presidential Projects (M2PATE) and the Ministry of Finance and Budget (MFB). Two complementary decrees on small-scale PPP contracts are planned by June 2018. For transparency purposes, we are committed to publish the terms and conditions of all PPP contracts within one month of the date of their signature on the website of the MFB (continuous benchmark).
- **Investment capacity.** We are reinforcing our efforts to build investment capacity, as the pace of scaling up public investment has not reached our ambitions. Building on the recent Public Investment Management Assessment (PIMA), we established the new Organization for the Coordination and Monitoring of Investments and their Financing (OCSIF) to coordinate and trouble-shoot investment. In December 2017, we adopted a medium-term strategy to develop investment capacity (structural benchmark), and we are examining the scope for integrating more cost-benefit analysis in our planning. Moreover, we have ensured that all new investment projects are reviewed by the Ministry of Economy and Planning to ensure consistency with the investment management and national development strategies.

13. Our efforts to increase revenue collection are also central to enabling more priority spending:

- The gradual increase in the net tax-to-GDP ratio is advancing as planned, from 9.9 percent in 2014 to 11.5 percent in 2017. Looking forward, our objective is to reach 12.0 percent of GDP in 2018 and at least 12.3 percent in 2019. The continuing implementation of the respective actions plans for tax and customs administration is driving much of this improvement.

- The increase in the tax on petroleum products (TPP) for 2018 is still expected to raise an additional MGA134 billion (equivalent to 0.3 percent of GDP) in 2018. In the first three months of the year alone, the revenue from the TPP has already increased by MGA 23.7 billion. The VAT on petroleum products, calculated after application of the TPP, corresponded to an additional MGA 8.5 billion, for a total of MGA 32.3 billion additional revenue from this measure in the first quarter.
- The technical assistance mission of the IMF's Fiscal Affairs Department (FAD) in February 2018 confirmed the merits of the ongoing action plans. We will build on the recommendations of this mission to strengthen our actions to achieve our goal of a sustained revenue increase.
- The tax policy unit has already completed an impact analysis of certain tax measures under consideration and will continue to provide enhanced analysis on domestic tax and custom revenue (macro and sectorial analysis, including modeling) of tax policy options, data across services and collaboration among services in general. This unit is now fully operational, and we have requested further TA from the IMF and others to maximize its impact.

14. With the objective of increasing domestic tax collections from 5.8 percent of GDP in 2017 to at least 6.5 percent of GDP by 2019, we will focus on the following measures:

- The increase in the number of services under performance contracts, from 19 in 2017 to 36 in 2018 (32 percent of the 111 operational units).
- The consolidation of the taxpayer segmentation, considering that the largest taxpayers managed by the Directorate of Large Enterprises (DGE) account for 0.2 percent of total taxpayers and 80 percent of total tax collection. Efforts will also focus on the Regional Companies Services (*Services Régionaux des Entreprises,* SRE), responsible for taxpayers with turnover between MGA 200 million and 4 billion; they represent less than 10 percent of tax revenue, which remains low.
- The use of the unique tax identification number (TIN) throughout all the departments of the MFB (already implemented), with the goal of extending the requirement for using TINs throughout all ministries by end-December 2018 (structural benchmark). The detection of noncompliant tax payers will be facilitated by this use of the TIN, which eases the exchange of information between government agencies, and the improved cooperation between the departments of customs and domestic taxes. In addition, we want to strengthen fiscal control and ensure a better treatment of tax litigation, with the dual objective of increasing revenue while improving taxpayers' confidence.
- We will strengthen our recovery plan for outstanding tax payments (*Restes à recouvrer*, RAR), which represented MGA 741 billion (2.1 percent of GDP) at the end of 2017, by focusing truly on recoverable claims.
- Finally, considering the remarks of the recent technical assistance mission on the risks related to the lowering of the threshold of VAT liability to MGA 100 million, we will implement the control plan aimed at reinforcing the efficiency of the VAT proposed by the AFRITAC mission in March 2017.

15. Beyond the TPP increase, the customs services will continue their modernization and performance efforts:

- The use of performance contracts, extended to the anti-fraud unit in September 2017 (structural benchmark), is generating positive incentives for customs staff and revenue effects. We will expand performance contracts to smaller customs offices and put in place a central customs clearance center that will reduce the opportunities for corrupt practices.
- The migration to ASYCUDA World is the largest customs project in 2018. All major offices should be equipped by the end of June 2018, which should improve the sequencing and timeliness of clearance operations.
- There is also a need to improve the control of high-risk sectors, including existing exceptional tax regimes (imports of free trade zones) and future ones (the law on special economic zones in particular).

16. We are determined to ensure that new tax incentives for investment are effective and cost-efficient to safeguard our core objective of boosting revenue collection. For the implementation of the new law on Special Economic Zones approved by Parliament in April 2018, we reiterate our commitment to start with pilot projects limited to at most two geographic locations, which will focus exclusively on exports in one or two clearly defined sectors. The implementation of the Law for Industrial Development will likewise start with pilot projects limited to at most two geographic locations, which will focus on one or two clearly defined sectors. For these two laws, the tax code revisions and issuance of implementing decrees will rely on cost-based incentives (investment credits or accelerated depreciation exclusively for capital goods) rather than profit-based incentives, consolidate all tax incentives into the tax law, and adopt rules-based approaches to avoid discretion in granting tax incentives. Before taking any further actions, we will assess the costs and benefits of these pilots. More broadly, we plan to review the tax code as the overarching legal framework governing tax incentives with a view to harmonizing the regimes in the medium-term (including the free trade zones or *zones franches*), drawing on technical assistance in this area from the IMF and other partners. We also plan to publish an annex to the budget with estimates of the fiscal costs of key tax incentives starting with the 2019 Budget, as part of the effort to control them.

B. Enhancing Economic Governance and Fighting Corruption

17. Efforts to strengthen the governance framework are advancing. We have adopted several new laws, starting with the *law against the traffic of precious woods* in 2015. In 2016, parliament adopted the *anti-corruption law*, which criminalizes UNCAC offenses and mandates the disclosure of assets by public officials, and the *law on anti-corruption centers*, which creates the legal foundation for specialized independent courts. The *international cooperation law in criminal matters*, which ensures that Madagascar can effectively provide and receive international cooperation in the investigation and repression of criminal matters, was adopted in 2017. The *asset recovery law*, which will ensure that judicial authorities can freeze, seize and confiscate proceeds of crime, and the *anti-money laundering and counter terrorism financing law (AML/CFT)*, which will update Madagascar's AML/CFT framework with international standards, were submitted to Parliament in December 2017. However, due to the large amount of laws presented during the ordinary and extraordinary sessions, these two laws were not discussed. The government has made a priority of these laws. The government recognizes the importance of bringing these laws closer to international standards. To expedite the application of these laws, we plan to issue all outstanding implementation decrees (associated with the anti-corruption law, international cooperation law and AML/CFT law) by end-October 2018.

18. We are reinforcing the institutions for effective enforcement of the new legal framework. The first quarterly statistics 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) will be published in July. The first anti-corruption center opened in Antananarivo by on June 15, 2018 and we aim to open one more center before the end of the year. We will also publish, including providing searchable internet access (using the criteria of topics and presiding judges), all final court decisions by the anti-corruption centers starting by end-December 2018 (structural benchmark). To implement the anti-corruption law, BIANCO will introduce a mechanism to verify asset disclosures from officials (covered under article 41 of the constitution and article 2 of the anti-corruption law) in July 2018. Over the medium term, to ensure that asset declarations are comprehensive (covering both assets legally owned and beneficially owned), verifiable, subject to dissuasive sanctions for non-compliance, and progressively made publicly available online, we will draft a strategy by end-June 2018` for the necessary legal reforms, including drafting the legal texts.

19. We remain committed to strengthen public financial management (PFM), as part of our efforts to enhance good governance, transparency, and public finances. We completed a PEFA self-evaluation in January 2018, which found progress as well as some persistent weaknesses. During the first year of our three-year Strategic Plan of Modernization of Public Financial Management, we implemented measures broadly as planned.

- We developed a medium term fiscal framework in 2017, and we are working on strengthening the budget preparation process. Accordingly, we are using our newly-created Tax Policy Unit to review revenue forecasts and working to improve wage bill forecasts, drawing on IMF TA.
- We will continue to enhance the management of fiscal risks and the coverage of the budget, by better supervising and integrating autonomous entities, SOEs, and PPPs. In particular, by end-June 2018, we will submit to Parliament the revised law governing the National Public Establishments (*Etablissements publics nationaux*, EPN, which account for 0.5 percent of GDP in 2018). The law will enhance supervision, transparency, and accountability of EPNs, as well as clarify their categories (structural benchmark). We aim to issue the application decrees before the end of 2018. The 2019 budget will include more information about SOEs, autonomous public establishments, and PPPs.
- To implement the Code of Public Procurement passed in 2017, we aim to issue the decree to formalize the funding and separation of the functions of regulation and control by the end of this year. Actions following up on the audit of ARMP, completed in September 2017, will be incorporated into the broader PFM action plan by end-June 2018. We are conducting outreach activities to inform the private sector and civil society of these improvements. Before the end of 2018, we expect to conclude a study on migrating to an e-procurement system and to establish a

public and easily accessible registry of companies that have violated the procurement regulations and are prohibited from participating in future bids.

- We are strengthening our debt management strategy by updating and reporting statistics regularly, documenting contingent liabilities exhaustively, and extending the maturity of domestic debt instruments to reduce exposure to rollover and interest rate risks. The recent DEMPA (Debt Management Performance Assessment) noted the ongoing progress on this front as well as areas for further improvements.
- To reinforce ex post controls and the PFM system's contribution in the fight against corruption, we are strengthening audit bodies and internal inspections, especially the Court of Auditors (*Cour des comptes*). We will begin publishing statistics on the actions of the Council of Budgetary and Financial Discipline from end-June 2018.
- Finally, to improve coordination and leadership of our PFM reform strategy, we are reviewing the organization of the steering committee.

C. Maintaining Stable Inflation

20. We remain committed to keeping inflation in single digits. Monetary policy is facing near-term challenges, related to our success in building international reserves. The larger-than-anticipated accumulation of international reserves over 2016-17, partly linked to advantageous prices on exported vanilla, created liquidity in banks that the central bank has successfully contained. The BFM is strengthening its monetary policy framework with several objectives: improve the management of commercial bank reserves; continue the gradual move from monetary to interest rate targeting; and above all safeguard our inflation target. Measures include:

- More focus is being given to managing excess bank reserves and their impact on the banking system. We have introduced progressive, deterrent, penalty rates for repeated violations of reserve requirements and increased the interest rate. on BFM's standing lending facility. Furthermore, we are also (i) increasing the use of fine-tuning operations in case of significant liquidity shocks (for example, the vanilla shocks in recent years); as well as (ii) continuing the progressive increase in the interest rate on BFM's standing lending facility.
- As an additional tool for liquidity management, the BFM is also committed to performing foreign exchange swap operations in a competitive auction format and only when (i) traditional instruments are not effective in managing liquidity; (ii) there is lack of collateral in the banking system in case of liquidity injection; and (iii) outright foreign exchange market interventions are not appropriate.
- The use of collateral for interbank lending will be supported by: (i) submitting draft legislation to Parliament to promote repo transactions by end-December 2018 (structural benchmark), and in preparation for which both (ii) giving BFM real-time access to information on Treasury bonds (BTFs); and (iii) introducing appropriate discounts on debt instruments when used as collateral for borrowing from BFM, as commonly done internationally in monetary markets.

21. We aim to make the foreign exchange market more efficient and transparent. The market has been shallow with periods of volatile foreign exchange movements when some bank clients chose to keep significant balances in foreign currency accounts or not repatriate export proceeds for speculative reasons. In response, the MFB, in consultation with the BFM, introduced a surrender requirement of 100 percent in August 2014, which was reduced to 70 percent in June 2016. The MFB and BFM are developing a plan to phase out the existing surrender requirement gradually with the objective of adopting it by end-September 2018, depending on the provision of requested TA. BFM has requested TA from the IMF this year to review and propose improvements to the legislation and regulation of the foreign exchange market, leading to a draft new or revised foreign exchange law/decree expected in July 2018.

D. Building a Sound Financial Sector Supporting Growth

22. Efforts to promote greater access to financial services are ongoing. In line with the 2016 Financial System Stability Assessment (FSSA) recommendations, we issued in December 2017 the decrees and the related instructions on the implementation of the law on electronic money and electronic money institutions. In line with best practices, we also modernized the legal framework, by adopting and enacting a law regulating the establishment, the licensing, the operations, and the supervision of a private credit bureau. In addition, we adopted and enacted the law on the Integrated Information System (IIS).

