IMF Country Report No. 13/97

MAURITIUS

2013 ARTICLE IV CONSULTATION

April, 2013

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2013 Article IV consultation with Mauritius, the following documents have been released and are included in this package:

- **Staff Report** for the 2013 Article IV consultation, prepared by a staff team of the IMF, following discussions that ended on January 30, 2013, with the officials of Mauritius on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on March 19, 2013. The views expressed in the staff report are those of the staff team and do not necessarily reflect the views of the Executive Board of the IMF.
- **Informational Annex** prepared by the IMF.
- **Public Information Notice** (PIN) summarizing the views of the Executive Board.

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International Monetary Fund
Washington, D.C.

MAURITIUS

STAFF REPORT FOR THE 2013 ARTICLE IV CONSULTATION

March 19, 2013

KEY ISSUES

Outlook and risks: Growth has been relatively resilient and is projected at 3¾ percent in 2013, slightly below potential reflecting subdued demand from trading partners and modest private investment. External shocks are the largest risk to the outlook, but should be manageable with an appropriate policy response.

Fiscal policy and public debt sustainability: The authorities are planning a fiscal consolidation for 2014–15 to reduce debt vulnerabilities, rebuild policy buffers, and help reduce emerging external imbalances. Mauritius appears well-placed to meet its statutory debt ceiling target of less than 50 percent of GDP by 2018. For 2013, a fully neutral fiscal stance—similar to the 2012 outcome—would smooth the planned fiscal adjustment, and could be achieved with only a small reduction in planned spending. Spending savings could be realized through better targeting of social spending, reduction of subsidies, revenue reform, and efficiency gains for public enterprises, including by applying full cost recovery pricing policies.

Monetary policy: The current monetary policy stance has delivered low and stable inflation, but inflationary pressures may arise in 2013 reflecting recent wage increases and possible adjustments in administered prices. Controlling excess liquidity should help reduce inflationary pressures and strengthen the interest rate transmission mechanism.

External sustainability: Emerging external imbalances need to be addressed through measures to increase national savings (including fiscal consolidation); to foster competitiveness through structural reforms, and by investing in physical and human capital, which is critical for longer-term growth prospects. Staff estimates suggest that the real effective exchange rate is broadly in line with fundamentals.

Financial sector: Stress tests indicate that the Mauritian banking system is well-capitalized and resilient against a range of shocks.

Approved By
David Robinson and Vivek Arora

Discussions took place in Port Louis from January 16–30, 2013. The staff team comprised Mr. Petri (head), Mr. David, Gitton, and Xiong (all AFR). Mr. Ismael (OED) participated in the policy discussions. The mission met with Vice-Prime-Minister and Minister of Finance and Economic Development Xavier-Luc Duval, the Governor of Bank of Mauritius, Rundheersing Bheenick, and other government officials. Mr. Fahlberg (AFR) provided research and Ms. Thiam editorial support.

CONTENTS

FIGURES

TABLES

APPENDIXES

INTRODUCTION

1. Economic growth has been resilient in an adverse external environment, but growth slowed somewhat in 2012. After some signs of recovery following the aftermath of the global financial crisis and ensuing stimulus policies, the Mauritian economy is still not operating at full capacity although the output gap is small. Heavy dependence on demand from Europe for key services exports and declining competitiveness are particular sources of risks going forward.

2. The 2012 Article IV consultation recommended rebuilding fiscal buffers and accelerating debt reduction, while the monetary policy stance was found to be broadly appropriate. The staff appraisal called for better pricing and governance policies in state-owned enterprises (SOEs) and targeting of the social protection system to contribute to more inclusive growth. Policy making has reflected these recommendations with a less expansionary fiscal stance than planned; and reforms have been initiated in the highlighted areas with support from development partners.

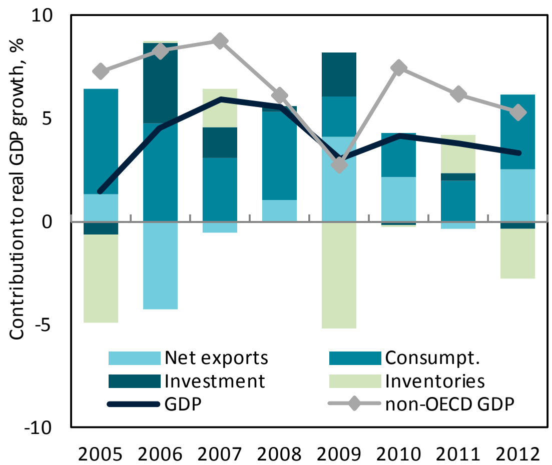
RECENT ECONOMIC DEVELOPMENTS

3. The difficult external environment adversely impacted economic activity in 2012. Growth decelerated to 3.3 percent, driven by weak sugar and textile exports and a slowdown in the construction sector. Tourist arrivals increased slightly, but hotel occupancy was lower and profit margins narrowed. On the upside, technology and financial services sectors maintained strong growth. The output gap is estimated to be small (around ½ percent), with the unemployment rate increasing marginally to 8 percent. CPI inflation moderated to 3.9 percent on average. Reflecting the ongoing crisis in the EU, exports of goods and services increased by only 5 percent in dollar terms (tourism receipts grew by 2 percent), with the external current account deficit narrowing slightly to 10 percent of GDP. In June 2012, Moody's upgraded the country's credit rating to Baa1.

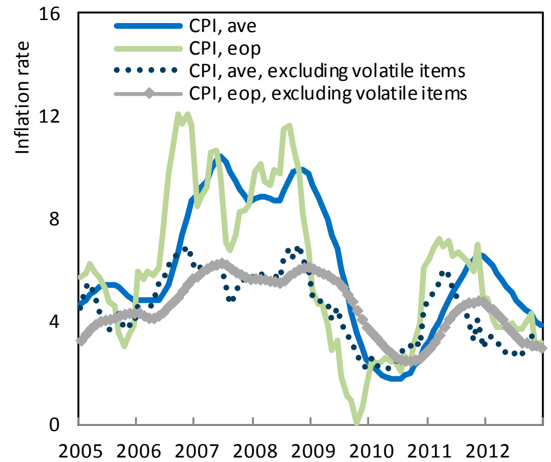
4. The fiscal stance was broadly neutral, thus supporting the overall macroeconomic policy mix. The overall deficit including extra-budgetary funds is estimated at 2.3 percent of GDP. The structural primary deficit excluding grants was broadly unchanged relative to 2011; so there was no discretionary fiscal impulse (compared to an impulse of 1½ percentage points of GDP projected in the last staff report). The good fiscal outturn was partly due to a reduction in transfers and subsidies (which decreased by over 1 percent of GDP compared to 2011), particularly transfers to SOEs. Also, expenditures on goods and services were 1 percent of GDP lower than expected. Better than expected tax revenue (in particular for VAT receipts) was more than offset by lower levels of non-tax revenue and grants than initially projected.

Figure 1. Mauritius: Macroeconomic Developments, 2005–12

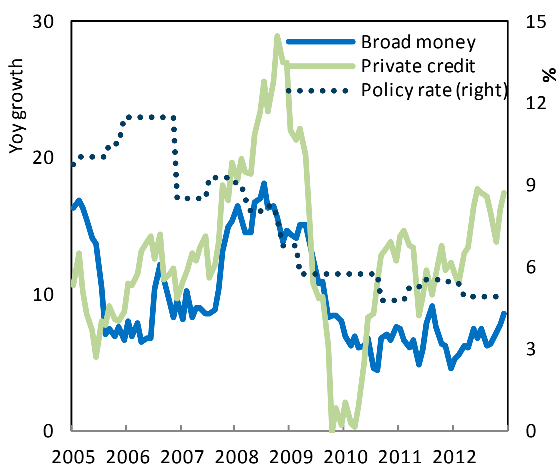
Growth is lately driven by consumption and exports.



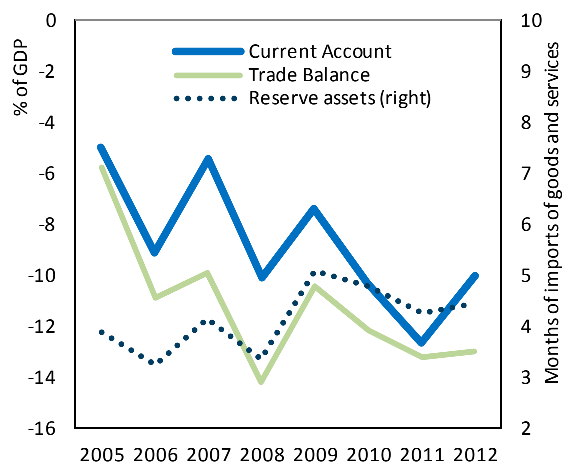
Inflationary pressures have diminished in 2012.



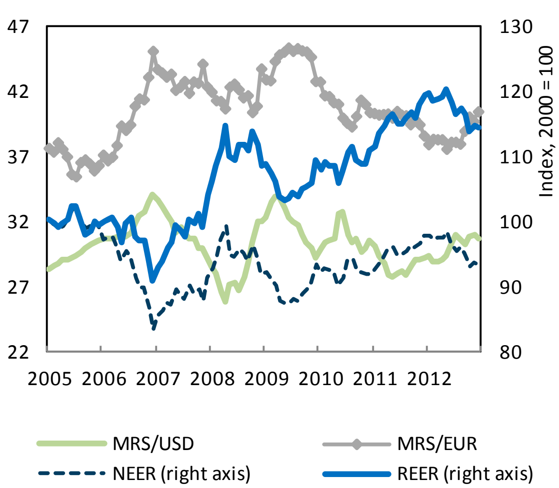
Credit to the private sector continued its recovery.



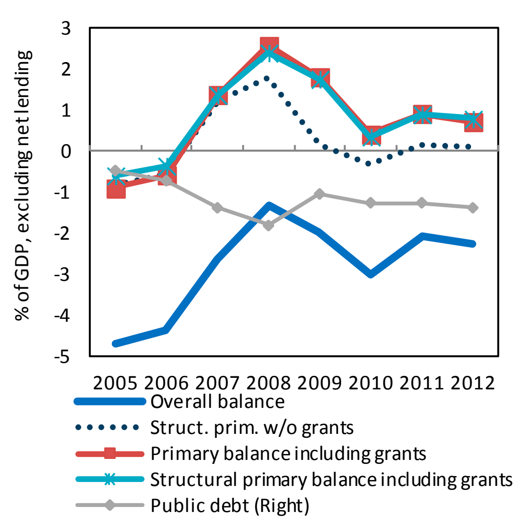
Reserves remain at comfortable levels, despite large, though declining, current account deficits.



The real appreciation of the rupee was slowed in late 2012, as the BOM intervened to accumulate reserves.



Fiscal policy was broadly neutral in a fragile environment, and total debt continues to decline.

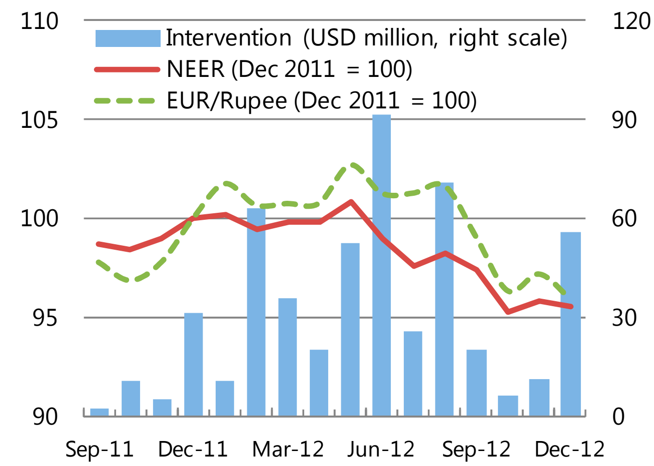


Sources: Mauritian authorities; and IMF staff estimates and projections.

5. Monetary policy was accommodative during 2012. In March 2012, the Bank of Mauritius (BOM) reduced the repo rate, which serves as the policy rate, by 50 basis points to 4.9 percent given the deceleration in global growth and prudent fiscal policies. The BOM maintained the policy rate at that level for the remainder of the year in light of continued uncertainty in the global outlook. Excess liquidity in the banking system remained elevated; the yield on 3-month treasury bills fell by 120 basis points over the course of the year to 2.7 percent at end-2012 (substantially below the policy rate) and credit growth to the private sector was robust at 17 percent.

6. The authorities intervened in the foreign exchange market to gradually rebuild reserve buffers. Reserve cover rose to 4.4 months, with intervention rising during the second half of the year (Chart 1). For the year as a whole, the rupee appreciated by 1.3 percent in real effective terms following a real appreciation of over 6 percent in 2011.

Chart 1. Mauritius: Interventions in FX Markets



Sources: Mauritian authorities; and IMF staff estimates.