23. Reinforcing financial stability and containing systemic risk remains a priority. Our Financial Stability Unit (FSU) is operational and continues to release its annual "Financial Stability Report", which is gaining increasing traction among market participants. We have improved our supervision and control of microfinance institutions and adopted a new law on microfinance which includes a new resolution framework. To reinforce the stability of the banking sector, we plan to submit to Parliament by end-December 2018 a new banking law that will: (i) improve the bank recovery and resolution framework in line with FSSA recommendations; (ii) enhance the powers and independence of the financial supervisor (CSBF), including legal protection of Commission members and supervisors; and (iii) reinforce the framework for corrective bank supervisory measures, with specific triggers, responsibilities, and time limits for an effective response to bank violations and vulnerabilities to be determined by the law or regulation (structural benchmark).We are developing new prudential regulations, strengthening existing ones, and revising the regulations on capital definition and capital adequacy and we plan to issue them in conjunction with the banking law. To minimize systemic risk, we have elaborated a draft macro-prudential strategy aimed at maintaining financial stability. Therefore, a "law on financial stability", in line with international best practices, will be submitted to Parliament in 2019. The law will establish the national structure in charge of analyzing, identifying, and preventing systemic risks as well as managing and addressing financial crises.

24. We also aim to fully implement risk-based supervision (RBS) by the end of 2019, drawing on a well sequenced action plan with intermediate steps that was adopted in December 2017. With help of IMF technical assistance, we are developing the skills and capacity of our supervisors to effectively implement RBS, covering banks and microfinance institutions under CSBF jurisdiction. We have started also enhancing the quality, integrity, validity and reliability of the data for off-site returns, which is a key component in RBS.

25. Concerning non-bank financial institutions, we are following up on recent audits of the CEM *(Caisse d'Epargne de Madagascar)* and PAOMA *(Paositra Malagasy)*. For CEM, we have developed an action plan, for which the first step is conversion into a microfinance institution. PAOMA is currently limiting the development of new products, while undertaking a full audit of the customer accounts. By the end of September 2018, the government will set up a working group to elaborate a development plan for PAOMA.

26. The BFM's modernization is continuing, with a reform agenda to increase transparency and to render it more financially independent. BFM remains committed to full implementation of International Financial Reporting Standards (IFRS). We will develop an action plan, supported by technical assistance, to fully adopt IFRS for the accounts of 2020 (expected by April 2021), starting with the preparation of a gap analysis followed by pro-forma IFRS financial statements for fiscal year 2018. We will also consider the capital adequacy of the BFM, including the possible impact following full IFRS implementation, as part of a longer-term strategy to safeguard the financial autonomy of the bank. We will request technical assistance for this purpose. We also made progress with the destruction of old bank notes having started last year, and the stockpile that existed at end-December 2017 will be eliminated by end-June 2018. The internal audit department will conduct in 2019 a review of implementation of the revised bank-wide procurement policy approved in June 2017. This audit will be repeated periodically. More broadly, we will continue our efforts to strengthen our internal and external audit mechanisms as per the safeguards recommendations.

E. Improving the Quality of Statistics

27. A new statistics law, modernizing and regulating data collection, was adopted by Parliament in March 2018. This law was prepared with technical assistance from the UNDP and will be followed by decrees (i) to spell out organizational arrangements (ii) to strengthen coordination among ministries and (iii) to improve information and data flows.

28. While data provision is broadly adequate for surveillance and program monitoring, we are taking measures to address shortcomings in the areas of real sector, monetary and financial sector, balance of payment, and government finances statistics:

- On the real sector, revised series of annual national accounts for the 2007-2014 period with the base year updated from 1984 to 2007 were published in June 2017. The revised series for 2015-2016 were finalized in the first quarter of 2018. For the first time, Madagascar will also have quarterly national accounts, as INSTAT is finalizing quarterly GDP estimates under the new base year. The quarterly business survey, re-launched by BFM since the last quarter of 2017, is also helping quarterly estimates and projections. INSTAT will switch to the publication of the rebased GDP series by the end of 2018. Appropriate communication to key users to inform them of the main changes implied by the new series has been launched and will continue in coming months. On the real sector again, INSTAT plans to publish a reweighted consumer price index (CPI) based on the 2019 household survey.
- Regarding monetary and financial statistics, efforts are focused on the consolidation of balance sheets of micro-financial institutions in the preparation of the monetary survey.

- On balance-of-payments statistics, we are emphasizing the enhancement of information, notably through the launch of surveys in the tourism and transport sectors.
- On government finance statistics, our objective after moving to the 2014 GFSM in 2018 is to extend the statistical coverage from the central government to the general government including local authorities and national public establishments (EPN).

29. We remain committed to allocate sufficient human, financial, and material resources to the production of statistics. Some shortcomings, like the suspension of publication of industrial production indices, are due to financing issues. The government will continue to support INSTAT in fulfilling its missions. We also count on increasing technical and financial assistance from our partners.

V. PROGRAM MONITORING

30. The program will continue to be evaluated through semi-annual reviews based on quantitative performance criteria and structural benchmarks. We have proposed quantitative targets (Table 1) as well as structural benchmarks (Table 2) through end-June 2019. Definitions of key concepts and indicators, as well as reporting requirements, are set out in the accompanying Technical Memorandum of Understanding (TMU). The fourth, fifth, and sixth reviews are scheduled to be completed on or after November 20, 2018, May 20, 2019, and November 20, 2019 respectively, based on test dates for periodic performance criteria of end-June 2018, end-December 2018, and end-June 2019, respectively.

31. There are some modifications on the program monitoring going forward:

- Starting with the end-September 2018 indicative target, the definition of the performance criterion (PC) on the domestic primary fiscal balance is modified to exclude external budget grants (TMU ¶9). This modification is in line with the initial intention to measure our efforts to cover government's operating expenses from our own resources (external budget grants became more significant beginning in 2017), while financing most investment with concessional external financing. This change will not impact the government's objectives in this area, as the new targets have been revised for the expected amount of external budget support.
- The planned transition to the rebased national accounts will not impact the objectives under the IMF-supported program, which are set in nominal terms for quantitative targets or as changes as a percentage of GDP for medium-term objectives.
- Finally, considering Madagascar's debt monitoring capacity upgrade from weak to adequate in February 2018, and in line with IMF debt limits policy, Madagascar will shift from PCs on nominal ceilings for non-concessional debt contracted to a PC for the present value (PV) of new debt contracted. Considering the need for a transition period to adapt our technical capacity and debt strategy, we propose to maintain the nominal ceilings on non-concessional borrowing as indicative targets (TMU ¶24). These limits are intended to preserve debt sustainability and a moderate risk of debt distress, while accommodating Madagascar's investment plans. We will continue to review debt limits under the ECF arrangement.

Table 1. Madagascar: Quantitative Performance Criteria and Indicative Targets, June 2018-June 2019

	2018			2019	
	End-June Performance Criteria	End-Sep. Indicative Targets	End-Dec. Performance Criteria	End-March Indicative Targets	End-June Performance Criteria
	(Billions of Ariary; unless otherwise indicated)				
Fiscal					
Note: Change in the definition of the fiscal target after June 2018					
Floor on primary balance excl. foreign-financed investment (commitment basis) [1]	177	...	...	...	...
Floor on primary balance excl. foreign-financed investment and grants (commitment basis) [1]	...	-59	22	29	105
External					
Ceiling on accumulation of new external payment arrears (US$ millions) [2]	0	0	0	0	0
Note: Change in debt targets after June 2018					
Ceiling on new nonconcessional external debt with original maturity of more than one year, contracted or guaranteed by the central government or BFM (US$ millions) [3]					
Grant element of less than 35 percent	383	...	...	...	...
Grant element of less than 20 percent	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 BFM (US$ millions) [2]	0	...	...	...	...
Ceiling on new external debt contracted or guaranteed by the central government or BFM, in present value terms (US$ millions) [4]	...	900	900	900	900
Central bank					
Floor on net foreign assets (NFA) of BFM (millions of SDRs) [5]	617	758	795	787	779
Ceilings on net domestic assets (NDA) of BFM [5]	1,865	1,250	1,423	1,360	1,519
Indicative targets					
Floor on social priority spending [1]	158	260	429	77	220
Floor on gross tax revenue [1]	2,411	3,705	5,102	1,265	2,812
Ceiling on new nonconcessional external debt with original maturity of more than one year, contracted or guaranteed by the central government or BFM (US$ millions) [3]					
Grant element of less than 35 percent	...	383	383	383	383
Grant element of less than 20 percent	...	100	100	100	100
Ceiling on new nonconcessional external debt with original maturity of up to and including one year, contracted or guaranteed by the central government or BFM (US$ millions) [2]	...	0	0	0	0
Memorandum items					
Official external program support (millions of SDRs) [3]	235	288	329	329	329
Official external program grants (millions of SDRs) [1]	0	74	114	0	0
New concessional loans, contracted or guaranteed by the central government or BFM (US$ millions)[3]	1,647	...	...	...	...
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] 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] Cumulative ceilings calculated from January 1, 2018 and monitored on a continuous basis from completion of the third review under the ECF arrangement.

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

Table 2. Madagascar: Prior Action and Structural Benchmarks 2018

Prior Action for the third review

Increase fuel pump prices by MGA 50 per liter in June.

Action	Dates	Rationale
Mobilizing fiscal revenue		
Employ the new Tax Identification Number (TIN) throughout all ministries.	End-Dec. 2018	Important to reduce fraud
Improving the composition and quality of fiscal spending		
Adopt and implement an automatic fuel pricing formula with a smoothing mechanism by end-September 2018, while avoiding any budget costs from fuel pricing in the interim.	Continuous benchmark	Critical to contain transfers
Install 3,500 smart meters for JIRAMA.	End-June 2018	Critical to contain transfers
Enhancing economic governance		
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)
Start the process of publishing, including providing searchable internet access (using the criteria of topics and presiding judges), of all final court decisions by the anti-corruption centers.	End-Dec. 2018	Critical to economic governance
Strengthening financial sector development		
Submit to Parliament draft legislation to promote repo transactions.	End-Dec. 2018	Critical for monetary policy
Submit to Parliament a new banking law that will: (i) improve the bank recovery and resolution framework in line with FSSA recommendations; (ii) reinforce the framework for corrective bank supervisory measures (with the specific triggers, responsibilities, and time limits for an effective response to bank violations and vulnerabilities to be determined by the law or regulation); and (iii) enhance the powers and independence of the financial supervisor (CSBF), including legal protection for its staff and Board members.	End-Dec. 2018	Central for financial stability

Attachment II. Technical Memorandum of Understanding
June 2018

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 2018-19. 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.

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 new external debt owed or guaranteed by the central government and/or the central bank, and the domestic primary balance (commitment basis). Performance criteria will be set for end-June 2018, end-December 2018, and end-June 2019, while indicative targets will be set for end-September 2018 and end-March 2019.

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

6. Total government revenue is comprised of tax and nontax budget revenue (as defined under Chapter 5 of GFSM 2001) and grants. Revenue is recorded in the accounting system on a cash basis. Taxes on the import of petroleum products, paid through the issuance of promissory notes, are recorded under revenue at the time of the issuance of the promissory notes: to reconcile the difference in timing between the issuance of the promissory note and its actual payment to the Treasury, an equivalent amount is recorded (negatively) under the line "other net transactions of the Treasury" until the actual payment.

7. 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.

PROVISION OF DATA TO THE FUND

8. The following information will be provided to the IMF staff for the purpose of monitoring the program (see Table 1 for details):

- 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 eight weeks for other data. 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, the number of persons convicted pursuant a final court decision, and the number of verifications of assets disclosures of public officials (Tables 3-6).

- 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.

QUANTITATIVE PERFORMANCE CRITERIA

A. Fiscal Aggregates

1. Floor on Primary Balance (commitment basis)

9. The domestic primary balance (commitment basis) is measured as follows:

- *March and June 2018:* Domestic tax and non-tax revenue plus current (budgetary) grants less domestically-financed capital expenditures and current spending excluding interest payments.
- *Starting September 2018:* Domestic tax and non-tax revenue less domestically-financed capital expenditures and current spending excluding interest payments.
- 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. Current spending excluding interest payments is the sum of expenditures on wages and salaries, goods and services, transfers and subsidies, and treasury operations (net) excluding the refund of VAT credits. The primary balance will be calculated cumulatively from the beginning of the calendar year. For reference, using data at end-December 2017, the value of the primary balance would be as follows:[2]

	Definition used in March and June 2018	Definition used starting September 2018
Primary balance excluding foreign financed investment (commitment basis)	179	
Primary balance excluding foreign financed investment and grants (commitment basis)		-362
Domestic tax revenue (net of VAT refunds)	4,118	4,118
Domestic non-tax revenue	122	122
Current grants	541	…
Less:		
Domestically-financed capital expenditures	700	700
Current expenditures	3,902	3,902
Wages and salaries	2,076	2,076
Goods and services	282	282
Transfers and subsidies	1,467	1,467
Treasury operations (net of VAT refunds)	77	77

[2] The exact definition used to calculate the primary balance at end-December 2017 is reported in the Technical Memorandum of Understanding included in the staff report for the second review (IMF Country Report No. 17/385).

B. External Debt

1. Ceiling on Accumulation of New External Payment Arrears

10. 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. Ceilings on New External Debt

11. 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 present value (PV), expressed as a percentage of the nominal value of the debt. The PV 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.

12. 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 PV and grant element for all disbursements under the agreement.

13. For program monitoring purposes, the definition of debt is set out in *Point 8, Guidelines on Public Debt Conditionality in Fund Arrangements, Executive Board Decision No. 15688-(14/107), adopted December 5, 2014* (see Annex 1). External debt is defined by the residency of the creditor.

14. 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 or 3-month Euribor 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

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

rate is linked to a different benchmark interest rate, a spread reflecting the difference between the benchmark rate and the six-month USD LIBOR (rounded to the nearest 50 bps) will be added.

15. A performance criterion (ceiling) applies to the PV of new external debt, contracted or guaranteed by the government or CBM. The ceiling applies to debt contracted or guaranteed for which value has not yet been received, including private debt for which official guarantees have been extended. The PV and associated grant element (GE) is determined using the Fund's concessionality calculator or excel template available online. These monitoring targets should be calculated from January 1, 2018 and observed on a continuous basis from completion of the third review under the ECF arrangement. The ceiling is subject to an adjustor defined below.

16. Two continuous ceilings apply to new non-concessional external debt with nonresidents with original maturities of more than one year contracted or guaranteed by the government or CBM. The ceilings apply to debt and commitments contracted or guaranteed for which value has not yet been received. They apply to private debt for which official guarantees have been extended and which, therefore, constitutes a contingent liability of the government or CBM. The first ceiling concerns new non-concessional external debt with nonresidents with original maturities of more than one year contracted by the government or CBM with a grant element of less than 35 percent and the second ceiling concerns new non-concessional external debt with nonresidents with original maturities of more than one year contracted by the government or the CBM with a grant element of less than 20 percent. These monitoring targets should be calculated and observed on a continuous basis from January 1, 2016 until the completion of the third review under the ECF arrangement. See paragraph 24.

17. Excluded from the ceilings in paragraphs 15 and 16 are (i) the use of IMF resources; (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); and (iii) debts classified as international reserve liabilities of CBM.

18. 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 calculated and observed on a continuous basis from end-May 2016 until the completion of the third review under the ECF arrangement. See paragraph 24.

19. 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 (iv) normal import financing. A financing arrangement for imports is considered to be "normal" when the credit is self-liquidating.

C. Monetary Aggregates

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

20. 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 2017, NFA was SDR 782 million, calculated as follows:

Foreign Assets	
MGA billions, end-2017 exchange rates (A)	4,988.039
SDR millions, end-2017 exchange rates (B)	1,086.925
SDR millions, program exchange rates (C)	1,099.836
Foreign Liabilities	
MGA billions, end-2017 exchange rates (D)	1,458.186
SDR millions, end-2017 exchange rates (E)	317.748
Net Foreign Assets	
SDR millions, program exchange rates (F) = (C) – (E)	782.088

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

21. 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 2017, NDA at program exchange rates was MGA 1,083 billion, calculated as follows:

Net Foreign Assets	
SDR millions, program exchange rates (A)	782.088
MGA billions, program exchange rates (B)	3,475.489
Base Money	
MGA billions, end-2017 exchange rates (C)	4,558.154
Net Domestic Assets	
MGA billions, program exchange rates (D) = (C) – (B)	1,082.665

INDICATIVE TARGETS

A. Floor on Priority Social Spending

22. 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

23. 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 2017, gross government tax revenue was MGA 4,329 billion, comprised of net tax revenue of MGA 4,118 billion and VAT refunds of MGA 211 billion.

C. Ceilings on New Non-Concessional External Debt

24. From the completion of the third review under the ECF arrangement onwards, the ceilings for non-concessional debt with maturities of more than one year (paragraph 16; cumulative since January 1, 2016) and of less than one year (paragraph 18; cumulative since end-May 2016) serve as indicative targets.

STRUCTURAL BENCHMARKS

25. For the purposes of the structural benchmark on fuel pricing, avoiding budget costs from fuel pricing is defined and monitored as follows:

- Until the adoption and implementation of the fully automatic fuel pricing mechanism with a smoothing formula, the authorities will calculate the estimated net liabilities to fuel distributors generated by discretionary adjustments to the fuel price, as determined either by the fuel price structure in place as of November 2017 or a new fuel price structure established in a memorandum of understanding between the government and fuel distributors. The cumulative stock of these liabilities will be measured from January 2017.

- Avoiding budget cost from fuel pricing means that (i) the cumulative stock of these liabilities is at most MGA 100 billion (i.e. the government has a liability to the distributors of at most MGA 100 billion) by end-2018; (ii) the difference between average pump prices and average reference prices is eliminated by end-December 2018; and (iii) the cumulative stock of net liabilities to fuel distributors will be paid off during 2019 through a price surcharge and, consequently, no transfers will be due to be paid by the government budget to the fuel distributors.

- The authorities will provide to IMF staff the calculations for the estimate of the monthly flow and stock for these net liabilities for each month, as well as the minutes of the agreement with the fuel distributors, by the 14th day of that month.

MEMORANDUM ITEMS

26. 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.

27. 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.

28. 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.

USE OF ADJUSTERS

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

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

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

30. The performance criteria on the primary balance 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:

- *March and June 2018:* 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 SDR 30 million, evaluated at program exchange rates as described in paragraph 4.

- *Starting September 2018:* The floor on the primary balance excluding foreign-financed investment and grants (commitment basis) will be adjusted downward by the cumulative upward deviation of actual from projected official external program support (grants or loans on concessional terms), calculated at quarterly period-average actual exchange rates as described in paragraph 4.

31. An adjustor of up to 5 percent of the external debt ceiling set in PV terms applies in case deviations are prompted by a change in the financing terms. Changes in interest rates, maturity, grace period, payment schedule, commissions, fees of a debt or debts are candidates for the adjuster. The adjustor cannot be applied when deviations are prompted by an increase in the nominal amount of total debt contracted or guaranteed and are subject to debt sustainability.

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 (continued)

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 operational and financial position of JIRAMA	Monthly, within four weeks of the end of each month, for operational and financial data. Quarterly, by the end of the following month, for the Table on "Total impayés fournisseurs"
Data summarizing the financial position of 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 public or publicly guaranteed loans signed since January 1, 2016, specifying the nominal value; calculated grant element and PV; and terms, including the interest rate (using the program reference rate for variable rate loans), maturity, commissions/fees, grace period, repayment profile, and grant component.	Quarterly
External data	
Central Bank of Madagascar (CBM)	
Balance of payments	Quarterly, by the end of the subsequent quarter

Table 1. Madagascar: Data Reporting Requirements (concluded)

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	
OMH	
Petroleum shipments and consumption	Monthly, within four weeks of the end of each month

Table 2. Madagascar: Reports sent by SAMIFIN to BIANCO

Reports disseminated	Members of the Executive Power	Members of the Legislative Power	Members of the Judicial Power	Heads of province and district, Commissaries, Prefects, Mayors	SOE Managers	Others
Aggregated value of suspected money laundering						

Table 3. Madagascar: 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. Madagascar: 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. Madagascar: 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).

Table 6. Madagascar: Verification of Asset Disclosure Forms

	Forms received	Forms verified	Cases submitted for investigation for non-declaration	Cases submitted for investigation for inconsistencies in the declaration
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				

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

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

REPUBLIC OF MADAGASCAR

June 26, 2018

THIRD REVIEW UNDER THE EXTENDED CREDIT FACILITY AND REQUEST FOR MODIFICATION OF PERFORMANCE CRITERIA—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 of June 2017, since the dynamics of Madagascar's external public and publicly-guaranteed (PPG) debt remain sustainable under the baseline. The public DSA shows total (domestic and external) PPG debt is also sustainable under the baseline, so risks to domestic debt are not assessed as significant. However, stress tests breach the prudent benchmark for the public DSA (covering both domestic and external debt) and, in only some instances, for the external DSA. The analysis suggests that shocks to GDP growth are the main potential source of vulnerability, especially for the public DSA. A weaker currency, widened fiscal deficits, lower exports, or higher interest rates present additional risks. This DSA reflects updated and more detailed loan data, which include marginally less favorable financing conditions than in the last DSA.

[1] Prepared by IMF and the World Bank following the mission in March 2018. 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. The assessment comprises a baseline scenario and a set of alternative scenarios.

2. **This DSA includes public external and domestic debt and guarantees of the central government.** The DSA does not include the debt of local government or state-owned enterprises (SOEs) 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.

3. **The December 2017 World Bank Debt Management Performance Assessment (DeMPA) records incremental progress starting from a low base.** Out of 33 indicators, 14 meet the minimum score for adequate performance. There are notable improvements since the previous DeMPA undertaken in 2013: there are high scores in managerial structure since borrowing is now steered by a published debt management strategy and the adoption in 2014 of the Law on Public Debt and Guarantees for the Central Government has strengthened the legal framework for government debt management. Staff capacity has improved. Inadequate scores reflect important weaknesses in audit, guarantees and on-lending (a topic of World Bank technical assistance), cash flow forecasting and cash balance management, debt administration and data security.

4. **Debt monitoring capacity has been upgraded.** Government debt recording appears to be sound and well-reported with a high quality biannual statistical bulletin that covers both domestic and external debt. Debt monitoring capacity scores 4.5 over 2014-16 according to the World Bank Country and Policy Institutional Assessment Index (CPIA), which merits an upgrade from 'weak' to 'adequate' debt monitoring capacity. In turn, this influences how external debt limits are specified in IMF programs and the proposed performance criterion on external debt would, therefore, be specified in present value (PV) terms from end-December 2018 onwards. The existing nominal limits on non-concessional borrowing would instead become indicative targets. Notwithstanding the improved monitoring capacity, Madagascar continues to be classified as a weak performer according to the overall CPIA index and the thresholds for external debt used in this report remain as in the previous DSA.[2]

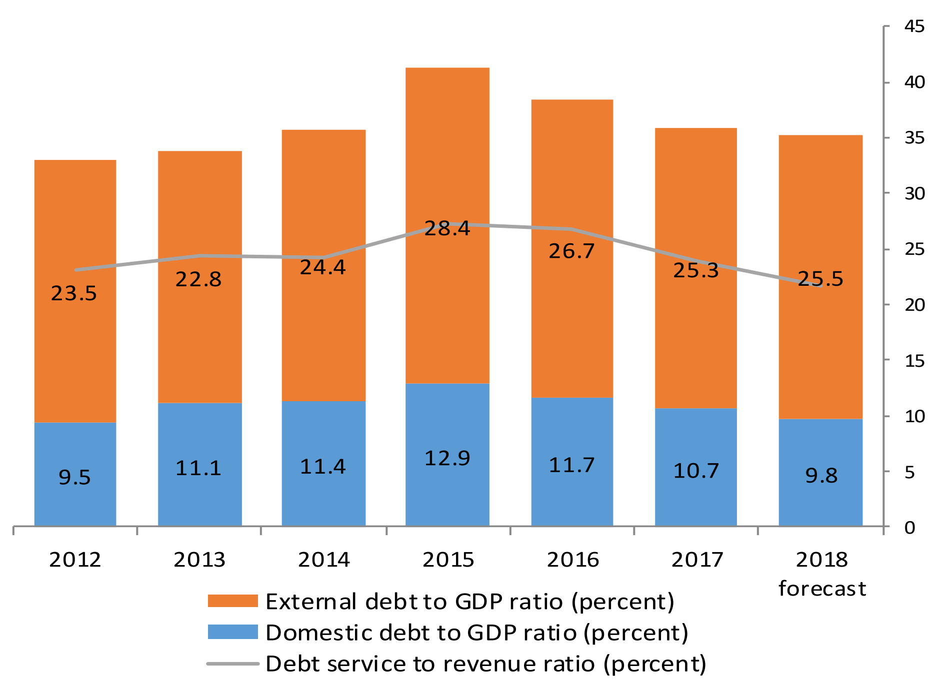
[2] The average CPIA in 2014-16 is 3.2, which is close to the average for sub-Saharan African International Development Association (IDA) countries. The indicative thresholds for external debt applicable for countries with weak overall CPIA scores are: (i) 30 percent for the PV of debt-to-GDP ratio; (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.