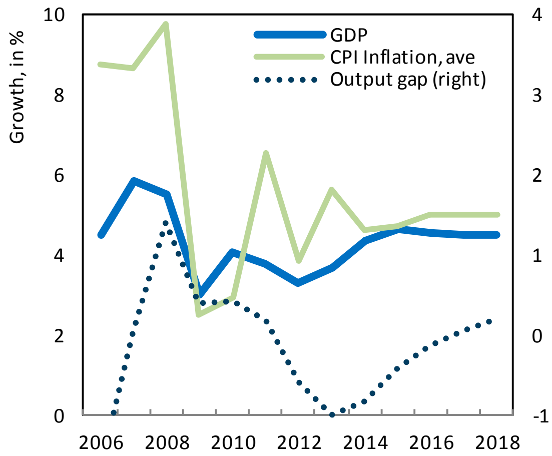
7. The banking system appears sound. Banks have remained well-capitalized, with 15 percent of Regulatory Tier I capital to risk-weighted assets at end-June, well above Basel II and the proposed Basel III requirements. Non-performing loans (NPL) increased slightly to 3.7 percent by June 2012 (Table 6), mainly in the construction and tourism sectors. Banks have remained profitable with 20 percent return on equity, despite low leverage ratios. BOM continued to publish its bi-annual CAMEL ratings for all domestic banks.

OUTLOOK AND RISKS

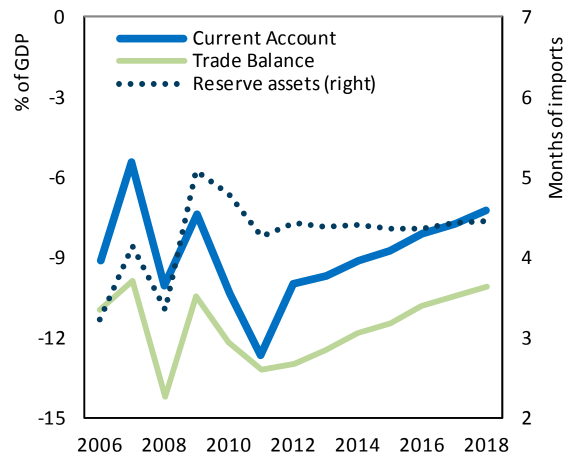
8. The outlook for 2013 and the medium-term is positive. Output growth in 2013 is projected to increase to 3¾ percent, slightly below potential (Figure 2), reflecting still subdued demand from Mauritius' main markets and modest private investment. In subsequent years, real GDP growth is expected to reach its estimated potential growth of around 4½ percent, with inflation stabilizing at around 5 percent. Over the medium-term, the current account deficit is projected to narrow gradually, falling to 7 percent of GDP by 2018, in part as a result of sustained fiscal adjustment to attain the authorities' legally mandated debt target and reforms improving external competitiveness.

Figure 2. Mauritius: Macroeconomic Projections, 2006–18

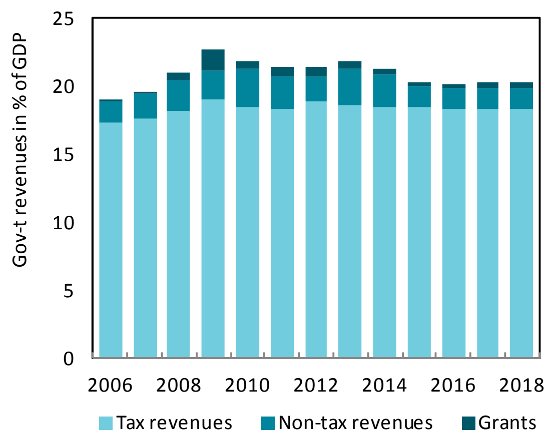
The output gap is projected at 1 percent in 2013 and will start to narrow after 2014 as growth reaches its potential.



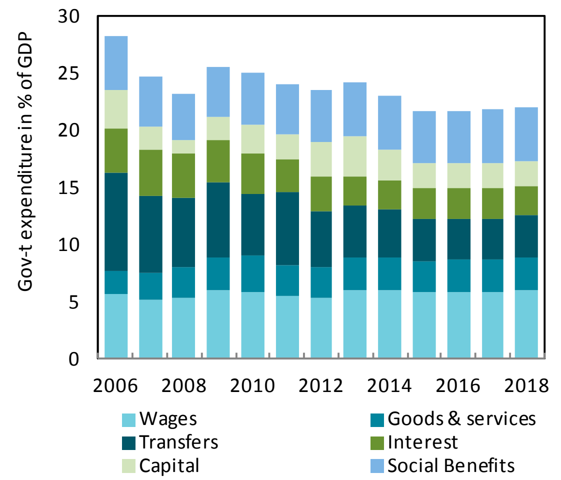
The current account should improve over the medium-term and international reserves should remain comfortable.



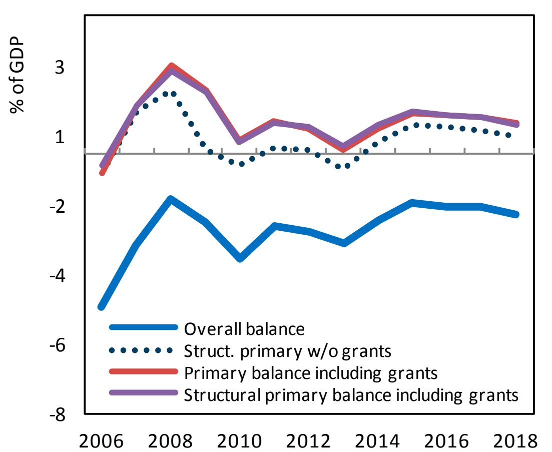
Tax and total revenues should remain broadly stable; hence consolidation will take place through…



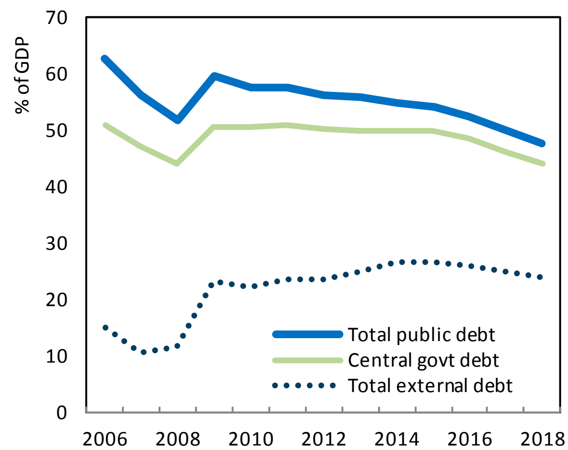
…reduced spending with a focus on reducing transfers and subsidies and some capital spending is shifted to SOEs.



Fiscal policy targets primary surpluses starting in 2014 to build policy buffers ….



…leading to a decline in debt below the legally-mandated level of 50 percent by 2018.



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

9. Growth prospects are significantly impacted by developments in the global economy, especially Europe (see Table 7 for a description of risks and the suggested policy response). In the short term, staff estimates that with an appropriate policy response, a resurgence of euro area sovereign and banking stress with spillovers to other regions might reduce growth in Mauritius by 1¾ percentage points in 2013, with the shock transmitted through reduced tourism, trade, and FDI inflows. Large short-term capital flows linked to the Global Business Corporations (GBCs) could also prove to be more volatile than in the past. The policy response would include: (i) allowing automatic fiscal stabilizers to work; (ii) limited targeted spending increases focused on specific growth-supporting interventions to facilitate labor market adjustment; (iii) moderately expansionary monetary policy; and (iv) letting the exchange rate act as a shock absorber. Thus, with an appropriate policy response, the economy would remain resilient, despite a significant negative domestic impact, notably with an increase in public debt to 61 percent of GDP by 2017 under this adverse scenario. Other risks to the outlook with a potentially high impact on the Mauritian economy include a protracted period of slower European growth and the end of double taxation agreement with India. A global oil shock triggered by geopolitical events or a fiscal policy shock in the United States would be expected to have a more moderate impact on Mauritius in case they materialize.

10. In the longer term, the challenge will be to sustain reform efforts. These include improving the targeting of social benefits, improving the cost-effectiveness of public sector delivery, using full cost recovery pricing for public utilities and fuel, and enhancing overall productivity through investments in physical and human capital. These risks appear manageable in view of Mauritius' well-established track record as an economic reformer, with a dynamic private sector, sound macroeconomic fundamentals, and robust institutions.

11. The authorities broadly agreed with the staff's assessment of the outlook and associated risks and policy options. While competiveness appeared to have declined over the last decade they considered that planned fiscal consolidation and structural reforms would restore the economy's competitiveness and reduce the current account imbalance.

MACROECONOMIC POLICIES FOR 2013

Discussions centered on the appropriate fiscal and monetary policy mix for 2013 given the uncertain external environment, weak private investment, and emerging inflationary pressures from increases in wages and administered prices. Addressing external imbalances through fiscal consolidation and structural reforms to increase savings and raise competitiveness was also central to the discussions.

A. Fiscal Policy

12. The 2013 budget reflects the authorities' objectives of supporting growth, creating employment, and ensuring sound macroeconomic management. A modest increase in the overall deficit is envisaged by the authorities. Revenues are largely unchanged while spending increases reflecting an increase in compensation of public employees in line with the recommendations of the Pay Research Bureau (PRB) report, as well as a marginal increase in public investment that are partially offset by a decline in transfers and subsidies. Nevertheless, the reduction in transfers is accompanied by a marked increase in loans to SOEs, including for the road decongestion program, which are expected to finance additional infrastructure investments. The 2013 budget introduced a pre-funded pension system for new civil servants and measures to improve the performance monitoring system for SOEs, both of which should result in longer-term savings. In addition, excises on alcohol and tobacco products and soft drinks were increased.

13. Staff noted that a fully neutral fiscal stance would help with the overall policy mix and provide a more consistent signal on the direction of fiscal policy. Based on the government's policy intentions and implementation history, staff projects that the budget would imply a positive discretionary fiscal impulse of ½ percent of GDP (measured by the structural primary balance), which is planned to be more than reversed in 2014. The fiscal impulse will likely have a limited impact on growth, given that fiscal multipliers are typically low in small open economies with a flexible exchange rate regime.[1] Thus, despite the projected modest widening of the output gap for 2013, staff recommended that from a medium-term perspective, a neutral fiscal stance in 2013 might be preferable to smooth the strong fiscal adjustment planned for 2014–2015 and allow for a somewhat more accommodative monetary policy.

14. The authorities agreed with the staff's analysis, but underscored the importance of increasing public investment to reduce infrastructure bottlenecks and support domestic demand. They noted that domestic demand remained weak, given that private investment is projected to remain subdued in 2013. Moreover, the road decongestion project is meant to reduce transport bottlenecks that are urgent; the authorities are working on addressing implementation delays, which might otherwise result in a less expansionary ex-post outcome.

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[1] See Ilzetzki, Mendoza, and Végh, (2011) "*How Big (Small?) are Fiscal Multipliers?*" IMF Working Paper (WP/11/52) and Spilimbergo, Symansky, and Schindler (2009) "*Fiscal Multipliers,*" IMF Staff Position Note (SPN 2009/11).

B. Monetary Policy

15. The current moderately accommodative monetary policy stance is appropriate, but inflationary pressures may arise in 2013 and need to be closely monitored and controlled within the overall macroeconomic policy mix. Wage increases in the public and private sectors and adjustments to some administrated prices might have secondary effects that need to be controlled. Staff forecasts headline inflation to marginally exceed 5 percent in 2013, but decline thereafter. Growth in credit to the private sector is expected to be modest in 2013 (about 11 percent). The authorities should stand ready to tighten monetary conditions if inflation accelerates beyond current expectations, which appear to be well-anchored, as indicated by the March 2013 Inflation Expectations Survey (IES) conducted by the BOM, which showed expected inflation for 2013 dropping to 5.2 percent from the 5.8 percent expected in the September 2012 IES. Even in the case when a rise in inflation is due to an increase in administrated prices, a tightening monetary policy stance could help contain inflationary expectations and limit second-round price pass-through effects. Staff also recommended removing excess liquidity to align the policy rate with market rates.

16. The authorities consider inflation risks to be well contained, but stand ready to respond if inflation expectations deviate from target. The authorities project somewhat higher inflation for 2013, but argued that second round effects of increases in administered prices should be dampened by weak domestic demand. In addition, the magnitude of eventual spillovers from increases in public sector wages to the private sector is uncertain. Furthermore, planned fiscal consolidation should help to contain inflationary pressures going forward.

C. External Balance Assessment

17. Staff estimates suggest that the real effective exchange rate (REER) is broadly in line with fundamentals (Appendix II). The estimates point to a mild REER overvaluation of 5 percent on average over the medium term (see Text Table 1), but there is uncertainty about the estimates. The current account deficit is relatively large, which could suggest overvaluation, but it is not significantly different from the estimated current account norm, particularly over the medium term.

Also, financial services exports may be underestimated,[2] suggesting that the actual current account deficit may be smaller.

Text Table 1. Mauritius: Exchange Rate Estimates

Exchange Rate Misalignments (Mauritius specific elasticities)[1]

	2011	2012	2013	2017
Method				
Macroeconomic Balance	11.0	6.6	5.6	3.6
Equilibrium Real Exchange Rate	11.6	13.8	10.0	7.6
External Sustainability	15.5	12.8	12.7	8.7
Purchasing Power Parity	0.8	2.2	-0.4	-0.4
Fundamental Equilibrium Exchange Rate	7.8	8.1	5.8	...
Average	9.3	8.7	6.7	4.9
Trimmed Average [2]	10.1	9.2	7.1	3.7

[1] Mauritius specific elasticities: exports = -1.6; imports = 1
[2] Average excluding highest and lowest results
Source: IMF Staff Estimates.