RECENT DEVELOPMENTS AND CURRENT DEBT SITUATION

5. **Debt ratios have fallen recently, following an uptick before the ECF program** (Figure 1). Total public debt rose from 31 percent of GDP in 2008 to 41 percent of GDP in 2015, pushed up partly by depreciation of the official exchange rate. However, the ratio of debt to GDP fell by 2.9 percent in 2016 and by 2.4 percent in 2017 to 36 percent of GDP.[3] This follows smaller than expected fiscal deficits, thanks largely to stronger revenue collection, rising nominal GDP growth, and an appreciating real effective exchange rate. Accordingly, the debt service to revenue ratio ticked down to 24 percent in 2017 (from 27 percent in 2015). The reengagement of the government with the international donor community following the return to constitutional order in 2014, concurrent increases in aid, and lower recourse to domestic borrowing helped the decline.

6. **An appreciating real effective exchange rate and overperformance on the fiscal balance led to better-than-expected outcomes in 2017.** Actual debt levels at end-2017 stood about 5 percentage points lower than anticipated in the DSA for the first review, which projected a rise to above 41 percent. Half of this difference is accounted for by a stronger than anticipated Ariary. In addition, the primary fiscal deficit registered1.8 percent of GDP less than projected in the first review owing to overperforming revenue collections and delayed spending (mostly investment). The authorities have largely refrained from borrowing externally on non-concessional terms, which helped support debt sustainability.

Figure 1. Madagascar: Nominal Debt and Debt Service Ratios



[3] Debt is far below the pre-HIPC peak of 95 percent of GDP.

7. **External sources account for 70 percent of debt** (Table 1)**.** Multilateral creditors, in particular the World Bank and African Development Bank, account for more than half of all debt and offer loans on highly concessional terms. Within domestic debt, securities issuance edged up as a share of GDP.[4] The stock of domestic arrears was 1.3 percent of GDP, after substantial declines in 2016 and 2017. Debt owed to the Central Bank[5] rose in nominal terms and has remained constant at 3 percent of GDP since 2015, due in part to on-lending of part of IMF program disbursements to the government. Commercial and guaranteed loans increased their share of debt to 2 percent in 2017.

Table 1. Madagascar: Break-down of Total PPG Debt 2015-17, (end of period)

Creditor	Amount (US$m)			Percent of GDP			Percent of total		
	2015	2016	2017	2015	2016	2017	2015	2016	2017
Domestic debt, *of which:*	**1,153**	**1,109**	**1,185**	**12.9**	**11.7**	**10.7**	**31.3**	**30.4**	**29.7**
Securities inc. BTA, BTF, BTS	333	526	669	3.7	5.5	6.0	9.0	14.4	16.8
Debt to the Central Bank	269	283	330	3.0	3.0	3.0	7.3	7.8	8.3
Arrears	346	210	147	3.9	2.2	1.3	9.4	5.7	3.7
Other inc. loans	206	90	39	2.3	0.9	0.4	5.6	2.5	1.0
External debt, *of which:*	**2,534**	**2,535**	**2,808**	**28.4**	**26.7**	**25.3**	**68.7**	**69.6**	**70.3**
Multilateral	1,950	2,052	2,276	21.8	21.6	20.5	52.9	56.3	57.0
Paris Club	133	127	130	1.5	1.3	1.2	3.6	3.5	3.3
Non-Paris Club	356	333	324	4.0	3.5	2.9	9.7	9.2	8.1
Commercial & Gauranteed	94	23	78	1.1	0.2	0.7	2.6	0.6	2.0
Total PPG debt	**3,687**	**3,644**	**3,994**	**41.3**	**38.4**	**36.0**	**100.0**	**100.0**	**100.0**

8. **The government may face some contingent liabilities with respect to SOEs including the nonbank financial sector, while the banking sector is less likely to generate direct fiscal costs.** The treatment of SOE debt[6] and contingent liabilities is as follows:

- The recapitalization of Air Madagascar is part of the baseline assumptions and reflected in projected debt dynamics. The strategic partnership with Air Austral concluded in November 2017 involved one-off government support to assume past arrears of 0.8 per-cent of GDP, paid partly in 2017 and partly in 2018, with both domestic financing (issuances of specific T-Bonds) and external financing ($40 million from an international bank). While no future public support to the airline (such as government guarantees) is proposed, the government transfers could imply an implicit government guarantee of future airline obligations.

[4] Although most securities are short-term Treasury bills (BTAs) with durations of up to one year, most of the increase came from longer-dated bonds (BTFs) with a maturity of up to three years.

[5] 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 before 2014 (that has 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, are planned to be reduced. Consistent with this, excluding on-lending, debt to the central bank has been declining in nominal terms.

[6] SOE liabilities include sums owed to the government. Consisting mostly of tax arrears, they amount to 1¼ percent of GDP (of which more than half is accounted for by Jirama).

- Debt projections also include explicit government guarantees provided for the electricity utility JIRAMA's external borrowing, but amounts are limited to less than 0.5 percent of GDP. JIRAMA's total domestic and external liabilities are estimated at 4½ percent of GDP.

- Contingent liabilities from other SOEs are not included. Potential contingencies include future recapitalization of the postal savings scheme and the Madagascar Savings Fund (*Caisse d'Epargne de Madagascar, CEM*), which would likely amount to less than 1 percent of GDP.

- Most banks are financially solid with deposits exceeding loans and majority foreign shareholders. Dollarization of deposits and credits is not pronounced and banks' foreign assets generally exceed their foreign liabilities.

UNDERLYING ASSUMPTIONS

9. **The DSA projections are consistent with the authorities' plan to scale up much needed infrastructure investment and social spending** (Table 2). In 2016-17, loans contracted were worth approximately \$1.3 billion in nominal terms and \$0.7 billion in PV terms. As per the authorities' plans, loans signed, being studied, or being negotiated amount to approximately \$1.4 billion (\$0.8 billion in PV terms) for 2018-19. The significant difference between the nominal value and PV terms indicates that concessional (external) borrowing and grants will remain an important source of financing. Loan contracting is expected to taper off over the medium term. Disbursements, worth about \$0.4 billion in nominal terms in 2016-7,[7] have been more gradual than signatures and grow more slowly than anticipated since project execution is slightly slower than previously assumed. This is consistent with slightly slower GDP growth than projected in the 2017 DSA. It is also consistent with more backloaded spending, which contributes to a lower deficit for 2018 but higher deficits in later years. Forecast improvements in GDP growth and revenue generation become more favorable to debt dynamics over the medium term, while the non-interest current account deficit and decreasing reliance on grants become less favorable to debt dynamics.

10. **Financing conditions are slightly less favorable than in the 2017 DSA.** Informed by a new debt strategy document provided by the authorities (*Strategie de La Dette a Moyen-Term, 2018-2020*) financing assumptions have been modified slightly. Average interest rates on new disbursements, at 1.6 percent, are ¼ percent higher than in the 2017 DSA, reflecting higher rates from some sources and lower from others. The average maturity remains broadly unchanged at 27½ years. Several grace periods have been shortened, resulting in an average decrease by 1 year to 4½ years. Staff also incorporated better information from the authorities on loans signed but not yet disbursed, which, other things equal, acts to reduce the estimated projected debt.

[7] Disbursement figures for a given year can include those from loans signed in previous years.

Box 1. Baseline Macroeconomic Assumptions

Compared to the 2017 DSA, key changes in short-run assumptions are motivated by delayed project execution (reducing real GDP growth and the fiscal deficit) and higher vanilla prices (boosting the current account). Medium-run assumptions remain similar.

Real GDP: Growth is projected to peak at about 5½ percent in 2019. Short-term growth is slightly lower than in the 2017 DSA, reflecting slower project execution than previously assumed. Medium-term growth remains at about 5 percent, driven by improved confidence, scaling up of public investment, further re-engagement of development partners, and increasing mining exports.

Current account: Exports were higher than expected in 2017, as already high vanilla prices continued to rise and metal prices surpassed expectations. Accordingly, the current account deficit has been revised downward, especially for2018. Vanilla prices are assumed to give up most of their gains over the medium term.

Fiscal variables: Owing to the delay in disbursements of externally-financed investment, fiscal expenditure and the primary deficit have been revised downward in 2018 and upward over the next few years.[1] Grant support has been revised down.

Table 2. Madagascar: Baseline Macroeconomic Assumptions

		2018	2019	2020	2021	2022	2023
Real GDP growth (percent)	2018 DSA	5.0	5.4	5.3	5.2	4.9	4.9
	2017 DSA	5.3	5.9	5.5	5.2	5.0	-
Non-interest CA deficit (percent GDP)	2018 DSA	1.1	2.4	3.4	3.7	3.9	3.6
	2017 DSA	4.9	4.6	3.8	3.7	3.5	-
Primary deficit (percent of GDP)	2018 DSA	1.4	3.5	4.4	4.2	3.7	3.1
	2017 DSA	3.6	3.4	2.8	2.5	2.4	-
Total revenues, excl grants (percent of GDP)	2018 DSA	12.2	12.5	13.0	13.4	13.6	13.9
	2017 DSA	11.8	12.2	12.7	13.1	13.5	-
Grants (percent of GDP)	2018 DSA	3.4	2.7	1.4	1.4	1.4	1.4
	2017 DSA	3.6	3.4	2.4	2.3	2.3	-
Non-Interest Expenditure (percent of GDP)	2018 DSA	17.0	18.8	18.8	19.0	18.8	18.5
	2017 DSA	19.0	19.1	17.8	17.9	18.1	-

Source: World Bank and IMF staff projections.

[1] The primary deficit in Table 2 includes foreign financed capital expenditure and grants, which are excluded from IMF program quantitative targets.

11. **Limited semi-concessional and very limited non-concessional borrowing is envisaged throughout the forecast horizon.** Cumulative semi-concessional borrowing (grant element between 20 and 35 percent) and non-concessional external borrowing (grant element of less than 20 percent) since the start of 2016 reached $173 million at end-December 2017, compared to an IMF program ceiling of $383 million. Of this amount, non-concessional borrowing was $55 million, compared to the ceiling of $100 million. Over the long term, the importance of semi-concessional borrowing relative to concessional loans (and grant financing) is assumed to increase, reducing the average grant element of new borrowing from over 40 percent in the short term to 26 percent in 2038.

12. **The main risks to these assumptions relate to revenue generation, the exchange rate, the persistence of donor grant support, and possible negative developments related to the elections later in 2018.** If revenue performance is not sustained, this could accelerate debt accumulation. Faster-than-expected depreciation of the Ariary would increase the real value of the existing debt stock. Tighter global financial conditions[8] could spill over to unexpectedly higher interest rates from some lenders. Additionally, although the outlook on donor grant support is positive, any lack of reform progress going forward could complicate engagement. The electoral period may lead to negative developments, such as challenges to expenditure restraint, leading to higher-than-intended borrowing. Possible political instability related to the elections could weaken economic confidence, with negative implications for key macroeconomic variables, such as growth, the exchange rate and donor support. Many of the negative risks are counterbalanced by positive risks. A stronger-than-projected exchange rate or revenue generation (with an upside potential given the low base) would boost the ability to service higher debt levels and structural fiscal reforms could stimulate additional donor support in the medium to long term. Risks from recurrent natural disasters are already incorporated in the baseline and additional risks are limited.[9]

EXTERNAL DSA

Baseline Scenario

13. **PPG external debt declined from 26.7 percent of GDP in 2016 to 25.3 percent of GDP in 2017.** An increase in nominal terms (from \$2.5 billion in 2016 to \$2.8 billion in 2017) was exceeded by nominal GDP growth in US dollar terms, which was boosted by growth in real activity as well as the real appreciation of the Ariary. The strength of the Ariary and a better-than-expected current account balance kept external debt at a level that was almost 5 percent lower than anticipated in the 2017 DSA. PPG external debt is anticipated to edge up to 25.5 percent of GDP in 2018 (Table 3) and reach 37 percent in 2023. Overall external debt including private debt is expected to rise moderately over the medium term. Inflows from transfers and FDI[10] are projected to almost match the trade deficit and other outflows, including from the mining sector.[11] Under the baseline, debt dynamics benefit from real GDP growth exceeding nominal interest rates. Looking further ahead, as reliance on

[8] Against the backdrop of continued monetary policy normalization and stretched valuations across asset classes, an abrupt change in risk appetite could raise interest rates suddenly and sharply.