18. Recent interventions in foreign exchange markets helped limit excessive fluctuations, but are not sufficient to address underlying structural issues. Interventions have proven effective in Mauritius because (i) there is imperfect substitutability between the Mauritian rupee and other currencies; (ii) the BOM is a large player in a relatively small foreign exchange market; (iii) the interventions were intended to move the currency towards equilibrium; and (iv) fiscal policy was supportive. Thus, in the context of an appreciating real exchange rate, the interventions appeared useful in supporting the overall macroeconomic policy mix and in enabling the BOM to rebuild its reserve buffer. Given the uncertainty of the overvaluation estimates, staff advised that interventions should focus on limiting excessive fluctuations and on avoiding significant REER misalignments along the lines of the “two targets—two instruments” approach.[3]

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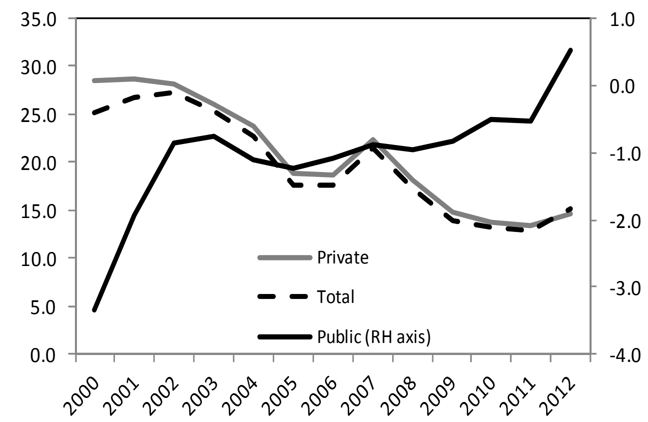
[2] The current account deficit was revised upward by 2 percentage points on average for 2011 and 2012 following a new survey on Global Business Companies (GBCs). In most cases, the operations of GBCs would be expected to generate net services exports, suggesting that the coverage of the survey may need to be broadened.

[3] Ostry, Ghosh, and Chamon (2012) “*Two Targets, Two Instruments: Monetary and Exchange Rate Policies in Emerging Market Economies,*” IMF Staff Discussion Note (SDN/12/01).

19. Ultimately, external imbalances need to be addressed by increasing national savings and structural reforms to foster competitiveness. Over the 2000s Mauritius experienced a significant fall in national savings from over 25 percent of GDP in the early 2000s to 15 percent in 2011 with a corresponding increase in the current account deficit since investment was stable. This decline in savings is fully explained by private savings behavior (Chart 2). In this context, fiscal consolidation as envisioned by the authorities should help facilitate external adjustment. Pension reform might also help improve incentives for private savings over the medium-term (see below). Efforts to improve competitiveness through structural reforms are also crucial, as are investments in infrastructure and human capital to remove bottlenecks, and reduce skills mismatches in the labor market, wage policies that align real wage increases closer to productivity improvements could also help gain competitiveness over time (see below).

Chart 2. Mauritius: National Savings (% of GDP)



Sources: Mauritian authorities; and IMF staff estimates.

20. The authorities are concerned about the economy's competitiveness, and agree with the need to focus on structural reforms. The impact of real exchange rate overvaluation on key export sectors, which are also large employers, is an immediate source of concern. The Economic and Social Transformation Plan (ESTP) has been launched to address competitiveness concerns,[4] but the authorities noted that the impact of the reforms will materialize over the medium-term. In the meantime, they intend to continue trying to limit excessive overvaluation through sterilized intervention as part of the macroeconomic policy mix, supported by relatively tighter fiscal policy going forward.

21. Reserves levels are adequate when measured against the traditional thresholds (import cover and short-term debt) and are projected to remain so over the medium-term (Appendix II). However, reserves are only slightly above 20 percent of M2, a benchmark intended to capture the risk of capital flight and the potential need for bank support in/after a crisis. Against the backdrop of the country's exposure to natural disasters and its status as an international

[4] The 10-year program focuses inter alia on: streamlining trade regulations; improving vocational and on the job training; raising the efficiency of SOEs; boosting public investment efficiency through public financial management (PFM) reforms; and land law reform.

financial center, there is a rationale for continuing to keep reserve coverage adequate (see also the 2012 Article IV report, IMF Country Report No. 12/62).

MEDIUM-TERM MACROECONOMIC AND STRUCTURAL POLICIES

Discussions centered on debt sustainability and the specifics of medium-term fiscal consolidation; structural reforms, and efforts to address infrastructure bottlenecks; the macroeconomic impact of pension reform; the labor market and reforms to increase employment; the monetary policy framework; and bank stress tests.

A. Medium-Term Debt Sustainability

22. **The debt sustainability analysis (DSA) shows a broadly positive debt outlook, as in the previous DSA (Appendix I).** Both total public and external debt are on sustainable trajectories and the results of stress tests indicate that debt dynamics are resilient to most shocks. Structural primary surpluses are projected to increase to 1 percent of GDP by 2015, an adjustment of 0.8 percent of GDP relative to the 2012 outcome. The authorities' fiscal adjustment plans are compatible with reducing total public debt to below 50 percent of GDP by 2018. Recent empirical work suggests that a debt ratio of 50 percent of GDP is close to the sustainability risk threshold for a typical emerging market.[5] As a financial center, Mauritius might need larger policy buffers to respond to shocks, and staff recommends continuing to target structural primary surpluses after 2018 to gradually reduce public debt levels to 40 percent of GDP to further reduce vulnerabilities to adverse developments in international capital markets, help address external imbalances, and strengthen policy buffers.

23. **Given large infrastructure needs, staff believes that medium-term fiscal consolidation should seek to rationalize current expenditure and enhance revenues.** In the short-run, there is room for reducing expenditures through better targeting of social assistance and reduction in transfers and subsidies, but some priority spending such as health and education might need to increase over the medium-term. The authorities' strategy of reducing medium-term capital expenditures while increasing loans to SOEs destined for public investment places a premium on strengthening capacity at SOEs to ensure that investments are commensurate to needs, properly planned, tendered, and implemented. Loans to SOEs should be tied to strict conditions for improving efficiency and ensuring repayment. In that context, authorities should continue to

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[5] IMF (2011) "*Modernizing the Framework for Fiscal Policy and Public Debt Sustainability Analysis.*" The 2011 Article IV Consultation (SM/11/60) discussed the appropriateness of the debt ceiling and other fiscal rules.

strengthen the existing financial monitoring framework for SOEs, as discussed in the 2012 Article IV Consultation report (IMF Country Report No. 12/62).

24. Revenue raising measures could be an important component of a balanced adjustment mix. Increases in the revenue-to-GDP ratio could be achieved through growth-friendly and environmentally-sustainable taxes (including excises, VAT, and real estate taxation). The tax system should also be reviewed with the objective of eliminating remaining exemptions (including several of the VAT exemptions introduced in the 2013 budget) and improving the design and administration of the major taxes. There is potential to introduce a true carbon tax, and also to raise taxation of fuel products, both serving environmental and external balance objectives.

25. The authorities' broadly concurred with staff's recommendations and noted that they are on track to achieve fiscal adjustment targets. Current plans would maintain public investment at stable levels through 2015,[6] target reductions in transfers to SOEs, and keep other current expenses constant in real terms. Plans thereafter might be revised in light of needs, and the authorities indicated a willingness to review the tax system to make it more buoyant. Estimates of the VAT "tax gap" suggest that there is some scope to increase revenue collection, although such gains are likely to be limited as efficiency levels are already relatively high by international comparison. The authorities have also pointed to progress made in establishing a comprehensive performance monitoring framework to improve corporate governance in SOEs (the Parastatal Information Management System) with assistance from the World Bank.

B. Physical Infrastructure Needs and Pricing Policies

26. Physical infrastructure bottlenecks need to be addressed urgently. Key constraints are in water, electricity, and transport sectors, and in each case assistance could be sought from development partners to plan, assess and implement projects:

- *Water*. A stable regulatory framework that allows for full cost recovery will be critical to attracting investment. The impact of needed tariff increases on the poor should be mitigated through lifeline tariffs (already in place) and/or targeted cash transfers through the recently established Social Registry of Mauritius (SRM). An experienced private sector operator with a well-defined performance contract may be able to solve problems more quickly and at lesser cost than existing structures.

[6] The current profile for public investment over the medium-term might have to be revisited once plans for the construction of a Mass Transit System become more concrete.

- *Electricity*. The electricity sector appears well managed, but would benefit from a move towards automatic pricing policies to mitigate fiscal risks (Appendix III). Current energy generation costs are vulnerable to swings in international energy prices. Moving to a formula-based tariff, which reflects changes in international prices of input costs, exchange rates and inflation, would reduce fiscal risks. Electricity tariffs should also cover costs of new investments, which are needed. Current cross-subsidies for industrial consumers (whose tariffs are set below marginal costs) should be gradually phased-out.
- *Transport*. The road decongestion project is designed to enhance road capacity. Options for charging motorists based on their impact on adding to congestion could also be considered—such as through either electronic or GPS-metering—which could more reliably reduce congestion and provide resources for public transportation.

27. Subsidy reform could help achieve medium-term fiscal goals. Untargeted subsidies on LPG, rice and flour are projected to cost 0.4 percent of GDP in 2013 and should be phased out. These subsidies administered by the State Trading Corporation (STC) are not transparent because they are not reflected in the budget. Moreover, in the case of LPG, subsidies subvert the carbon tax (MID levy), which is part of the government's green agenda. Before the latest adjustment in early March 2013, retail prices for gasoline and diesel had not been adjusted since 2011, generating a net loss for the STC during 2012.[7] Staff recommends adopting a transparent automatic formula with monthly adjustments up to a limit of 3 percent to smooth movements in retail prices. Targeted cash transfers to the poor through the SRM could also be considered to mitigate the impact of price increases.

28. The authorities acknowledge the desirability of moving to automatic pricing formulas for public utilities and fuel, but pointed to strong political economy constraints. In the water sector, the authorities are working with Singapore on a government-to-government basis. They are considering increasing water tariffs, although they would remain well below full cost recovery. Given the small size of the domestic market, full fuel price liberalization is not feasible. The previous fuel pricing mechanism resulted in high price volatility and price movements were not well understood. The establishment of a better electricity tariff structure has not been a priority in light of the relatively good performance of the sector so far. The authorities noted that utility prices were being reviewed and could be adjusted further. Staff pointed to the importance of an effective public communications campaign and transparency to build support for reform efforts in these areas.

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[7] In late 2012, the adjustment required by the established pricing mechanism was not adopted by cabinet.

C. Pension Reform and Its Macroeconomic Consequences

29. Demographic trends will put pressures on the finance's of the public pension system (Appendix IV). Public pension expenditures in Mauritius amount to around 4 percent of GDP; similar to other emerging markets, but they are projected to increase due to population ageing. Preliminary staff estimates suggest that yearly imbalances between contributions and expenditures might reach 5 percent of GDP by 2040. Initially, the non-contributory Basic Retirement Pension (BRP) would be the main driver of imbalances, but civil servants' pensions would pose an increasing burden through 2040, which will be somewhat mitigated by significant reforms enacted in 2013. BRP expenditures alone exceeded 2 percent of GDP in 2011. These expenditures are untargeted and close to 40 percent of the benefits go to the richest 20 percent of the population.[8] Thus, there is substantial scope for fiscal savings and better incentives for savings.

30. Important steps to reform the pension system have been taken, but the agenda is not completed. The retirement age for participants in the National Pension Fund (NPF) and for public servants is being gradually raised to 65 years.[9] In 2013, a new system for new civil servants was created which will be fiscally sustainable. These reform efforts will help address imbalances in the system in the long-run; even if there will be some transition costs. Staff noted that additional progress could be made on: the benefit design and asset management strategy for the new civil servants' pension fund; ensuring the sustainability of the NPF; and reviewing the overall investment strategy and governance structure of the public pension system. In addition, merging the National Savings Fund (NSF) and the new civil servants' system with the NPF could be considered to achieve economies of scale in administration and asset management costs.

31. Additional pension reforms could increase private savings. The prevailing contribution rate in Mauritius of 9 percent is low by international comparison (16th percentile of 120 countries). Similarly, the targeted replacement rate of 33 percent after 40 years of contributions is low and may not provide sufficient retirement income and thus create contingent fiscal liabilities. Jointly increasing NPF contribution rates and pension benefits and the mandatory inclusion of self-employed workers in the NPF could promote national savings and better achieve social protection objectives.

32. The external investment and financing strategy of the public sector should be viewed from a sovereign asset liability management perspective. With more than 80 percent of the

[8] David and Petri (2013) "*Inclusive Growth and the Incidence of Fiscal Policy in Mauritius,*" draft IMF working paper.

[9] Nevertheless, the retirement age for the universal BRP has not been increased.

public pensions assets invested domestically, greater international diversification and passive investment strategies should result in higher risk-adjusted returns. However, initially, there would be capital outflows to be coordinated with the governments' borrowing and the BOM's reserve accumulation strategy to ensure that overall public sector objectives are reached in a cost-minimizing way.

33. The authorities welcomed the macroeconomic perspective on pension reforms, which validates recent reform efforts. They highlighted efforts being undertaken with the World Bank to implement a model to improve estimates of pension system imbalances and assess the impact of reform options. The last full actuarial review focused only on the NPF and NSF and referred to the state of these systems as of 2005, so a forward looking capability will be extremely valuable. The authorities argued that the BRP is perceived to be part of the national social fabric and therefore targeting these expenditures to the most vulnerable would be politically very difficult but they are committed to exploring other options to meet social protection and national savings objectives.

D. Labor Market Outlook

34. Unemployment seems to be largely structural affecting mostly the low-skilled young and women (Appendix V). The latest overall unemployment rate is 8 percent; 44 percent of the unemployed are below the age of 25 (with an unemployment rate of 22 percent). Female unemployment declined but is still about 13 percent. Strong demand for skilled workers in the financial services, ITC, health care, and tourism sectors has offset some employment losses for the lower-skilled textile and sugar sectors, but the demand is partially unmet, which signals a skill mismatch underpinned by low education attainment.

35. Labor market reforms can increase the employment-growth elasticity. Staff estimates an employment-growth elasticity of 0.3 for Mauritius, which is low compared to most countries. Assuming baseline growth of 4.1 percent, unemployment might decline by one percentage point by 2017. Policy measures should primarily target the employability of low-skilled youth through subsidized training, as already envisaged by the authorities. Better aligning the education curriculum to industry demands and increasing private sector involvement in vocational education, particularly for the young that do not stay within the traditional system would be important. Directly supporting firms, particularly SMEs in the design of their job needs could also be helpful. An earned income tax credit might encourage low-wage earners to take jobs on which they can acquire skills. Finally, the wage setting mechanisms should be reviewed with the objective of aligning real wage increases closer with labor productivity improvements.

36. The authorities agreed with the diagnosis of the labor market and noted that several of the initiatives recommended by staff are already underway. The 2013 budget includes actions to facilitate the skills acquisition and job placement for the unemployed up to the age of 25, including the Youth Employment Program, which is jointly financed by government and the private sector. The authorities also aim at improving their statistical databases to better measure unemployment and capture and the factors that determine it.

E. Monetary Policy Framework and Financial Sector Issues

37. The current "hybrid inflation targeting" framework remains well-suited for Mauritius, but can be refined further. The law sets a dual primary objective for monetary policy: maintain price stability and promote orderly and balanced economic development. It also assigns a dual function to the BOM (conduct monetary policy and manage the exchange rate) and defines its dual operational task: determine a range of rate of inflation and formulate and implement appropriate policies to promote economic activities having due regard to domestic and international economic developments. There is scope for a clearer definition of a consistent set of final policy objective(s), intermediate target(s), and operational target(s)/instrument(s). At the request of the authorities, a technical assistance mission to discuss the central bank act is planned for Q2 2013.

38. The monetary policy transmission mechanism should be strengthened by reducing excess liquidity in the banking system. Monetary transmission from the key repo rate to deposit and lending rates is generally effective (Appendix VI). However, the interbank rate and 91-day T-bill rate continue to be well below the key repo rate due excess liquidity within the banking system and insufficient supply of liquid domestic assets. Reducing the misalignment of interest rates would enhance monetary transmission and improve banking sector efficiency. Over the medium-term, the monetary transmission mechanism could also be improved by liberalizing the relatively large number of administered prices in the economy. The BOM should resume its repo operations to mop up excess liquidity and it should be recapitalized with government bonds to have enough assets as collateral for repo operations. Developing a secondary bond market could also help absorb bank excess cash holdings by providing banks with a larger supply of liquid assets.

39. Stress tests highlight the resilience of the Mauritian banking system (Appendix VII). The banking system is well-capitalized and profitable, which provides important buffers against a range of shocks to their credit portfolios. Direct exchange rate and interest rate risks appear to be low, although concentration of lending remains a risk for some banks. Liquidity ratios have declined, but the banking sector as a whole still has sufficient liquid assets to sustain a hypothetical bank-run test, with the liquid assets-to-total assets ratio at 10 percent by the end of day 5. Distance-to-default analysis combining balance sheet information and stock prices also indicates that the expected default risk is minimal for the two largest domestic banks. Developments in the real estate sector should be monitored although it appears that lending is well-collateralized.

40. The authorities welcomed the results of the staff's stress testing exercise, which are in line with the BOM's own stress testing results. The BOM is undertaking steps to limit lending concentration risks and is examining the interconnectedness of the Mauritian financial system, gathering information on within-group exposures as well as on offshore activities. The BOM has also circulated a consultative paper on Basel III requirements.

41. The BOM is collaborating with the Financial Services Commission (FSC) and working on other ways to strengthen the financial system. Regular meetings are taking place between BOM and FSC to address supervisory and statistics coordination issues; the first BOM-FSC joint on-site inspection is expected this year. The FSC is contributing to the BOM's Financial Stability Reports. The BOM and the FSC should continue to strengthen their collaboration, particularly on the inter-linkages between banks and non-bank financial institutions. A draft deposit insurance scheme (DIS) bill was prepared by the BOM in consultation with stakeholders, reviewed by an IMF TA mission, and submitted to the Ministry of Finance for review. Implementation of DIS would contribute to greater financial system stability.

F. Statistical Issues

42. Mauritius' macroeconomic statistics are adequate for surveillance and statistical capacity continues to be strengthened. The authorities aim at subscribing to SDDS Plus in the future. Balance of payments and international investment position statistics should increasingly improve coverage, frequency, and timeliness of data sources, with particular focus on the coverage of GBCs. Monetary statistics could benefit from expanding coverage to Other Financial Companies. There is need for assistance to improve labor statistics and public sector statistics. Consolidated public sector statistics (general government, central bank, and SOEs) are needed to assess the true macro-fiscal stance and the public sector's net worth. Fully integrating the special funds into the budget in 2014 would reduce budgetary fragmentation and facilitate more effective expenditure management.

STAFF APPRAISAL

43. The authorities have a good track record of prudent macroeconomic management and implementing structural reforms even though challenges remain. Macroeconomic management has delivered low inflation, declining debt-to-GDP ratios, and, given the difficult external environment, satisfactory growth. This outcome has been helped by consistent efforts to improve public financial management, the business climate, social assistance, and the sustainability of public finances, including on pensions. Important challenges remain in the areas of public utilities. Recent efforts to improve the human and capital infrastructure (especially road congestion) need to continue.

44. The outlook for 2013 is broadly positive. Growth is expected to reach 3¾ percent, close to potential, with inflation projected at about 5 percent. The main risk to the outlook is a significant deterioration of economic conditions in Europe, but with an appropriate policy response, the Mauritian economy should remain resilient to external shocks.

45. A neutral fiscal policy stance would be desirable for 2013 in order to smooth medium-term fiscal consolidation and to facilitate external adjustment. The planned modest expansionary fiscal impulse for 2013 is likely to have a limited impact given the low fiscal multipliers typical of small highly open island economies with a floating exchange rate regime. In addition it would delay debt reduction and send an unclear signal on the direction of fiscal policy. A neutral stance is also likely to help to narrow the large current account deficit and facilitate the rebuilding of policy buffers.

46. The current accommodative monetary policy stance remains appropriate, but the authorities should stand ready to tighten monetary conditions if inflation accelerates beyond current expectations. Inflationary pressures relate to wage increases and adjustments in administered prices, but expectations appear to be well-anchored. Excess liquidity should be reduced to better align the policy rate with market rates and help strengthen the monetary transmission mechanism. The Mauritian banking system is well-capitalized and profitable. Stress testing indicates the sector to be resilient against a range of shocks. Real estate developments should be monitored and cooperation between the BOM and the FSC further improved.

47. Medium-term fiscal consolidation should focus on reductions in transfers and subsidies and revenue raising measures. Expenditure measures could include better targeting of social protection expenditures, phasing-out subsidies for LPG, rice and flour, and improving the efficiency of SOEs. Full cost recovery pricing policies for water and electricity could also mitigate quasi-fiscal deficits and facilitate much needed investments in these sectors to improve the quality of service. The existing cash transfer mechanism could be expanded to protect the poor. Increases in the revenue-to-GDP ratio would provide additional space for priority spending for building human and physical capital. This could be achieved through improvements in the design and administration of the main taxes (excises, VAT, income and real estate taxation).

48. **Increasing national savings and fostering competitiveness would reduce the large external current account deficit.** Medium-term fiscal consolidation should facilitate external adjustment. Efforts to improve competitiveness through structural reforms and investment in infrastructure and human capital are also crucial. The floating exchange rate regime continues to serve the country well, in particular by allowing the exchange rate to act as a shock absorber. Staff estimates that the real exchange rate is broadly in line with fundamentals.

49. **The pension system could be used as a lever to increase national savings.** Recent reforms have put the system on a much better footing, but further reforms would be helpful. An increase in mandatory retirement savings combined with an actuarially-sustainable increase in benefits is likely to lead to higher overall national savings. The inclusion of most public pensions systems within a strengthened NPF and mandatory inclusion of self-employed workers in the NPF might also be considered.

50. **Labor market reform should primarily target the employability of the low-skilled youth and women who comprise the majority of the unemployed.** Measures to better align the education curriculum to the needs of industry and increase private sector involvement in vocational education could also contribute to reduce skills mismatches, particularly for the young. Wage setting mechanisms should be reviewed with the objective of aligning real wage increases closer with labor productivity improvements. An earned income tax credit could be introduced to encourage low-wage earners to take jobs on which they can acquire skills.

51. **Mauritius' macroeconomic statistics are strong and form a good basis for surveillance and policy-making.** Ongoing initiatives to further strengthen the coverage and timeliness of data are welcome steps towards the goal of subscription to SDDS Plus.

52. **Staff recommends that the next Article IV consultation be held on the standard 12-month cycle.**

Table 1. Mauritius: Selected Economic and Financial Indicators, 2010–2018

	2010	2011	2012		2013		2014	2015	2016	2017	2018
	Actual	Actual	Last SR	Est.	Last SR	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.
	(Annual percent change, unless otherwise indicated)										
National income, prices and employment											
Real GDP	4.1	3.8	3.7	3.3	4.1	3.7	4.4	4.7	4.6	4.5	4.5
Real GDP per capita	3.6	3.4	3.1	2.7	3.5	3.2	3.8	4.1	4.2	4.1	4.1
GDP per capita (in U.S. dollars)	7,562	8,725	8,403	8,850	8,789	9,395	9,912	10,486	11,101	11,806	12,561
GDP deflator	1.7	4.1	3.9	3.3	5.9	5.7	4.6	4.7	5.0	5.0	5.0
Consumer prices (period average)	2.9	6.5	4.8	3.9	5.3	5.7	4.6	4.7	5.0	5.0	5.0
Consumer prices (end of period)	6.1	4.9	5.0	3.2	5.5	6.0	5.1	5.0	5.0	5.0	5.0
Unemployment rate (percent)	7.8	7.9	…	8.0	…	…	…	…	…	…	…
	(Annual percent change, in US Dollars)										
External sector											
Exports of goods and services, f.o.b.	18.9	19.6	3.0	4.8	6.1	6.7	6.3	6.7	6.8	7.1	7.3
Of which : tourism receipts	15.9	23.0	2.9	1.7	10.3	4.3	5.5	5.4	5.8	5.8	5.9
Imports of goods and services, f.o.b.	20.5	20.8	3.0	3.9	4.3	5.9	5.3	6.0	5.7	6.5	6.5
Nominal effective exchange rate (annual averages)	3.2	3.3	...	0.5	…	...	...	...	...	...	...
Real effective exchange rate (annual averages)	3.2	6.2	...	1.3	…	...	...	...	...	...	...
Terms of trade	-5.5	-5.3	...	0.5	…	...	...	...	...	...	...
	(Annual change in percent of beginning of period M2)										
Money and credit											
Net foreign assets	20.2	-7.7	16.9	9.2	...	6.9	...	...	...	...	...
Domestic credit	10.3	8.6	10.0	14.6	...	11.8	...	...	...	...	...
Net claims on government	1.0	-1.4	1.5	-1.3	...	1.0	...	...	...	...	...
Credit to non-government sector [1]	9.9	10.2	8.2	18.2	...	10.7	...	...	...	...	...
Broad money (end of period, annual percentage change)	7.6	4.6	12.3	8.6	...	9.7	...	...	...	...	...
Income velocity of broad money	0.9	1.0	0.9	1.0	...	1.0	...	...	...	...	...
Interest rate (weighted average TBs, primary auctions)	3.9	4.6	...	3.3	...	...	...	...	...	...	...
	(Percent of GDP, unless otherwise indicated)										
Central government finances											
Overall consolidated balance (including grants) [2]	-3.0	-2.1	-3.7	-2.3	-3.2	-2.6	-1.9	-1.4	-1.5	-1.5	-1.8
Primary balance (including grants)	0.4	0.9	-0.5	0.7	-0.6	0.1	0.7	1.2	1.1	1.1	0.9
Structural primary balance (including grants)	0.4	0.9	-0.5	0.8	-0.6	0.2	0.8	1.2	1.1	1.1	0.8
Structural primary balance (excluding grants)	-0.3	0.2	-1.4	0.1	-1.2	-0.4	0.3	0.9	0.8	0.7	0.5
Revenues and grants	21.9	21.4	21.8	21.4	20.9	21.9	21.3	20.3	20.2	20.2	20.3
Expenditure, excl. net lending	24.9	23.5	25.5	23.7	24.1	24.5	23.2	21.7	21.7	21.8	22.0
Domestic debt of central government	43.1	42.6	40.5	41.5	38.1	39.7	37.6	37.4	36.0	34.5	33.2
External debt of central government	7.5	8.4	10.0	8.7	11.6	10.3	12.4	12.6	12.6	11.7	10.9
Investment and saving											
Gross domestic investment	23.6	25.7	24.8	24.7	25.3	25.1	25.3	25.5	25.6	25.8	25.9
Public	6.1	5.5	7.4	5.5	7.7	7.6	7.1	7.2	5.6	5.4	5.0
Private	17.5	20.2	17.5	19.2	17.5	17.5	18.2	18.2	20.0	20.4	20.9
Gross national savings	13.3	13.1	14.8	14.7	16.4	15.4	16.2	16.7	17.5	18.1	18.7
Public	-0.5	-0.5	0.2	1.0	0.5	1.3	1.1	0.9	0.7	0.7	0.4
Private	13.8	13.6	14.7	13.7	15.8	14.1	15.2	15.8	16.7	17.4	18.2
External sector											
Balance of goods and services	-12.2	-13.2	-13.8	-13.0	-12.7	-12.5	-11.8	-11.5	-10.8	-10.5	-10.1
Exports of goods and services, f.o.b.	50.9	52.6	53.9	54.0	54.4	54.0	54.1	54.3	54.6	54.8	55.0
Imports of goods and services, f.o.b.	-63.1	-65.8	-67.7	-67.0	-67.2	-66.5	-66.0	-65.8	-65.4	-65.2	-65.1
Current account balance	-10.3	-12.6	-10.2	-10.0	-9.1	-9.7	-9.1	-8.8	-8.1	-7.7	-7.2
Overall balance	2.1	1.6	-2.4	1.8	0.2	1.2	1.3	1.1	1.4	1.7	1.7
Total external debt [3]	22.3	23.7	16.1	23.7	17.7	25.1	26.7	26.5	25.9	24.9	23.8
Net international reserves (millions of U.S. dollars)	2,448	2,631	2,420	2,834	2,512	2,977	3,144	3,298	3,497	3,766	4,044
Months of imports of goods and services, f.o.b.	4.8	4.3	3.9	4.4	3.9	4.4	4.4	4.4	4.4	4.4	4.5
Memorandum items:											
GDP at current market prices (billions of Mauritian rupees)	298.8	322.8	350.0	344.6	385.9	377.9	412.5	451.9	496.2	544.5	597.5
GDP at current market prices (millions of U.S. dollars)	9,706	11,244	…	11,466	…	...	...	...	...	...	...
Public sector debt (percent of GDP) [4]	57.4	57.4	57.0	56.2	55.7	55.8	55.0	54.2	52.6	50.0	47.6
Foreign and local currency long-term debt rating (Moody's)	Baa2	Baa2	…	Baa1	…	…	…	…	…	…	…