[9] Historical averages of key variables, which by construction include the medium-term impact of recurrent disasters, are an input into forecasts; estimates are adjusted for the impact of planned policy measures. See Box 2 of the 2017 DSA for a discussion of impacts on the macroeconomy.

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

[11] 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.

foreign financing decreases, external PPG debt is expected to be 32 percent of GDP in 2038. In the 2017 DSA, external PPG debt was projected at 25 percent in 2037 due in part to more optimistic FDI as well as more favorable long-term grants and interest rates.[12]

14. **Under the baseline projection, all PPG external debt indicators in present value (PV) terms remain comfortably below the policy-dependent debt burden thresholds** (Figure 2). Because of the large concessional element of borrowing, the PV of external debt is substantially lower than the nominal debt stock. The PV of PPG external debt was 14 percent of GDP in 2017. It is projected to increase to 22½ percent of GDP by 2023 (21 percent in the 2017 DSA) and to remain broadly constant until 2038 (16 percent in 2017 DSA).

15. **Private sector debt is not assessed to pose a significant threat to external sustainability**. Private external debt is projected to decline as the loans related to a major mining project are repaid. Given the exceptional nature of the mining 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).

Sensitivity Analysis

16. **Two types of DSA stress tests are applied to the baseline external PPG debt and debt service projections.** First, the six standard bound tests apply pre-defined shocks to each of five macroeconomic variables that drive external debt (Table 4). The shock that leads to the highest values is shown in Figure 2 and indicated in Footnote 1 of the figure. Second, there are two alternative scenarios including one in which macroeconomic variables are set equal to their average over 2008-17 (as a check against the realism of baseline assumptions) and one in which financing is less favorable.

17. **Nine out of 40 tests breach the external PPG debt thresholds**. Four shocks breach the debt-to-GDP threshold. First, a depreciation of 30 percent relative to the baseline in 2019 would result in the PV breaching the debt-to-GDP threshold of 30 percent in 2023 and heading back to it over the long term- this is considered the most severe test, and breach under this assumption is sufficient to yield an assessment of moderate risk of external debt distress for Madagascar. Second, less favorable financing would result in a breach in the longer term. Third, a combination of less severe shocks would also breach the debt-to-GDP threshold in 2023. Fourth, the historical scenario generates a breach.[13] The same four shocks, notably the combination of less severe shocks, would cause temporary breaches to the PV of debt-to-revenue threshold of 200. Finally, a shock to exports

[12] These factors also help explain why, although 2017 debt levels are 5 percent of GDP lower than in the 2017 DSA, they are forecast to be only ¼ percent of GDP lower than in the 2017 DSA for 2022.

[13] There are good reasons to place less weight on the historical scenario, in which large current account deficits in 2008 and 2009 are an important driver. As discussed in the 2017 DSA, the episode was atypical, related to investment in large mining projects, and did not increase PPG external debt.

makes the PV of debt-to-exports ratio breach its threshold temporarily. Compared to the debt stock indicators, debt service indicators appear especially robust since the stress tests generate no breaches. The 2017 DSA results generated minor breaches in the bounds tests and more substantial breaches using the historical scenario. The difference is accounted for partly by a lower baseline in 2017 and partly because the default historical shock is more benign following the shift in the base year.

PUBLIC DSA

Baseline Scenario

18. **Total PPG debt (external plus domestic) is projected to rise moderately as a proportion to GDP over the medium term and remain broadly steady thereafter under baseline assumptions.** Estimated at 36 percent of GDP in 2017, domestic and external PPG debt is expected to rise to 44 percent over the medium term. Much of the medium-term increase is in external debt, as the authorities benefit from improved donor relations to seek external concessional financing and rely less on domestic sources. The primary deficit, which includes foreign-financed capital projects and grants in the DSA, is the main driver of debt dynamics. Real GDP growth that exceeds interest rates helps keep debt contained over the longer term under the baseline assumptions. Between 2023 and 2038, debt is expected to fall by 1 percent of GDP, but the composition is expected to change. As domestic debt markets deepen, the share of external debt is expected to decline slightly. The domestic component of PPG debt variables remains broadly the same as in the 2017 DSA.

19. **The PV of total PPG debt to GDP and to revenue, as well as debt service measures, rise slowly from low levels over the forecast horizon.** The baseline assumes that Madagascar will rely less on concessional financing over time. Therefore, when measured in PV terms, total PPG debt is projected to increase throughout the projection horizon and reach 34½ percent of GDP in 2038. Since debt is consistently below the threshold of 38 percent (Figure 3 and Table 5) and is not rising alarmingly, Madagascar’s debt sustainability rating is not augmented by significant risks from domestic public debt. Less concessional financing causes the projected ratio of debt service to revenue including grants to rise for much of the forecast period. The PV of debt relative to revenue including grants is projected to reach 198 percent in 2023 and remain broadly stable thereafter.

Sensitivity Analysis

20. **In six out of eight stress tests, the PV of total PPG debt as a share of GDP breaches the risk benchmark, albeit usually only in the long term** (Figure 3 and Table 6). The most extreme shock—a one standard deviation reduction in GDP growth in 2019-20 relative to its historical average—would breach the PV of debt-to-GDP threshold (38 percent) during 2023 and continue rising to 60 percent by 2038, if no corrective measures are taken. The PV of the debt-to-GDP benchmark is also breached by a smaller yet more persistent growth shock, or two alternative shocks yielding a smaller growth shock combined with a shock to the fiscal balance. However, such breaches only take place over the longer term. A one-time depreciation would of increase would also breach

the threshold over the long term. Finally, a large increase in debt creating flows in 2019, which could for example arise from realizing an unexpectedly large unknown contingent liability, would also breach the threshold over the long term. Measured as a share of revenue rather than of GDP, shocks generally result in rising values over the longer term, although no thresholds are specified. In the most extreme shock, debt service would rise sharply but temporarily. The simulations suggest total PPG debt projections are more sensitive to shocks than the external debt projections. Policies promoting an environment conducive to stable GDP growth as well as further improvements in revenue generation and expenditure control and management are essential for PPG debt sustainability.

CONCLUSION

21. **Breaches of debt thresholds only under stress scenarios result in a moderate risk rating.** Current external debt ratios are lower than in the 2017 DSA due in part to better-than-expected vanilla and other commodity exports, which contributed to a better-than-expected current account balance and a stronger-than-anticipated Ariary. The authorities are expected to be able to service current and future debt. Only some shocks challenge the sustainability of external debt stocks, while external debt service capacity appears robust. In comparison, total PPG debt remains more vulnerable to deviations from the baseline assumptions, especially slower GDP growth. A higher primary deficit (for example from disappointing revenue collection) or a one-off increase in debt-creating flows (for example materializing contingent liabilities related to SOEs) would also present risks.

22. **The authorities have initiated measures that can help address these vulnerabilities**. In 2017, revenue mobilization efforts continued to be fruitful, a new institution to manage public investment OCSIF became operational, and expenditure execution was satisfactory overall. Further measures aim to improve revenue collection and budgetary execution, strengthen project implementation and debt monitoring capacity, and improve policy and institutional performance. Alongside initiatives to promote governance and build a sound financial sector, such measures should help to maintain favorable financing conditions and increase Madagascar's potential economic growth. It is also important to contain debt risks by strengthening the monitoring and management of SOEs, including the National Public Establishments.

23. **The DSA informed discussions with the authorities during the March 2018 mission.** Staff stressed that proposed IMF program limits and borrowing plans need to be consistent with debt sustainability and the overall macroeconomic framework. Staff will also continue to stress the importance of growth-friendly policies as well as measures to manage the fiscal balance for debt sustainability. Staff clarified the distinction between nominal debt ratios and those measured in PV terms and worked with technical staff to refine calculations of PVs for both IMF program monitoring and to inform broader debt management. The authorities broadly concurred with the overall assessment and the policy implications. While agreeing on the baseline projections, the authorities believed that scaling up public investment could have a stronger than projected impact on growth.

Table 3. Madagascar: External Debt Sustainability Framework, Baseline Scenario, 2015-38[1]

(In percent of GDP; unless otherwise indicated)