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

[1] Includes credit to parastatals.

[2] *GFSM 2001* concept of net lending/net borrowing, includes special and other extrabudgetary funds.

[3] Numbers were revised to include private external debt transactions as reported in the 2011 Foreign Assets and Liabilities Survey (FALS).

[4] These figures do not discount certain types of State-owned enterprises' debt. Such discounting is envisaged under the 2008 Public Debt Management Act for the purposes of calculating the public debt ceiling. In 2011, discounted SOE debt amounted to 3.3 percent of GDP.

Table 2. Mauritius: Summary of Central Government Finances, 2010–2015 [1]

(Percent of GDP; unless otherwise indicated)

	2010	2011	2012		2013			2014	2015
	Actual	Actual	Last SR	Est.	Last SR	Budget	Proj.	Proj.	Proj.
Total revenue and grants (1)	21.9	21.4	21.8	21.4	20.9	21.9	21.9	21.3	20.3
Domestic revenue	21.2	20.7	20.8	20.7	20.2	21.3	21.3	20.8	20.0
Tax revenue	18.5	18.3	18.3	18.8	18.1	18.7	18.7	18.4	18.4
Income tax - Individuals	1.5	1.5	1.6	1.5	1.6	1.6	1.6	1.6	1.6
Income tax - Corporations	2.8	2.7	2.5	2.7	2.5	2.5	2.5	2.5	2.5
Value added tax (VAT)	7.1	7.0	7.0	7.2	7.0	7.2	7.2	7.2	7.1
Excise duties, incl. "Maurice Ile Durable" levy	3.1	3.6	3.6	3.8	3.3	3.8	3.8	3.6	3.6
Customs	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Other taxes	3.5	3.0	3.2	3.1	3.3	3.2	3.2	3.2	3.2
Social contributions	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Nontax revenue	2.4	2.1	2.2	1.6	1.8	2.3	2.3	2.1	1.2
Grants	0.7	0.7	1.0	0.7	0.6	0.6	0.6	0.5	0.4
Total expense (current spending) (2)	22.4	22.0	21.6	20.4	20.4	21.1	20.7	20.3	19.4
Expenditures on goods and services	9.0	8.2	9.0	8.0	8.9	8.8	8.9	9.0	8.5
Compensation of employees	5.9	5.6	5.7	5.4	5.9	6.0	6.0	6.0	5.8
Use of goods and services	3.1	2.6	3.3	2.6	3.0	2.8	2.9	2.9	2.7
Interest payments	3.4	3.0	3.3	3.0	2.7	2.9	2.7	2.6	2.6
Domestic interest	3.3	2.8	3.0	2.7	2.4	2.7	2.4	2.4	2.3
External interest	0.1	0.1	0.2	0.3	0.2	0.2	0.2	0.3	0.3
Transfers and subsidies	5.5	6.3	4.8	5.0	4.2	4.4	4.4	4.0	3.7
Subsidies	0.3	0.4	0.4	0.3	0.3	0.4	0.4	0.3	0.3
Grants and transfers	5.2	6.0	4.5	4.6	3.9	4.0	4.0	3.8	3.5
Social benefits	4.5	4.5	4.5	4.5	4.5	4.6	4.6	4.6	4.6
Contingencies	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0
Gross operating balance ((3)=(1)-(2))	-0.5	-0.5	0.2	1.0	0.5	0.8	1.3	1.1	0.9
Net acquisition of non-financial assets (capital spending)	2.7	2.7	3.0	2.8	3.1	3.1	3.1	2.5	2.2
Net lending / borrowing (central governm. budget balance) [2]	-3.2	-3.2	-2.8	-1.8	-2.6	-2.2	-1.9	-1.4	-1.3
Net lending / borrowing (special funds) [3]	0.2	1.1	-0.9	-0.4	-0.7	-1.0	-0.7	-0.5	-0.1
Inflows to special funds (contribution from government)	1.0	2.0	0.5	0.6	0.1	0.0	0.0	0.0	0.0
Outflows from special funds (expense)	-0.9	-0.9	-1.4	-1.0	-0.7	-1.1	-0.7	-0.5	-0.1
Net lending / borrowing (consolidated balance)	-3.0	-2.1	-3.7	-2.3	-3.2	-3.3	-2.6	-1.9	-1.4
Transactions in financial assets/liabilities	-0.1	0.9	0.6	0.3	0.6	1.6	1.6	2.3	2.9
Net acquisition of financial assets	0.0	0.9	0.8	0.4	0.8	1.7	1.8	2.5	3.2
Of which: net lending	0.0	0.7	0.9	0.0	0.9	1.7	1.7	2.5	3.2
Adjustment for difference in cash and accrual	-0.2	-0.1	-0.2	-0.1	-0.2	-0.2	-0.2	-0.2	-0.3
Borrowing requirements (financing)	2.9	2.9	4.3	2.5	3.9	4.9	4.1	4.2	4.3
Domestic	1.0	1.2	2.2	1.6	1.3	2.6	1.9	1.2	3.0
Banks	1.0	-1.4	1.5	-1.3	0.7	…	0.9	0.6	1.5
Nonbanks	0.1	2.6	0.8	2.9	0.7	…	0.9	0.6	1.5
Foreign	1.9	1.7	2.1	0.9	2.5	2.3	2.3	3.0	1.3
Disbursements	2.2	2.0	2.3	1.2	2.8	2.6	2.6	3.6	2.4
Amortization	-0.3	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3	-0.6	-1.1
Memorandum items:									
Government debt	50.6	51.0	50.5	50.3	49.7	…	50.0	50.0	49.9
Public sector debt [4]	57.4	57.4	57.0	56.2	55.7	…	55.8	55.0	54.2
GDP at current market prices (in billions of rupees)	298.8	322.8	350.0	344.6	385.9	380.1	377.9	412.5	451.9
Expenditure, excluding net lending	24.9	23.5	25.5	23.7	24.1	25.2	24.5	23.2	21.7
Primary balance (incl. grants; excl. net lending)	0.4	0.9	-0.5	0.7	-0.6	-0.4	0.1	0.7	1.2
Structural primary balance (incl. grants; excl. net lending)	0.4	0.9	-0.5	0.8	-0.6	…	0.2	0.8	1.2
Primary balance (excl. grants; excl. net lending)	-0.3	0.2	-1.5	0.0	-1.2	-1.0	-0.5	0.2	0.8
Structural primary balance (excl. grants; excl. net lending)	-0.3	0.2	-1.4	0.1	-1.2	…	-0.4	0.3	0.9

Sources: Ministry of Finance and Development; Bank of Mauritius; and IMF staff estimates and projections.

[1] *GFSM 2001* presentation.

[2] Corresponds to the authorities' budget presentation.

[3] Includes the following special and other extra-budgetary funds: Maurice Ile Durable Fund; Human Resource, Knowledge and Arts Development Fund; Food Security Fund; Local Infrastructure Fund; and Social Housing Development Fund; National Resillience Fund (named Business Growth Fund prior to 2012); and Road Decongestion Program Fund.

[4] These figures do not discount certain types of State-owned enterprises' debt. Such discounting is envisaged under the 2008 Public Debt Management Act for the purposes of calculating the public debt ceiling.

Table 3. Mauritius: Central Government Integrated Balance Sheet

(Percent of GDP)

	2009	2010			2011		
	Closing/ opening balance	Transactions	Other economic flows	Closing balance	Transactions	Other economic flows	Closing balance
Net worth	104.1	-0.3	-12.8	90.9	3.5	-11.2	83.2
Nonfinancial assets	161.5	2.7	-10.4	153.8	2.7	-9.8	146.7
Of which: fixed assets	42.5	2.6	-3.9	41.2	2.5	-1.4	42.4
Of which: land	118.7	0.0	-6.5	112.2	0.0	-8.2	104.0
Net financial worth	-57.4	-3.0	-2.4	-62.9	0.8	-1.5	-63.5
Financial assets	13.0	-0.8	-1.0	11.2	1.7	-0.8	12.1
Currency and deposits	1.7	-0.6	0.0	1.0	0.2	0.0	1.2
Equity and investment fund shares	6.7	0.0	-0.9	5.8	0.9	-0.5	6.2
Loans (includes loans to parastatals)	2.3	0.0	-0.1	2.2	0.7	-0.2	2.6
Other accounts receivable (arrears of revenue)	2.4	-0.2	0.0	2.2	-0.1	0.0	2.0
Liabilities	70.4	2.3	1.4	74.1	0.9	0.7	75.7
Domestic							
Currency and deposits [1]	3.1	-0.6	0.0	2.4	-2.1	0.0	0.4
Securities and loans [2]	45.9	1.0	-2.5	44.4	1.2	-1.9	43.7
Insurance, pensions, and standardized guarantee schemes	15.4	0.0	4.3	19.7	0.0	3.4	23.1
Foreign							
Securities and loans [2]	6.2	1.9	-0.4	7.6	1.7	-0.8	8.5
Memorandum items:							
GDP at current market prices (billions of rupees)	282.4	298.8			322.8		
Liabilities/assets ratio	0.4			0.4			0.5
Liabilities/financial assets ratio	5.4			6.6			6.2

Sources: Ministry of Finance and Development; and IMF staff estimates.