	Actual			Historical 6/	Standard 6/	Projections									
	2015	2016	2017	Average	Deviation	2018	2019	2020	2021	2022	2023	2018-2023 Average	2028	2038	2024-2038 Average
External debt (nominal) 1/	**47.4**	**44.3**	**38.7**			**37.0**	**37.5**	**38.8**	**40.0**	**41.0**	**41.5**	**39.3**	**36.9**	**33.9**	
of which: public and publicly guaranteed (PPG)	28.4	26.7	25.3			25.5	27.8	30.7	33.3	35.5	37.0	31.6	36.1	31.8	
Change in external debt	3.7	-3.1	-5.6			-1.7	0.4	1.3	1.3	1.0	0.5	0.5	-1.1	-0.1	
Identified net debt-creating flows	1.6	-6.2	-8.5			-2.7	-1.6	-0.8	-0.6	-0.5	-0.9	-1.2	-1.8	0.0	
Non-interest current account deficit	**0.4**	**-2.0**	**-0.9**	**5.9**	**7.7**	**1.1**	**2.4**	**3.4**	**3.7**	**3.9**	**3.6**	3.0	**2.8**	**4.2**	3.2
Deficit in balance of goods and services	3.5	2.3	3.6			5.9	6.1	6.4	6.5	6.5	6.0	6.2	4.7	6.6	
Exports	32.1	33.5	35.4			34.7	34.0	33.6	33.4	33.2	33.0	33.6	35.2	38.8	
Imports	35.5	35.8	39.0			40.6	40.1	40.0	39.9	39.8	39.1	39.9	39.9	45.4	
Net current transfers (negative = inflow)	-5.4	-6.9	-6.4	-5.8	1.0	-6.9	-5.7	-5.1	-4.9	-4.7	-4.6	-5.3	-4.6	-4.6	-4.6
of which: official	-1.5	-3.5	-2.8			-3.4	-2.6	-1.4	-1.4	-1.4	-1.4	-1.9	-1.2	-1.1	
Other current account flows (negative = net inflow)	2.3	2.7	1.9			2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.6	2.1	
Net FDI (negative = inflow)	**-4.5**	**-4.5**	**-3.1**	**-5.5**	**2.0**	**-3.1**	**-3.2**	**-3.3**	**-3.4**	**-3.4**	**-3.5**	-3.3	**-3.5**	**-3.5**	**-3.5**
Endogenous debt dynamics 2/	**5.8**	**0.3**	**-4.6**	**0.0**	**3.4**	**-0.7**	**-0.8**	**-0.8**	**-0.9**	**-0.9**	**-1.0**	-0.9	**-1.1**	**-0.7**	**-1.0**
Contribution from nominal interest rate	1.6	1.5	1.2			1.1	1.0	1.0	0.9	0.9	0.8	1.0	0.6	0.7	0.6
Contribution from real GDP growth	-1.5	-1.9	-1.6			-1.8	-1.8	-1.8	-1.9	-1.8	-1.9	-1.8	-1.7	-1.4	-1.6
Contribution from price and exchange rate changes	5.7	0.7	-4.2			...	...	...	...	...	...		...	...	
Residual (3-4) 3/	**2.1**	**3.1**	**3.0**	**1.0**	**4.7**	**1.0**	**2.1**	**2.1**	**1.9**	**1.5**	**1.4**	1.7	**0.7**	**0.0**	0.7
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/	...	...	27.6			26.1	25.7	26.0	26.4	26.8	27.0		24.2	24.3	
In percent of exports	...	...	77.9			75.2	75.7	77.5	79.1	80.6	81.8		68.8	62.7	
PV of PPG external debt	**...**	**...**	**14.2**			**14.6**	**16.1**	**17.9**	**19.7**	**21.3**	**22.5**		**23.4**	**22.3**	
In percent of exports	**...**	**...**	**40.0**			**42.0**	**47.3**	**53.5**	**59.1**	**64.0**	**68.2**		**66.5**	**57.4**	
In percent of government revenues	**...**	**...**	**119.7**			**119.1**	**128.4**	**137.9**	**147.1**	**156.0**	**161.4**		**154.0**	**136.0**	
Debt service-to-exports ratio (in percent)	**20.8**	**19.0**	**15.0**			**13.1**	**11.5**	**10.4**	**9.4**	**8.5**	**7.7**		**5.3**	**7.1**	
PPG debt service-to-exports ratio (in percent)	**1.9**	**2.6**	**2.6**			**2.3**	**2.2**	**2.5**	**2.8**	**3.0**	**3.1**		**4.3**	**4.8**	
PPG debt service-to-revenue ratio (in percent)	**5.8**	**7.8**	**7.7**			**6.6**	**6.0**	**6.5**	**7.0**	**7.2**	**7.4**		**9.9**	**11.3**	
Total gross financing need (Millions of U.S. dollars)	249.2	-12.1	155.2			318.5	420.5	517.4	539.5	547.3	465.9		279.6	1371.2	
Non-interest current account deficit that stabilizes debt ratio	-3.4	1.2	4.7			2.8	2.0	2.1	2.4	2.9	3.1		3.9	4.2	
Key macroeconomic assumptions															
Real GDP growth (in percent)	3.1	4.2	4.2	2.4	3.1	5.0	5.4	5.3	5.2	4.9	4.9	5.1	4.7	4.4	4.6
GDP deflator in US dollar terms (change in percent)	-11.5	-1.5	10.4	2.5	9.2	3.5	2.9	2.3	1.6	1.4	1.1	2.1	1.0	1.0	1.0
Effective interest rate (percent) 5/	3.3	3.2	3.1	3.8	0.7	3.0	3.0	2.8	2.6	2.3	2.2	2.7	1.5	2.2	1.8
Growth of exports of G&S (US dollar terms, in percent)	-10.7	7.2	21.6	7.2	15.0	6.5	6.2	6.4	6.4	5.9	5.4	6.1	6.3	6.8	6.8
Growth of imports of G&S (US dollar terms, in percent)	-12.7	3.3	25.5	4.1	18.0	13.0	7.1	7.5	6.7	6.0	4.1	7.4	6.7	7.2	6.7
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	40.0	42.3	41.4	40.2	40.1	39.2	40.5	35.9	31.5	34.6
Government revenues (excluding grants, in percent of GDP)	10.4	11.2	11.8			12.2	12.5	13.0	13.4	13.6	13.9		15.2	16.4	15.5
Aid flows (in Millions of US dollars) 7/	144.0	348.9	333.7			719.3	888.5	879.0	901.0	884.0	854.7		734.8	1090.4	
of which: Grants	144.0	348.9	333.7			430.5	372.1	207.3	220.6	230.9	245.6		282.8	436.4	
of which: Concessional loans	0.0	0.0	0.0			288.8	516.4	671.7	680.3	653.1	609.1		452.0	653.9	
Grant-equivalent financing (in percent of GDP) 8/	...	...	...			4.7	4.7	3.6	3.4	3.2	3.0		2.1	1.9	2.1
Grant-equivalent financing (in percent of external financing) 8/	...	...	...			71.6	63.5	53.9	53.3	54.0	55.0		56.8	51.0	54.9
Memorandum items:															
Nominal GDP (Millions of US dollars)	9744	10001	11500			12499	13553	14603	15609	16601	17607		23386	40227.1	
Nominal dollar GDP growth	-8.7	2.6	15.0			8.7	8.4	7.7	6.9	6.4	6.1	7.4	5.8	5.4	5.7
PV of PPG external debt (in Millions of US dollars)			1571.6			1783.4	2140.0	2570.7	3023.0	3469.8	3888.0		5366.1	8799.9	
(PVt-PVt-1)/GDPt-1 (in percent)						1.8	2.9	3.2	3.1	2.9	2.5	2.7	1.2	1.1	1.3
Gross workers' remittances (Millions of US dollars)	...	...	...			...	...	...	...	...	...		...	...	
PV of PPG external debt (in percent of GDP + remittances)	...	...	14.2			14.6	16.1	17.9	19.7	21.3	22.5		23.4	22.3	
PV of PPG external debt (in percent of exports + remittances)	...	...	40.0			42.0	47.3	53.5	59.1	64.0	68.2		66.5	57.4	
Debt service of PPG external debt (in percent of exports + remittances)	...	...	2.6			2.3	2.2	2.5	2.8	3.0	3.1		4.3	4.8	

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.

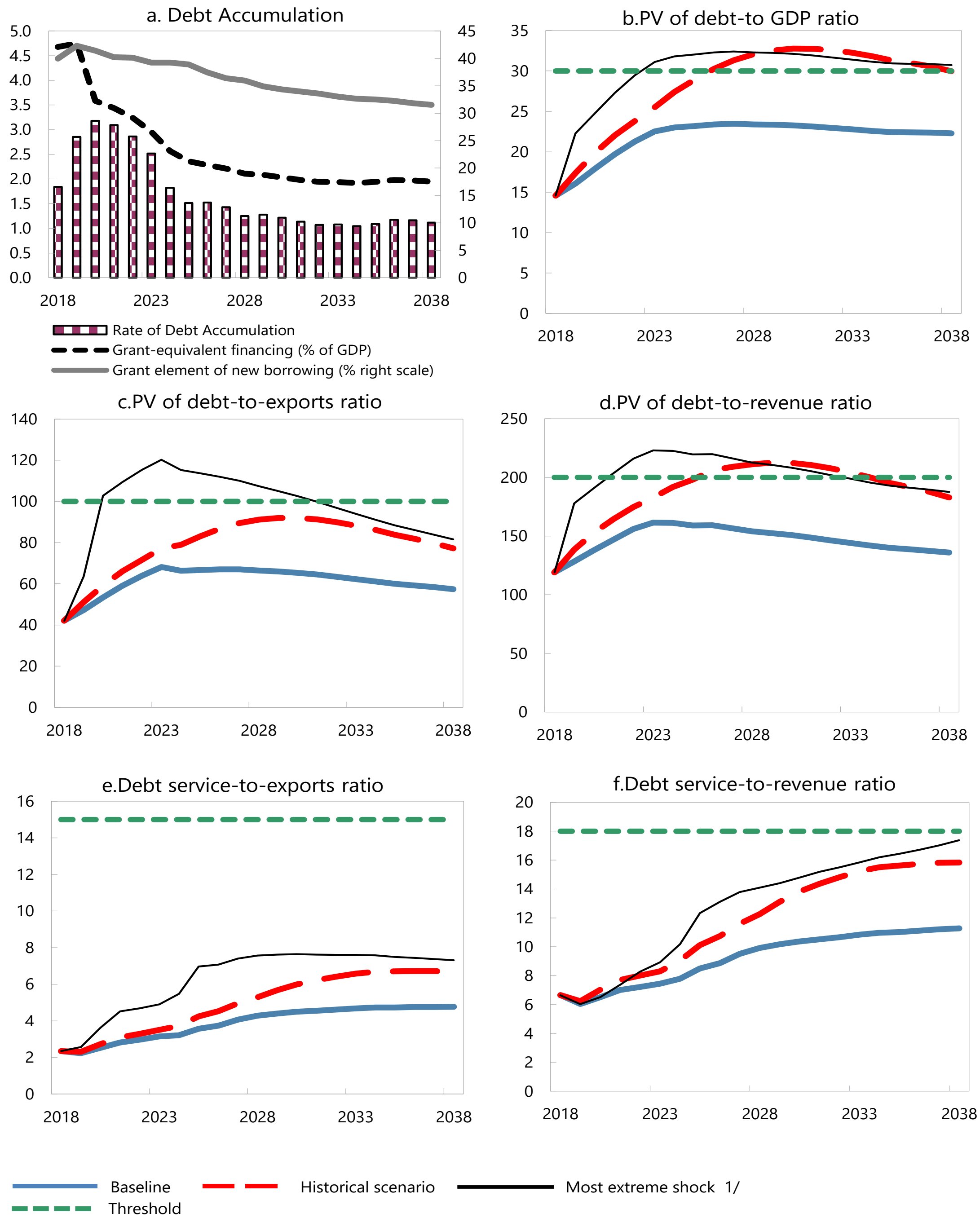
5/ Current-year interest payments divided by previous period debt stock.

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 Alternative Scenarios, 2018-2038[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 2028. In figure b. it corresponds to a One-time depreciation shock; in c. to a Exports shock; in d. to a One-time depreciation shock; in e. to a Exports shock and in figure f. to a Terms shock

Table 4. Madagascar: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2018-38

(In percent)

	Projections							
	2018	2019	2020	2021	2022	2023	**2028**	2038
PV of debt-to GDP ratio								
Baseline	15	16	18	20	21	23	**23**	22
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2018-2038 1/	15	17	20	22	24	25	**32**	30
A2. New public sector loans on less favorable terms in 2018-2038 2	15	17	20	23	26	28	**31**	34
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2019-2020	15	17	20	22	23	25	**26**	25
B2. Export value growth at historical average minus one standard deviation in 2019-2020 3/	15	19	26	27	29	30	**28**	24
B3. US dollar GDP deflator at historical average minus one standard deviation in 2019-2020	15	17	21	23	25	27	**28**	26
B4. Net non-debt creating flows at historical average minus one standard deviation in 2019-2020 4/	15	16	18	20	21	22	**23**	22
B5. Combination of B1-B4 using one-half standard deviation shocks	15	19	26	28	30	31	**31**	27
B6. One-time 30 percent nominal depreciation relative to the baseline in 2019 5/	15	22	25	27	29	31	**32**	31
PV of debt-to-exports ratio								
Baseline	42	47	53	59	64	68	**66**	57
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2018-2038 1/	42	51	59	66	72	77	**91**	77
A2. New public sector loans on less favorable terms in 2018-2038 2	42	50	60	69	77	84	**88**	88
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2019-2020	42	46	52	58	63	67	**65**	56
B2. Export value growth at historical average minus one standard deviation in 2019-2020 3/	42	64	103	109	115	120	**107**	82
B3. US dollar GDP deflator at historical average minus one standard deviation in 2019-2020	42	46	52	58	63	67	**65**	56
B4. Net non-debt creating flows at historical average minus one standard deviation in 2019-2020 4/	42	48	54	59	64	68	**66**	56
B5. Combination of B1-B4 using one-half standard deviation shocks	42	54	74	80	85	89	**83**	67
B6. One-time 30 percent nominal depreciation relative to the baseline in 2019 5/	42	46	52	58	63	67	**65**	56
PV of debt-to-revenue ratio								
Baseline	119	128	138	147	156	161	**154**	136
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2018-2038 1/	119	139	153	165	175	183	**211**	183
A2. New public sector loans on less favorable terms in 2018-2038 2	119	136	155	172	188	199	**205**	209
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2019-2020	119	134	152	162	172	178	**169**	149
B2. Export value growth at historical average minus one standard deviation in 2019-2020 3/	119	150	200	205	212	214	**187**	145
B3. US dollar GDP deflator at historical average minus one standard deviation in 2019-2020	119	139	163	174	185	191	**182**	160
B4. Net non-debt creating flows at historical average minus one standard deviation in 2019-2020 4/	119	129	139	148	156	161	**153**	134
B5. Combination of B1-B4 using one-half standard deviation shocks	119	150	200	209	218	223	**202**	167
B6. One-time 30 percent nominal depreciation relative to the baseline in 2019 5/	119	178	191	204	216	223	**213**	188

Table 4. Madagascar: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2018-38 (concluded)