[1] Includes special funds

[2] Includes interests payables on debt

Table 4. Mauritius: Balance of Payments, 2010−2018

	2010	2011	2012		2013		2014	2015	2016	2017	2018
			Last SR	Est.	Last SR	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.
	(Millions of U.S. dollars, unless otherwise indicated)										
Current account balance	-1,003	-1,422	-1,113	-1,148	-1,044	-1,185	-1,181	-1,209	-1,191	-1,207	-1,212
Trade balance	-1,894	-2,281	-2,494	-2,386	-2,585	-2,527	-2,629	-2,753	-2,854	-2,966	-3,077
Exports of goods, f.o.b.	2,259	2,645	2,664	2,692	2,782	2,840	3,023	3,235	3,465	3,732	4,028
Imports of goods, f.o.b.	-4,154	-4,926	-5,158	-5,078	-5,367	-5,366	-5,652	-5,988	-6,319	-6,698	-7,105
Of which: Oil Imports	-842	-1,120	-1,177	-1,165	-1,191	-1,187	-1,198	-1,214	-1,239	-1,266	-1,305
Services (net)	714	796	994	901	1,124	1,002	1,091	1,171	1,265	1,326	1,392
Of which: tourism	884	1,088	1,033	1,106	1,139	1,154	1,218	1,284	1,358	1,437	1,523
Income (net)	-6	-68	207	207	235	211	229	251	282	319	360
Of which: GBCs	-210	-254	…	0	…	0	0	0	0	0	0
Current transfers (net)	183	132	180	131	182	129	128	122	116	114	112
Capital and financial accounts	1,002	1,401	849	1,296	1,063	1,327	1,348	1,363	1,389	1,476	1,490
Capital account	-5	-2	-5	-2	-6	-2	-2	-2	-2	-2	-3
Financial account	1,007	1,403	855	1,298	1,068	1,329	1,350	1,365	1,392	1,478	1,493
Direct investment (net)	301	185	237	193	327	179	190	219	259	305	312
Abroad	-129	-89	-51	-53	-77	-80	-120	-137	-151	-166	-183
In Mauritius	430	273	288	246	403	258	310	357	410	472	495
Portfolio investment (net)	-186	69	-10	-10	0	-15	-18	-19	-20	-21	-22
Other investment (net)	892	1,149	628	1,115	741	1,166	1,178	1,165	1,153	1,194	1,203
Government (net)	195	181	26	34	381	255	297	99	36	-10	-45
Private (net)[1]	697	967	602	1,082	360	910	881	1,066	1,117	1,204	1,248
Errors and omissions	201	203	0	55	0	0	0	0	0	0	0
Overall balance	201	183	-264	204	19	143	167	154	199	269	278
Change in official reserves (- = increase)	-201	-183	264	-204	-19	-143	-167	-154	-199	-269	-278
	(Percent of GDP, unless otherwise indicated)										
Memorandum items:											
Balance of goods and services	-12.2	-13.2	-13.8	-13.0	-12.7	-12.5	-11.8	-11.5	-10.8	-10.5	-10.1
Exports of goods and services, f.o.b.	50.9	52.6	53.9	54.0	54.4	54.0	54.1	54.3	54.6	54.8	55.0
Imports of goods and services, f.o.b.	-63.1	-65.8	-67.7	-67.0	-67.2	-66.5	-66.0	-65.8	-65.4	-65.2	-65.1
Foreign direct investment	3.1	1.6	2.2	1.7	2.8	1.5	1.5	1.6	1.8	1.9	1.9
Current account balance	-10.3	-12.6	-10.2	-10.0	-9.1	-9.7	-9.1	-8.8	-8.1	-7.7	-7.2
Current account balance, excluding GBCs	-8.2	-10.4	…	-10.0	…	-9.7	-9.1	-8.8	-8.1	-7.7	-7.2
Overall balance	2.1	1.6	-2.4	1.8	0.2	1.2	1.3	1.1	1.4	1.7	1.7
Errors and omissions	2.1	1.8	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net international reserves, BOM, (mill. of U.S. dollars)	2,448	2,631	2,420	2,834	2,512	2,977	3,144	3,298	3,497	3,766	4,044
In months of imports of goods and services, f.o.b.	4.8	4.3	3.9	4.4	3.9	4.4	4.4	4.4	4.4	4.4	4.5
As ratio to external short term debt[2]	10.1	9.5	8.4	10.2	7.5	10.0	9.9	9.8	9.8	9.9	9.9
Percent of broad money	23.6	22.6	20.7	23.5	21.7	23.1	23.0	22.7	22.6	22.8	23.0
Gross reserves, BOM, (mil. of U.S. dollars)	2,601	2,784	2,573	2,988	2,665	3,131	3,298	3,452	3,650	3,919	4,197
GDP (millions of U.S. dollars)	9,706	11,244	10,898	11,466	11,468	12,237	12,979	13,804	14,672	15,666	16,735
Total external debt[3]	22.3	23.7	16.1	23.7	17.7	25.1	26.7	26.5	25.9	24.9	23.8
Total debt service ratio (% of goods & services exports)	4.4	3.6	3.8	3.4	3.5	3.5	4.2	5.0	4.5	4.4	4.2
Mauritian rupees per U.S. dollar (period average)	30.8	28.7	...	30.1	...	...	...	...	...	...	...
Mauritian rupees per U.S. dollar (end of period)	30.4	29.3	...	30.5	...	...	...	...	...	...	...

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

[1] Includes flows linked to Global Business Companies (GBCs) on a net basis. GBCs flows are based on data from surveys conducted for the first time in 2010/11, but data quality still needs to be improved.

[2] The 2011 foreign asset and liability survey has resulted in significant upward revisions in the stock of short term debt, thus leading to a sharp reduction in the ratio compared to previous projections.

[3] Numbers were revised to include private external debt transactions as reported in the 2011 Foreign Assets and Liabilities Survey (FALS).

Table 5. Mauritius: Depository Corporations Survey, 2009–2013

	2009	2010	2011	2012		2013
				Last SR	Est.	Proj.
	(Millions of rupees, end of period)					
Net foreign assets	332,684	392,515	367,800	424,200	398,358	423,486
Net domestic assets	-36,204	-73,391	-33,895	-49,116	-35,783	-25,855
Domestic credit	301,170	331,747	359,314	392,585	407,979	450,815
Claims on government (net)	49,849	52,735	48,180	53,293	43,706	47,226
Monetary authorities	-10,289	-4,188	-2,085	-2,069	-9,692	-9,671
Commercial banks	60,137	56,923	50,265	55,362	53,398	56,897
Claims on local government and SOEs	11,351	9,136	7,075	7,715	8,203	8,735
Claims on private sector	239,971	269,875	304,059	331,576	356,070	394,854
Other financial liabilities [1]	-237,986	-296,803	-279,049	-313,463	-306,878	-336,549
Other items (net)	-99,388	-108,335	-114,160	-128,238	-136,885	-140,120
Broad money (M2)	296,480	319,124	333,905	375,084	362,575	397,632
Money (M1)	88,151	91,119	96,683	108,667	106,092	121,605
Quasi-money	208,329	228,005	237,222	266,417	256,482	276,026
Reserve money	35,934	46,914	51,370	65,993	52,402	56,458
	(Annual change, millions of rupees)					
Net foreign assets	47,668	59,831	-24,715	56,400	30,558	25,128
Domestic credit	5,072	30,577	27,567	33,271	48,665	42,835
Claims on government	2,882	2,887	-4,555	5,113	-4,474	3,520
Claims on local government and SOEs	1,128	-2,214	-2,061	640	1,128	531
Claims on private sector	1,062	29,904	34,183	27,518	52,012	38,784
Broad money (M2)	22,167	22,644	14,781	41,179	28,670	35,057
Money (M1)	12,332	2,968	5,564	11,984	9,409	15,513
Quasi money	9,835	19,676	9,217	29,195	19,260	19,544
Reserve money	5,293	10,980	4,457	14,623	1,031	4,056
	(Annual percent change)					
Net foreign assets	16.7	18.0	-6.3	15.3	8.3	6.3
Domestic credit	1.7	10.2	8.3	9.3	13.5	10.5
Claims on government	6.1	5.8	-8.6	10.6	-9.3	8.1
Claims on local government and SOEs	11.0	-19.5	-22.6	9.1	15.9	6.5
Claims on private sector	0.4	12.5	12.7	9.1	17.1	10.9
Broad money (M2)	8.1	7.6	4.6	12.3	8.6	9.7
Money (M1)	16.3	3.4	6.1	12.4	9.7	14.6
Quasi-money	5.0	9.4	4.0	12.3	8.1	7.6
Reserve money	17.3	30.6	9.5	28.5	2.0	7.7
	(Percentage change of beginning of year of broad money)					
Net foreign assets	17.4	20.2	-7.7	16.9	9.2	6.9
Domestic credit	1.8	10.3	8.6	10.0	14.6	11.8
Claims on government (net)	1.1	1.0	-1.4	1.5	-1.3	1.0
Claims on local government and SOEs	0.4	-0.7	-0.6	0.2	0.3	0.1
Claims on private sector	0.4	10.1	10.7	8.2	15.6	10.7
Memorandum Items:						
Bank excess reserves (in millions of rupees)	1,769	5,125	3,492	…	3,357	2,671
Government deposits (in millions of rupees)	10,832	9,571	11,238	…	16,637	14,973
Domestic credit (in percent of GDP)	106.7	111.0	111.3	112.2	118.4	119.3
Claims on private sector (in percent of GDP)	85.0	90.3	94.2	94.7	103.3	104.5
Money multiplier	8.3	6.8	6.5	5.7	6.9	7.0
Velocity	1.0	0.9	1.0	0.9	1.0	1.0

Sources: Bank of Mauritius; and IMF staff estimates. SOEs is the acronym for State-Owned Enterprises.

[1] The major component of other financial liabilities consists of restricted deposits, which largely include deposits of the offshore nonfinancial corporations (so-called Global Business Companies, GBCs). GBCs are resident corporations licensed to conduct business exclusively with nonresidents and only in foreign currencies.

Table 6. Mauritius: Financial Soundness Indicators for the Banking Sector, December 2003–June 2012 [1]
(End of period, in percent, unless otherwise indicated)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012 Mar.	2012 Jun.
Capital adequacy											
Regulatory capital to risk-weighted assets [2]	14.2	15.0	15.4	15.8	13.3	15.3	15.4	15.8	15.6	16.4	16.3
Regulatory Tier I capital to risk-weighted assets	13.7	13.7	13.5	13.7	11.5	13.7	13.3	13.6	13.9	14.9	14.9
Total (regulatory) capital to total assets	8.0	7.8	7.8	7.3	6.0	7.3	7.7	7.3	7.2	7.5	7.9
Asset composition and quality											
Share of loans (exposures) per risk-weight (RW) category											
RW = 0%	5.2	6.4	16.6	12.8	9.1	9.0	20.6	21.6	16.0	16.5	18.3
RW = 20%	4.8	6.7	0.2	1.3	3.9	3.3	24.9	19.5	22.2	24.8	18.5
RW = 35%				…	…	…	3.2	3.0	3.7	3.8	4
RW = 50%	7.9	9.6	6.5	6.0	5.7	5.2	8.4	8.8	12.3	10.3	11.4
RW = 75%				…	…	…	3.7	3.6	3.8	3.6	3.9
RW = 100%	82.1	77.3	76.7	79.8	81.1	82.3	38.3	42.5	40.6	39.6	41.9
RW = 150%				…	…	…	0.9	1.0	1.4	1.4	1.9
Total exposures/total assets	47.8	45.9	53.6	40.1	44.8	54.9	40.0	46.7	52.6	55.8	58.6
Sectoral distribution of loans to total loans											
Agriculture	9.1	7.5	5.7	5.7	6.0	6.1	6.3	6.3	6.5	5.9	6.2
of which: sugar	*8.0*	*6.4*	*5.6*	*5.0*	*4.8*	*5.0*	*5.2*	*5.5*	*5.7*	*5.1*	*5.5*
Manufacturing	14.8	13.6	12.0	11.2	10.2	9.4	8.7	7.8	7.3	7.1	6.6
of which: EPZ	*7.5*	*6.1*	*5.4*	*4.8*	*4.7*	*4.0*	*3.2*	2.6	2.2	2.2	2
Traders	14.9	14.5	13.9	14.9	13.5	11.7	10.1	10.5	11.5	10.7	10.9
Personal and professional	9.8	10.0	9.4	9.5	9.7	8.6	9.0	8.8	8.8	8.8	9
Construction	14.2	16.2	15.2	15.4	16.4	18.7	19.7	20.2	22.0	23.2	24.1
of which: housing	*9.0*	*10.8*	*10.7*	*12.0*	*10.9*	*12.4*	*11.6*	*14.3*	*15.4*	*15.8*	*16.4*
Tourism/hotels	15.9	15.4	13.2	13.2	13.6	15.4	16.2	17.6	17.3	16.2	16.3
Other	21.2	22.8	30.7	30.1	30.6	45.6	30.0	28.8	26.6	28.1	26.9
Foreign currency loans to total loans	10.9	12.2	51.5	50.7	56.3	65.5	59.1	61.5	61.6	65.3	63.7
NPLs to gross loans - excluding accrued/unpaid interest	9.6	8.1	4.0	3.0	2.5	2.0	3.3	2.8	2.8	3.2	3.7
NPLs net of provisions to capital	28.1	22.4	11.4	7.0	9.1	8.2	13.4	9.1	10.9	11.7	15.6
Large exposure to capital [3]	220.9	200.0	250.3	380.0	493.2	394.2	216.9	222.5	247.0	217.7	215.9
Earnings and Profitability											
ROA (Pre-tax net income/average assets)	2.1	2.1	1.9	1.7	1.9	1.7	1.6	1.4	1.3	1.5	1.5
ROE (Pre-tax net income/average equity)	19.2	19.2	21.1	22.4	26.4	24.3	21.0	20.0	17.9	20.1	19.6
Interest margin to gross income	32.1	34.7	36.3	31.2	27.6	29.7	68.9	67.1	65.4	60.3	62.9
Noninterest expenses to gross income	23.9	27.7	20.1	16.4	15.0	17.2	39.2	38.9	41.2	38.5	39.1
Expenses/revenues	10.6	10.2	8.1	7.7	6.8	8.5	…	…	…	…	…
Earnings/employee - in 000 of rupees	2,212	2,433	2,904	2,817	3,402	…	…	…	…	…	…
Liquidity											
Liquid assets to total assets [4]	36.6	37.9	44.1	52.8	47.7	27.7	27.9	23.4	17.7	19.1	14.8
Liquid assets to total short-term liabilities [4]	71.0	71.7	88.6	118.8	104.2	31.9	34.4	31.9	26.0	28.6	22.6
Funding volatility ratio	13.9	14.0	-20.1	-51.6	-33.7	-9.3	…	…	…	…	…
Demand deposits/total liabilities	10.3	10.7	15.9	15.4	18.4	19.4	23.9	25.6	24.8	30.1	22.4
FX deposits to total deposits	11.0	13.8	57.3	68.0	67.6	66.0	64.1	64.0	60.6	62.9	59.6
Sensitivity to market risk											
Net open positions in FX to capital [4]	20.8	1.9	4.2	6.4	3.2	3.8	5.3	7.0	2.2	3.1	3.8

Source: Mauritian authorities.
[1] Banking sector refers to former Category 1 banks up to December 2004 and to all banks thereafter.
[2] Total of Tier I and Tier 2 less investments in subsidiaries and associates.
[3] Prior to June 2006, data refer to Category 1 banks only.
[4] Ratio has been revised according to manual as from 2008.