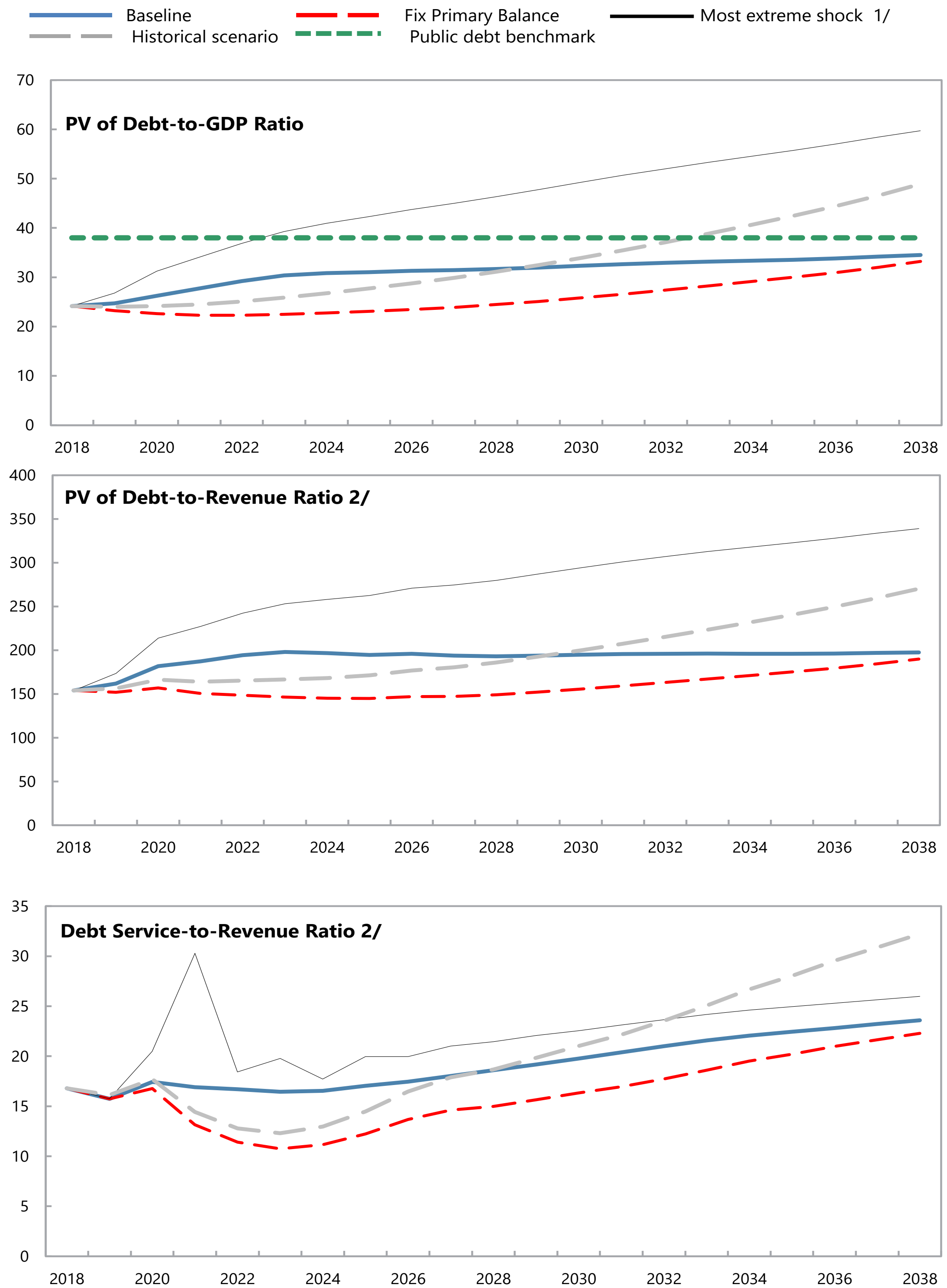
(In percent)

				Projections				
	2018	2019	2020	2021	2022	2023	**2028**	2038
Debt service-to-exports ratio								
Baseline	2.3	2.2	2.5	2.8	3.0	3.1	**4.3**	4.8
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2018-2038 1/	2.3	2.3	2.7	3.1	3.3	3.5	**5.3**	6.7
A2. New public sector loans on less favorable terms in 2018-2038 2	2.3	2.2	2.5	3.0	3.4	3.8	**6.1**	7.3
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2019-2020	2.3	2.2	2.5	2.8	3.0	3.1	**4.3**	4.7
B2. Export value growth at historical average minus one standard deviation in 2019-2020 3/	2.3	2.6	3.6	4.5	4.7	4.9	**7.6**	7.3
B3. US dollar GDP deflator at historical average minus one standard deviation in 2019-2020	2.3	2.2	2.5	2.8	3.0	3.1	**4.3**	4.7
B4. Net non-debt creating flows at historical average minus one standard deviation in 2019-2020 4/	2.3	2.2	2.5	2.8	3.0	3.2	**4.4**	4.8
B5. Combination of B1-B4 using one-half standard deviation shocks	2.3	2.4	3.0	3.5	3.7	3.9	**5.7**	5.8
B6. One-time 30 percent nominal depreciation relative to the baseline in 2019 5/	2.3	2.2	2.5	2.8	3.0	3.1	**4.3**	4.7
Debt service-to-revenue ratio								
Baseline	6.6	6.0	6.5	7.0	7.2	7.4	**9.9**	11.3
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2018-2038 1/	6.6	6.2	7.0	7.7	8.0	8.3	**12.3**	15.8
A2. New public sector loans on less favorable terms in 2018-2038 2	6.6	6.0	6.5	7.4	8.3	8.9	**14.1**	17.4
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2019-2020	6.6	6.4	7.3	7.9	8.1	8.4	**11.1**	12.6
B2. Export value growth at historical average minus one standard deviation in 2019-2020 3/	6.6	6.0	7.0	8.5	8.6	8.7	**13.2**	13.0
B3. US dollar GDP deflator at historical average minus one standard deviation in 2019-2020	6.6	6.7	7.9	8.5	8.7	9.0	**11.9**	13.6
B4. Net non-debt creating flows at historical average minus one standard deviation in 2019-2020 4/	6.6	6.0	6.6	7.1	7.3	7.5	**10.1**	11.3
B5. Combination of B1-B4 using one-half standard deviation shocks	6.6	6.6	8.1	9.3	9.5	9.7	**13.8**	14.5
B6. One-time 30 percent nominal depreciation relative to the baseline in 2019 5/	6.6	8.5	9.2	9.9	10.2	10.5	**14.0**	15.9
Memorandum item:								
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	34	34	34	34	34	34	**34**	34

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, 2018-2038



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 2028.
2/ Revenues are defined inclusive of grants.

Table 5. Madagascar: Public Sector Debt Sustainability Framework, Baseline Scenario, 2015-38
(In percent of GDP; unless otherwise indicated)

	Actual					Estimate	Projections								
	2015	2016	2017	Average 5/	Standard Deviation 5/	2018	2019	2020	2021	2022	2023	2018-23 Average	2028	2038	2024-38 Average
Public sector debt 1/	41.3	38.4	36.0			35.1	36.5	39.0	41.3	43.4	44.9		44.3	44.0	
of which: foreign-currency denominated	28.4	26.7	25.3			25.5	27.8	30.7	33.3	35.5	37.0		36.1	31.8	
Change in public sector debt	5.5	-2.9	-2.4			-0.9	1.4	2.5	2.4	2.1	1.5		-0.2	0.1	
Identified debt-creating flows	4.4	-2.9	-3.4			-1.9	1.0	2.4	2.3	1.9	1.4		-0.6	-1.1	
Primary deficit	2.5	0.4	1.6	1.6	0.9	1.4	3.5	4.4	4.2	3.7	3.1	3.4	1.2	0.4	1.0
Revenue and grants	11.8	14.7	14.7			15.7	15.3	14.4	14.8	15.0	15.3		16.4	17.5	16.7
of which: grants	1.5	3.5	2.9			3.4	2.7	1.4	1.4	1.4	1.4		1.2	1.1	
Primary (noninterest) expenditure	14.3	15.2	16.3			17.1	18.8	18.8	19.0	18.8	18.5		17.6	17.8	
Automatic debt dynamics	2.4	-2.1	-4.4			-2.7	-2.3	-1.9	-1.8	-1.7	-1.7	-2.0	-1.8	-1.4	-1.6
Contribution from interest rate/growth differential	-1.3	-1.9	-2.0			-2.0	-2.0	-1.8	-1.9	-1.9	-2.0		-2.1	-1.7	
of which: contribution from average real interest rate	-0.2	-0.2	-0.5			-0.3	-0.2	0.0	0.0	0.0	0.0		-0.1	0.1	
of which: contribution from real GDP growth	-1.1	-1.7	-1.5			-1.7	-1.8	-1.8	-1.9	-1.9	-2.0		-2.0	-1.8	
Contribution from real exchange rate depreciation	3.7	-0.2	-2.4			-0.7	-0.3	-0.1	0.1	0.2	0.3		...	...	
Other identified debt-creating flows	-0.5	-1.2	-0.6			-0.6	-0.2	-0.1	-0.1	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	-0.5	-1.2	-0.6			-0.6	-0.2	-0.1	-0.1	0.0	0.0		0.0	0.0	
Residual, including asset changes	1.1	0.0	1.0			1.0	0.3	0.1	0.0	0.1	0.1		0.3	1.2	0.6
Other Sustainability Indicators															
PV of public sector debt	...	...	24.8			24.2	24.7	26.2	27.7	29.2	30.4		31.7	34.5	
of which: foreign-currency denominated	...	...	14.2			14.6	16.1	17.9	19.7	21.3	22.5		23.4	22.3	
of which: external	...	...	14.2			14.6	16.1	17.9	19.7	21.3	22.5		23.4	22.3	
PV of contingent liabilities (not included in public sector debt)	...	...	...			...	...	...	...	...	...		...	...	
Gross financing need 2/	10.5	9.3	9.6			8.8	10.2	10.8	10.4	9.9	9.2		7.8	9.9	
PV of public sector debt-to-revenue and grants ratio (in percent)	...	...	168.5			154.0	161.9	181.8	187.2	194.3	198.0		193.1	197.5	
PV of public sector debt-to-revenue ratio (in percent)	...	...	209.8			197.3	197.3	201.7	207.0	214.1	217.8		208.4	210.5	
of which: external 3/	...	...	119.7			119.1	128.4	137.9	147.1	156.0	161.4		154.0	136.0	
Debt service-to-revenue and grants ratio (in percent) 4/	23.8	20.4	19.3			16.8	15.7	17.4	16.9	16.7	16.5		18.6	23.6	
Debt service-to-revenue ratio (in percent) 4/	27.2	26.8	24.0			21.5	19.2	19.3	18.7	18.4	18.1		20.1	25.2	
Primary deficit that stabilizes the debt-to-GDP ratio	-3.0	3.3	4.0			2.3	2.2	1.9	1.8	1.7	1.6		1.4	0.2	
Key macroeconomic and fiscal assumptions															
Real GDP growth (in percent)	3.1	4.2	4.2	2.4	3.1	5.0	5.4	5.3	5.2	4.9	4.9	5.1	4.7	4.4	4.6
Average nominal interest rate on forex debt (in percent)	0.8	0.8	0.9	0.8	0.1	1.0	1.3	1.6	1.5	1.5	1.5	1.4	1.3	1.6	1.4
Average real interest rate on domestic debt (in percent)	-1.5	-0.8	-2.3	-0.5	1.4	-1.1	-0.4	1.8	2.0	2.0	1.9	1.0	1.9	1.8	1.9
Real exchange rate depreciation (in percent, + indicates depreciation)	15.8	-0.7	-9.3	0.5	7.5	-2.9	...	...	...	...	...	...	...	...	...
Inflation rate (GDP deflator, in percent)	7.6	6.7	8.3	7.5	1.5	7.8	7.2	6.3	5.5	5.2	5.0	6.1	5.0	5.0	5.0
Growth of real primary spending (deflated by GDP deflator, in percent)	4.2	10.3	12.2	2.7	4.7	9.9	15.9	5.4	6.3	3.4	3.2	7.3	4.8	4.1	4.4
Grant element of new external borrowing (in percent)	...	...	...	...	...	40.0	42.3	41.4	40.2	40.1	39.2	40.5	35.9	31.5	...