Table 7. Mauritius: Risk Assessment Matrix

Source of Risk	**Up/Downside**	**Likelihood (Low, Medium, or High)**	**Impact (Low, Medium, or High)**	**Policy Response**
Stalled or incomplete delivery of Euro area policy commitments (financial stress re-emerges and bank-sovereign links re-intensify).	Down	M	H	Let automatic stabilizers work, limited targeted spending initiatives. Monetary and exchange rate policies should support the moderately expansionary fiscal policy.
Protracted period of slower European growth (larger than expected deleveraging or negative surprise on potential growth)	Down	M	H	Accelerate policies to diversify export destinations as well as structural reforms to boost competitiveness. Exchange rate flexibility.
Fiscal policy shock in the United States (sequestration and/or temporary government shutdown—medium likelihood; failure to raise the debt ceiling—low likelihood)	Down	L/M	M	Exchange rate flexibility as a first line of defense, coupled with monetary easing and automatic stabilizers.
End of Double Taxation agreement with India	Down	L	H	Exchange rate flexibility. Active labor market policies to absorb unemployed from financial services sector. Diversification of financial services.
Global oil shock triggered by geopolitical events (driving oil prices to $140 per barrel).	Down	L	M	Exchange rate flexibility as a first line of defense, coupled with monetary easing and automatic stabilizers.

APPENDIX I. DEBT SUSTAINABILITY ANALYSIS[1]

I. Recent Debt Developments

Public debt has stabilized over the last three years, albeit at a relatively high level of 56 percent of GDP, highlighting the need for fiscal consolidation over the medium term.[2] After reaching a peak of close to 75 percent in 2003, the ratio of public debt to GDP had been on a declining trend mainly due to strong economic growth and sound fiscal policy. Nevertheless, a series of stimulus measures to counter the effects of the global financial crisis pushed up public debt to almost 60 percent of GDP by the end of 2009. Although the comprehensive policy packages are considered to have been broadly effective in facilitating economic recovery in 2010–11 and thus bringing the debt ratio to close to 56 percent of GDP by end-2012, the Mauritian authorities are cognizant of the need for further fiscal consolidation over the medium-term.

The central government relies mostly on domestic debt for its borrowing needs, whereas in relative terms, state-owned firms have relied more heavily on external debt. As of December 2011, domestic debt represented over 80 percent of total central government debt, a small decline with respect to the average share for the period 2003–09 (90 percent), as the government pursued a strategy of seeking longer-term financing from multilateral and bilateral creditors under favorable conditions (below-market terms). Over 25 percent of domestic central government debt is classified as short-term (by original maturity). The debt of State-Owned Enterprises (SOEs) is estimated to account for 10 percent of total public debt as of end-2011. External debt amounted to over 50 percent of total SOE debt in 2011, in line with the historical average for the period 2003–09.

The legally-mandated public debt ceilings defined in the 2008 Public Debt Management Act (PDMA) are appropriate to anchor fiscal policy and ensure overall debt sustainability. The limits are 60 percent of GDP until 2017 and 50 percent of GDP after 2018. The 2011 Article IV consultation (SM/11/60) included discussions on the appropriateness of the debt ceiling rule contained in the PDMA in supporting fiscal sustainability. Recent empirical work also suggests that a debt ratio of 50 percent of GDP is close to the sustainability risk threshold for a typical emerging market.[3] In addition, as a financial center, Mauritius might need larger policy buffers to respond to shocks.

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[1] Prepared by Antonio David (AFR).

[2] Debt figures are presented on a gross basis. They may differ from some official government debt series, which apply discounts to public enterprise debt for commercially-run public enterprises for debt-law ceiling purposes.

[3] IMF (2011) "*Modernizing the Framework for Fiscal Policy and Public Debt Sustainability Analysis,*" Washington, DC.

The authorities are currently revising the debt management strategy. The strategy attempts to meet the borrowing needs of the government in a manner that avoids market disruption; to minimize the cost of the debt portfolio within an acceptable level of risk; and to support the development of a well-functioning market for government securities. Among other objectives, the strategy envisages lengthening the maturity profile of government debt (partly by increasing the share of external debt in the total portfolio), increasing the issuance of long-term domestic debt instruments, and increasing liquidity in the domestic market for government securities. In this context, authorities have made progress in standardizing domestic issuances into fewer benchmark maturities and in making public the issuance calendar for key benchmark maturities. Nevertheless, the secondary market for government securities remains relatively thin and shallow.

II. Baseline Assumptions underlying the DSA

The results of this debt sustainability analysis are based on a number of important assumptions, notably regarding fiscal consolidation, sound monetary policy and sustained economic growth over the medium term. GDP growth is expected to increase, reaching 4.5 percent in 2018 driven by increased infrastructure investment and productivity improvements. Inflation should remain moderate due to credible implementation of monetary policy by the Bank of Mauritius. Furthermore, the macroeconomic framework used for this exercise assumes that the government will resume fiscal consolidation after 2013, with a targeted primary surplus of about 1 percent of GDP by 2015. A reduction in transfers and subsidies and better enforcement of financial discipline for public enterprises is expected to contribute to deficit reduction.

The current account deficit is expected to gradually narrow reaching about 7 percent of GDP by 2018. The trade balance should improve over the projection period as imports stabilize, while export growth continues to be robust at around 6.8 percent on average.

The baseline macroeconomic framework is subject to downside risks. Given the strong links between Mauritius and advanced economies in Europe, the macroeconomic outlook remains vulnerable to the volatile external environment. FDI inflows, tourism receipts and exports of manufactured goods to European trading partners are particularly important transmission channels for external shocks.

III. Public Debt Sustainability

The results of the debt sustainability analysis indicate that public debt is sustainable over the medium-term (Table I.1 and Figure I.1). Despite the small fiscal expansion expected in the context of the 2013 budget, public debt should gradually decline over the projection period, as fiscal consolidation takes place. If the planned fiscal adjustment is implemented, Mauritius should be able to reach the 50 percent debt-to-GDP target mandated by the PDMA by 2018. In fact, public debt is projected to drop below 48 percent of GDP by 2018 even without discounting debt by SOEs.[4]

Public debt dynamics are resilient to several stress tests (Figure I.1). The results of standardized sensitivity tests do not fundamentally alter the broadly positive outlook for public debt previously discussed. In most cases, the public debt-to-GDP ratio does not approach 60 percent by the end of the projection period under the different shocks considered,[5] with two notable exceptions. The scenario including an increase in contingent liabilities would cause the debt-to-GDP ratio to reach 65 percent in 2014 before falling back to 57 percent by 2018. The debt outlook is also vulnerable to a large depreciation, which would push up the public debt-to-GDP ratio by over 10 percentage points to 58 percent in 2018.

IV. External Debt Sustainability

External debt dynamics are sustainable in the baseline scenario (Table I.2 and Figure I.2). External debt is estimated at 24 percent of GDP at the end of 2012. Gross bank external liabilities surpassed 100 percent of GDP at the end-2012 and are not included in external debt figures, as bank foreign assets are almost twice as large,[6] and as in many international financial centers, it would be misleading to include gross bank liabilities in the external debt measure. External debt is projected to increase somewhat initially and then stabilize around 25 percent of GDP over the medium term, as authorities take advantage of partially concessional long-term financing from multilateral and bilateral sources.

Stress tests indicate that the external debt trajectory is particularly vulnerable to shocks to the non-interest current account and large exchange rate depreciations. Sensitivity analysis suggests that Mauritius' external debt is resilient to interest rate and growth shocks, but a 30 percent real depreciation would push up the external debt-to-GDP ratio to 35 percent in 2018. A current account

[4] The discounting of the debt of certain types of SOEs is envisaged under the 2008 Public Debt Management Act for the purposes of calculating the public debt ceiling. In 2011, the discount on SOE debt amounted to 3.3 percent of GDP.

[5] Sensitivity tests include shocks to the interest rate, to growth, to the primary balance, a combination of shocks, as well as shocks to contingent liabilities, and a 30 percent exchange rate depreciation.

[6] Bank investments of the GBC float—that is, money from foreign investors meant to be transferred to third countries but held for a short period by GBCs in bank deposits—are included. Excluding these GBC counterpart investments would still result in a positive bank net foreign asset position.

deficit that is 3 percentage points of GDP larger than projected in the baseline would also cause the debt-to-GDP ratio to shoot up to close to 34 percent by 2018. Thus, moderating the non-interest part of the external current account balance is key to maintaining external debt sustainability.

V. Conclusion

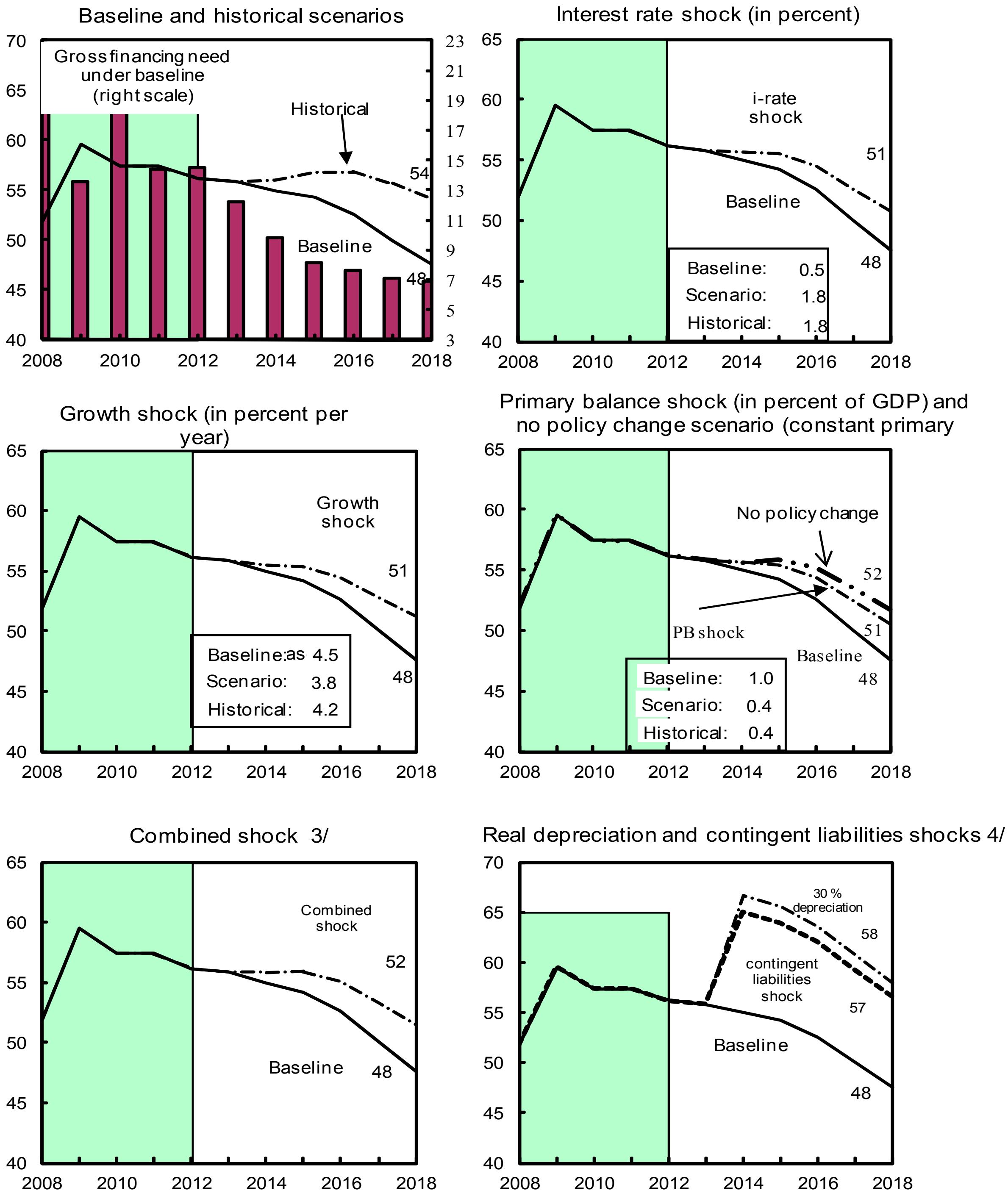
Overall, the DSA results indicate that the debt outlook for Mauritius is broadly positive. Both total public debt and external debt are on sustainable trajectories in the baseline, and the results of stress tests indicate that debt dynamics are resilient to several shocks. Nevertheless, the external debt outlook is particularly vulnerable to a shock to the non-interest current account and to large depreciations, which may lead to unsustainable trajectories. In addition, total public sector debt could be significantly affected by shocks to contingent liabilities. It is important to note that the simulated debt trajectories are based on the assumption that structural reforms will be implemented to sustain growth rates and that some fiscal consolidation will take place over the medium-term.