Sources: Country authorities; and staff estimates and projections.
1/ [Indicate coverage of public sector, e.g., general government or nonfinancial public sector. Also whether net or gross debt is used.]
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 2018-38

	Projections							
	2018	2019	2020	2021	2022	2023	2028	2038
PV of Debt-to-GDP Ratio								
Baseline	24	25	26	28	29	30	32	35
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	24	24	24	24	25	26	31	49
A2. Primary balance is unchanged from 2018	24	23	23	22	22	22	24	33
A3. Permanently lower GDP growth 1/	24	25	27	29	31	32	37	53
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2019-2020	24	27	31	34	37	39	46	60
B2. Primary balance is at historical average minus one standard deviations in 2019-2020	24	24	24	26	27	29	30	33
B3. Combination of B1-B2 using one half standard deviation shocks	24	25	26	28	31	33	39	50
B4. One-time 30 percent real depreciation in 2019	24	30	31	31	32	33	35	40
B5. 10 percent of GDP increase in other debt-creating flows in 2019	24	32	33	34	36	37	37	38
PV of Debt-to-Revenue Ratio 2/								
Baseline	154	162	182	187	194	198	193	197
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	154	156	166	164	165	167	186	270
A2. Primary balance is unchanged from 2018	154	152	157	151	148	147	149	190
A3. Permanently lower GDP growth 1/	154	163	185	193	203	210	227	303
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2019-2020	154	173	214	227	242	253	280	339
B2. Primary balance is at historical average minus one standard deviations in 2019-2020	154	157	168	174	182	186	183	191
B3. Combination of B1-B2 using one half standard deviation shocks	154	160	175	188	203	213	235	286
B4. One-time 30 percent real depreciation in 2019	154	198	212	211	214	216	213	227
B5. 10 percent of GDP increase in other debt-creating flows in 2019	154	209	231	231	237	238	226	220
Debt Service-to-Revenue Ratio 2/								
Baseline	17	16	17	17	17	16	19	24
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	17	16	18	14	13	12	19	32
A2. Primary balance is unchanged from 2018	17	16	17	13	11	11	15	22
A3. Permanently lower GDP growth 1/	17	16	18	17	17	17	22	34
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2019-2020	17	17	20	20	21	22	26	37
B2. Primary balance is at historical average minus one standard deviations in 2019-2020	17	16	17	15	14	16	18	23
B3. Combination of B1-B2 using one half standard deviation shocks	17	16	18	15	14	19	22	32
B4. One-time 30 percent real depreciation in 2019	17	17	20	20	20	20	24	32
B5. 10 percent of GDP increase in other debt-creating flows in 2019	17	16	20	30	18	20	21	26

Sources: Country authorities; and staff estimates and projections.
1/ Assumes that real GDP growth is at baseline minus one standard deviation divided by the square root of the length of the projection period.
2/ Revenues are defined inclusive of grants.

Statement by the Staff Representative on Madagascar
Executive Board Meeting
July 11, 2018

This statement contains information that has become available since the staff report (www.imf.org) was issued on June 26, 2018. It does not alter the thrust of the staff appraisal.

1. The supplementary budget law submitted to parliament on May 25, 2018 was approved without modification by parliament on June 29, 2018. It is in line with the authorities' policy commitments laid out in the staff report and consistent with the performance criteria and indicative targets of the ECF arrangement for the rest of 2018.

2. The presidential election dates have been officially announced: the first round will be held on November 7, 2018 and the second round on December 19, 2018. The government is expected to remain in place until the inauguration of the new president, which is planned for mid-January 2019.

Statement by Mr. Sembene, Executive Director for Madagascar,
Mr. Razafindramanana, Alternate Executive Director, and
Mr. Alle, Senior Advisor to Executive Director
July 11, 2018

1. The Malagasy authorities would like to thank the Fund for its continued engagement with Madagascar over the past years. The policy dialogue with staff in the context of the program supported by the Extended Credit Facility (ECF) has been instrumental in helping sustain economic recovery amidst episodes of political turmoil and natural disasters. The authorities broadly share the thrust of the staff report, which fairly depicts the achievements under the program and the challenges still facing the economy.

2. Madagascar has maintained its strong growth momentum despite a series of adverse shocks in 2017, including a drought followed by a major cyclone and an outbreak of plague. The authorities' efforts to overcome years of instability along with the support of the international community have paved the way for a sustained economic recovery.

3. Our authorities are determined to advance their reform agenda aimed notably at strengthening constitutional democracy and resolving social and political tensions that have held back the country's economic development in the past. It is in line with their consensus-building principles that the recent pre-electoral tensions have been handled. Following street protests over the electoral process, a new and consensual Prime Minister has been appointed on June 4th and a new government set up on June 11th including representatives from major opposition parties. Tasked with the priority objective of organizing an inclusive, free and fair presidential election, the government has recently unveiled the calendar; the first and second rounds of the presidential contest are scheduled for November 7th and December 19th respectively. The consensus government has reiterated its commitment to the ECF-supported program and is also committed to conducting a peaceful election with the view to maintaining the favorable economic prospects of the country.

Recent Developments, Program Performance and Outlook

4. The economic recovery that started in 2016 has continued in 2017. Despite the different shocks that affected the economy, real GDP growth stood above 4 percent for the second year in a row, driven mainly by transport, manufactured exports, and other services. The poor rice harvest caused by bad weather conditions translated into rice-price-fueled inflation, which rose to 9 percent y-o-y at end-2017 before abating to 7.4 percent y-o-y in April 2018.

5. Program performance has continued to be strong despite the challenging environment. All end-2017 quantitative performance criteria (PCs) and indicative targets (ITs) were met. Some PCs including the floor on the domestic primary balance and the one related to external debt and some ITs such as priority social spending and the ceiling on the central bank net domestic assets were observed with a significant margin. On the structural front, all the five structural benchmarks (SB) for end-2017 were implemented, with one

completed with delay. The new statistics law was indeed submitted to parliament in February 2018, rather than December 2017 as planned, causing the minor delay.

6. Regarding the outlook, our authorities concur with staff on the favorable growth prospects underpinned by the projected performance in agriculture, manufacturing, and public investment. They also broadly share the balance of risks. The authorities are confident that the recent consensus and the handling of the presidential election by a multi-partisan government should reassure all candidates and hence contribute to minimizing political risks. They are committed to continuing to monitor the situation closely, and stand ready to take necessary actions for preserving a peaceful climate including for the smooth implementation of the ECF-supported reform program.

Policies for 2018 and the Medium Term

Enhancing the fiscal stance for public investment

7. In 2018 onward, fiscal policy is geared toward creating space for growth-supporting public investment and social spending. To this end, efforts are directed toward mobilizing more revenue while improving the quality and composition of spending. The supplementary budget adopted by Parliament on June 29^{th} reflects these overarching features, as agreed with staff. It is consistent with the objectives of the program, including a positive primary balance of 0.1 percent of GDP. While being 0.6 percent of GDP lower than the initial budget, this effort in an environment of high fiscal needs epitomizes the authorities' commitment to fiscal sustainability. This projected favorable fiscal stance is backed by more optimistic revenue projections based on the overperformance recorded in the first quarter of 2018. In this connection, the introduction of performance contracts with management-level staff to increase custom duties constitutes one of the key administrative reform measures underpinning the expected improvement in revenue collection. Higher oil prices and performing VAT have also contributed to this performance. Going forward, additional measures such as the use of the new Tax Identification Number (TIN) throughout all departments of the ministry of finance and budget and social security offices (end-2017 SB) will also help enhance revenue mobilization.

8. On the spending side, the emphasis is on scaling up public investment financed both by domestic resources and foreign loans. The authorities' strategy is two-fold; phasing out or rationalizing transfers and making room for efficient public investment and social spending. To better mobilize foreign financing and improve investment efficiency, they have created the Organization for the Coordination and Monitoring of Investments and their Financing (OCSIF) tasked with coordinating the selection and implementation of projects across ministries and implementing donors' procedures. Operational losses and financial needs of the national electricity company, JIRAMA, make the bulk of budget transfers. With support from the World Bank, the authorities contained transfers in the 2018 budget, by implementing a set of measures including cost reduction and revenue increase. In this regard, efforts continue to improve bill collection, including through the installation of smart meters. Going forward, actions will encompass lowering production costs, reforming JIRAMA and

the overall electricity sector and raising tariffs. With an appropriate sequencing, all these actions will help progressively phase out transfers to JIRAMA.

9. Other efforts for spending restraint include containing the wage bill and implementing the fuel price adjustments. The wage bill was contained in 2017. Efforts in crosschecking the payroll and workforce data will yield savings on around 1,000 ghost workers in 2018. The strategy on the wage bill will be further enhanced with ongoing initiatives to improve the covering of salaries and pensions and hence forecasts. Regarding fuel prices, the authorities have concluded in February, a provisional agreement with the distributors to reduce their margins (lowered by MGA 140 per liter). In addition, pump prices were increased in March, April and June by an average of MGA 205 per liter. Discussions continue and based on a joint study underway, additional measures will be taken including possible further modifications to the margins and incremental steps towards automatic price adjustments. All the combined efforts in revenue mobilization and spending restraint should help create fiscal space both for much needed public investment and social spending in education, health and security.

Maintaining debt sustainability

10. The authorities take good note of staff assessment that the country's risk of external debt distress remains moderate. They also welcome the upgrade in their debt monitoring capacity from "weak" to "adequate", following a higher score in the 2014-16 World Bank Country and Policy Institutional Assessment Index (CPIA). The authorities and staff have agreed to fully take account of the implications of the new status from end-December 2018 onwards. Going forward, our authorities are committed to prioritizing concessional borrowing in their debt strategy with the view to preserving debt sustainability.

Strengthening the monetary policy framework and the financial sector

11. The central bank has managed well thus far the inflationary pressures and appreciation pressures on the *Ariary* (national currency) stemming from the high world price of vanilla. High liquidity in the banking system added to inflationary pressures. Going forward, the authorities are taking measures aimed at strengthening the monetary policy framework, including improving the functioning of the interbank market. The development of the financial sector remains a key component of the authorities' agenda. Reforms are underway to enhance financial stability and supervision. A new banking law aimed at strengthening supervisory powers should be submitted to parliament by end-December 2018; followed by a law on preventing systemic risks and managing financial crises to be submitted to parliament in 2019.

12. The government is revamping the legislative framework for engineering new products, services and actors in the financial sector. In this regard, a new law on microfinance has been enacted, setting the stage for revamping *Paositra Malagasy* (PAOMA) and *Caisse d'Epargne de Madagascar* (CEM), two institutions with systemic importance for financial inclusion. In the same vein, electronic money services are developing at a rapid pace, nearly doubling every year over 2010-16. This trend should be

sustained with the recent entry into force of the new law on electronic money. These positive developments should contribute to deepening the financial market and help improve access to credit, especially to SMEs.

Supporting structural transformation through industrial policy

13. The authorities have embarked on an agenda of structural transformation of the economy. Their strategy evolves around three features for which draft laws have been enacted: a Law on Special Economic Zones (SEZ), a Law for Industrial Development (LID) and a Law on Free Trade Zones. Overall, the aim of the SEZ and LID is to spur the diversification of the economy towards industrial activities including agroindustry, construction-related products and consuming goods. The free trade zone aims to leverage the water endowments of Madagascar to create a competitive harbor for regional and international trade. The government intends to adopt an incremental approach through pilot projects and adjust policy moving forward. Likewise, building on staff comments and recommendations, they are committed to continuing to improve draft laws, including by paying due attention to fiscal implications. In this regard, efforts will be made to attract private investment without jeopardizing unduly revenue mobilization.

Improving economic governance and fighting corruption

14. Significant progress has been made in setting the institutional framework to improve economic governance, enhance accountability and fight corruption in the management of public affairs. The authorities are fully aware of the potential benefits that achievements in those areas would bring to the business climate. Several new laws have been adopted by parliament including the anti-corruption law, which should facilitate the disclosure of assets by concerned public officials. Other draft laws submitted to parliament in December 2017 are pending discussion, including the asset recovery law, by which judicial authorities can freeze, seize and confiscate proceeds of crime; and the anti-money laundering and counter terrorism financing law (AML/CFT), which will align Madagascar's AML/CFT framework with international standards. Two enforcement institutions are being reinforced to apply the laws; the anti-corruption office (BIANCO) and the financial intelligence unit (SAMIFIN). In addition, an anti-corruption center has been established and another one is scheduled to be opened this year.

15. Specific efforts are also being made in areas of public financial management, public procurements, PPPs and SOEs to enhance economic governance. Fiscal transparency will be improved with the development of a medium-term fiscal framework, SOEs are better covered by the budget and a PPP Unit has been created and is spearheading the process for finalizing procedures in coordination with ministries and the National Committee for PPPs. Two bodies have been created to oversee public procurements with an emphasis on increasing the share of competitive bids. With UNDP assistance, the authorities are taking steps to elaborate a catalog of benchmark prices of goods and services in public procurements, to ensure value for money.

Conclusion

16. In the face of a challenging domestic and external context, Madagascar sustained strong economic performance under the ECF-supported program. Growth remained robust, the domestic primary balance was in surplus, and progress was made in implementing structural reforms. In the period ahead, the authorities are committed to continuing fiscal consolidation with a view to creating fiscal space for much-needed public investment and social spending. Furthermore, they intend to lay the basis of strong and inclusive growth, while further improving economic governance.

17. In view of the strong economic performance and the authorities' commitment to the objectives of the program, we would appreciate the Board's support for the completion of the third review under the ECF arrangement and the authorities' request for modification of performance criteria.