Table I.1. Mauritius: Public Sector Debt Sustainability Framework, 2008-2018
(In percent of GDP, unless otherwise indicated)

	Actual					Projections						
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	**Debt-stabilizing primary balance 9/**
Baseline: Public sector debt 1/	51.9	59.5	57.4	57.4	56.2	**55.8**	**55.0**	**54.2**	**52.6**	**50.0**	**47.6**	**-1.1**
o/w foreign-currency denominated	13.4	22.0	22.3	23.7	23.7	25.1	26.7	26.5	25.9	24.9	23.8	
Change in public sector debt	-4.3	7.7	-2.1	0.0	-1.2	-0.3	-0.9	-0.8	-1.6	-2.6	-2.4	
Identified debt-creating flows (4+7+12)	-3.8	-0.1	-0.2	-2.9	-0.4	-2.4	-2.8	-3.4	-3.3	-3.1	-2.7	
Primary deficit	-2.6	-1.8	-0.4	-0.9	-0.7	-0.1	-0.7	-1.2	-1.1	-1.1	-0.9	
Revenue and grants	21.0	22.8	21.9	21.4	21.4	21.9	21.3	20.3	20.2	20.2	20.3	
Primary (noninterest) expenditure	18.5	21.0	21.5	20.5	20.7	21.8	20.6	19.1	19.1	19.2	19.4	
Automatic debt dynamics 2/	-1.3	1.7	0.2	-2.0	0.3	-2.3	-2.0	-2.2	-2.2	-2.1	-1.8	
Contribution from interest rate/growth differential 3/	-2.3	2.3	0.2	-1.3	-0.6	-2.3	-2.0	-2.2	-2.2	-2.1	-1.8	
Of which contribution from real interest rate	0.4	3.8	2.5	0.7	1.1	-0.4	0.2	0.1	0.0	0.1	0.2	
Of which contribution from real GDP growth	-2.8	-1.5	-2.3	-2.0	-1.8	-1.9	-2.2	-2.3	-2.3	-2.2	-2.1	
Contribution from exchange rate depreciation 4/	1.1	-0.6	0.1	-0.7	0.9	...	...	...	...	...	...	
Other identified debt-creating flows	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	
Other (specify, e.g. bank recapitalization)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Residual, including asset changes (2-3) 5/	-0.5	7.8	-2.0	2.9	-0.8	2.1	1.9	2.6	1.7	0.6	0.2	
Public sector debt-to-revenue ratio 1/	246.5	261.5	261.9	267.7	262.4	254.9	258.0	266.8	259.9	246.9	234.6	
Gross financing need 6/	20.2	13.6	18.3	14.4	14.5	12.2	9.8	8.1	7.6	7.1	6.9	
in billions of U.S. dollars	2.0	1.2	1.8	1.6	1.7	1.5	1.3	1.1	1.1	1.1	1.2	
Scenario with key variables at their historical averages 7/						**55.8**	**56.0**	**56.9**	**56.8**	**55.6**	**54.2**	**-0.6**
Scenario with no policy change (constant primary balance) in 2013-2018						**55.8**	**55.6**	**55.9**	**55.2**	**53.5**	**51.8**	**-1.2**
Key Macroeconomic and Fiscal Assumptions Underlying Baseline												
Real GDP growth (in percent)	5.5	3.0	4.1	3.8	3.3	3.7	4.4	4.7	4.6	4.5	4.5	
Average nominal interest rate on public debt (in percent) 8/	7.8	7.5	6.1	5.6	5.6	5.2	5.2	5.1	5.3	5.4	5.7	
Average real interest rate (nominal rate minus change in GDP deflator, in percent)	1.2	7.6	4.4	1.5	2.2	-0.5	0.6	0.5	0.3	0.4	0.7	
Nominal appreciation (increase in US dollar value of local currency, in percent)	-11.1	4.8	-0.3	3.6	-3.9	...	...	...	...	...	...	
Inflation rate (GDP deflator, in percent)	6.5	-0.1	1.7	4.1	3.3	5.7	4.6	4.7	5.0	5.0	5.0	
Growth of real primary spending (deflated by GDP deflator, in percent)	7.3	16.9	6.8	-0.9	4.1	9.3	-1.5	-2.7	4.4	4.9	5.7	
Primary deficit	-2.6	-1.8	-0.4	-0.9	-0.7	-0.1	-0.7	-1.2	-1.1	-1.1	-0.9	

1/ Indicate coverage of public sector, e.g., general government or nonfinancial public sector. Also whether net or gross debt is used.
2/ Derived as $[(r - \pi(1+g) - g + \alpha\varepsilon(1+r)]/(1+g+\pi+g\pi))$ times previous period debt ratio, with r = interest rate; π = growth rate of GDP deflator; g = real GDP growth rate; α = share of foreign-currency denominated debt; and ε = nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).
3/ The real interest rate contribution is derived from the denominator in footnote 2/ as $r - \pi(1+g)$ and the real growth contribution as -g.
4/ The exchange rate contribution is derived from the numerator in footnote 2/ as $\alpha\varepsilon(1+r)$.
5/ For projections, this line includes exchange rate changes.
6/ Defined as public sector deficit, plus amortization of medium and long-term public sector debt, plus short-term debt at end of previous period.
7/ The key variables include real GDP growth; real interest rate; and primary balance in percent of GDP.
8/ Derived as nominal interest expenditure divided by previous period debt stock.
9/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.

Figure I.1. Mauritius: Public Debt Sustainability: Bound Tests 1/ 2/
(Public debt in percent of GDP)



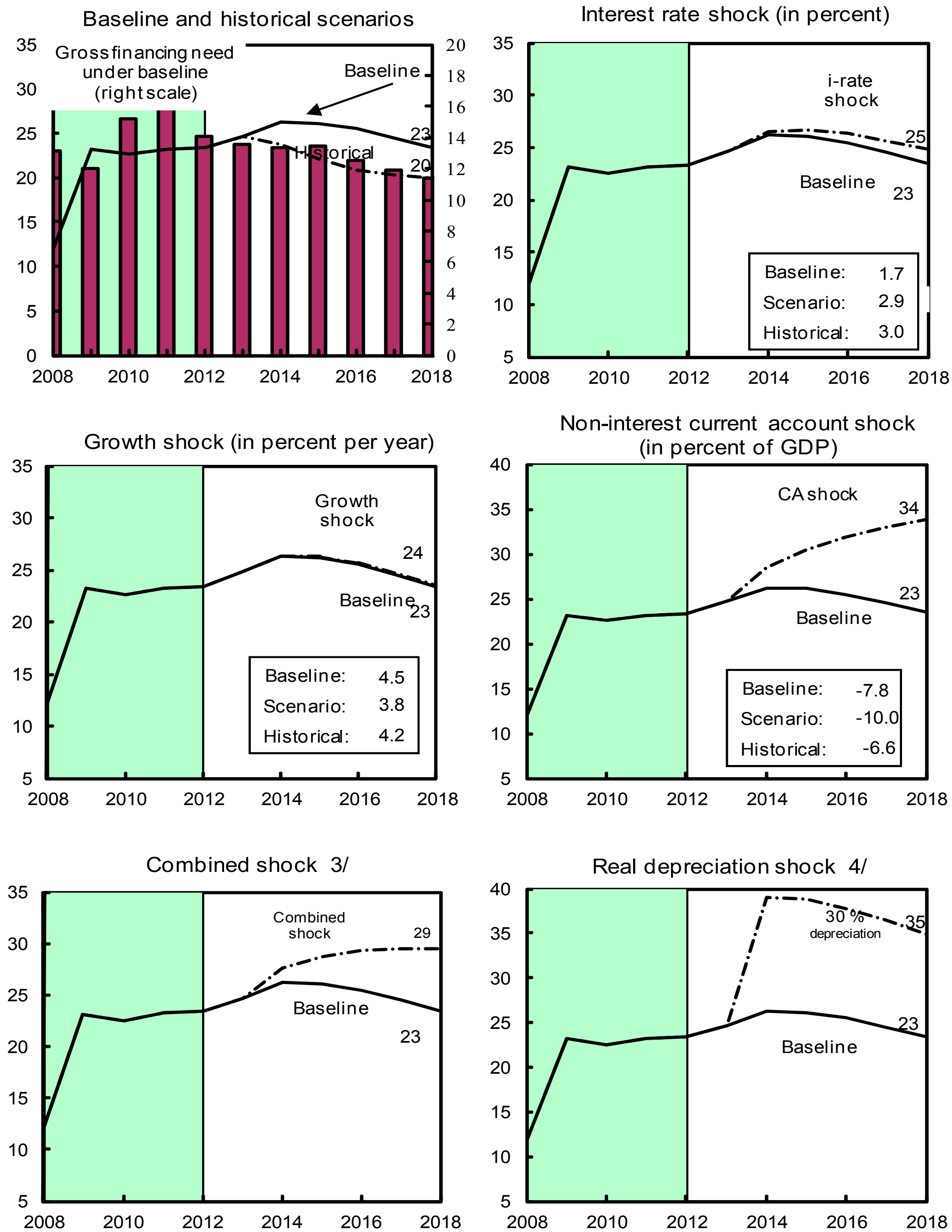
Sources: International Monetary Fund, country desk data, and staff estimates.
1/ Shaded areas represent actual data. Individual shocks are permanent one-half standard deviation shocks. Figures in the boxes represent average projections for the respective variables in the baseline and scenario being presented. Ten-year historical average for the variable is also shown.
2/ For historical scenarios, the historical averages are calculated over the ten-year period, and the information is used to project debt dynamics five years ahead.
3/ Permanent 1/4 standard deviation shocks applied to real interest rate, growth rate, and primary balance.
4/ One-time real depreciation of 30 percent and 10 percent of GDP shock to contingent liabilities occur in 2013, with real depreciation defined as nominal depreciation (measured by percentage fall in dollar value of local currency) minus domestic inflation (based on GDP deflator).

Table I.2. Mauritius: External Debt Sustainability Framework, 2008-2018
(In percent of GDP, unless otherwise indicated)

	Actual					Projections						
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Debt-stabilizing non-interest current account 6/
Baseline: External debt	12.0	23.2	22.6	23.2	23.3	**24.7**	**26.2**	**26.1**	**25.5**	**24.5**	**23.4**	**-2.8**
Change in external debt	1.7	11.2	-0.6	0.6	0.1	1.4	1.5	-0.2	-0.6	-0.9	-1.1	
Identified external debt-creating flows (4+8+9)	6.4	6.7	7.1	7.3	8.0	7.5	6.8	6.2	5.4	4.8	4.5	
Current account deficit, excluding interest payments	9.8	7.2	10.1	12.4	9.8	9.4	8.7	8.4	7.7	7.3	6.8	
Deficit in balance of goods and services	14.2	10.4	12.2	13.2	13.0	12.5	11.8	11.5	10.8	10.5	10.1	
Exports	51.1	47.0	50.9	52.6	54.0	54.0	54.1	54.3	54.6	54.8	55.0	
Imports	65.3	57.5	63.1	65.8	67.0	66.5	66.0	65.8	65.4	65.2	65.1	
Net non-debt creating capital inflows (negative)	-1.7	-1.8	-1.2	-2.3	-1.6	-1.3	-1.3	-1.4	-1.6	-1.8	-1.7	
Automatic debt dynamics 1/	-1.7	1.3	-1.9	-2.9	-0.2	-0.5	-0.6	-0.8	-0.7	-0.6	-0.5	
Contribution from nominal interest rate	0.3	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.4	0.5	
Contribution from real GDP growth	-0.5	-0.4	-0.9	-0.7	-0.7	-0.8	-1.0	-1.2	-1.1	-1.1	-1.0	
Contribution from price and exchange rate changes 2/	-1.5	1.5	-1.2	-2.3	0.3	...	...	...	...	...	...	
Residual, incl. change in gross foreign assets (2-3) 3/	-4.8	4.5	-7.7	-6.6	-7.8	-6.2	-5.2	-6.3	-6.0	-5.8	-5.6	
External debt-to-exports ratio (in percent)	23.4	49.3	44.3	44.2	43.2	45.7	48.5	48.0	46.7	44.8	42.6	
Gross external financing need (in billions of US dollars) 4/	1.3	1.1	1.5	1.9	1.6	1.7	1.7	1.9	1.8	1.9	1.9	
in percent of GDP	13.1	12.0	15.2	16.5	14.0	13.5	13.3	13.4	12.5	12.0	11.4	
Scenario with key variables at their historical averages 5/						**24.7**	**23.8**	**22.1**	**20.9**	**20.3**	**19.9**	**-2.5**
Key Macroeconomic Assumptions Underlying Baseline												
Real GDP growth (in percent)	5.5	3.0	4.1	3.8	3.3	3.7	4.4	4.7	4.6	4.5	4.5	
GDP deflator in US dollars (change in percent)	17.3	-11.0	5.5	11.6	-1.3	2.9	1.6	1.6	1.6	2.2	2.2	
Nominal external interest rate (in percent)	3.6	1.8	0.9	1.0	1.0	1.5	1.6	1.6	1.6	1.8	2.1	
Growth of exports (US dollar terms, in percent)	11.4	-15.6	18.9	19.6	4.8	6.7	6.3	6.7	6.8	7.1	7.3	
Growth of imports (US dollar terms, in percent)	21.2	-19.3	20.5	20.8	3.9	5.9	5.3	6.0	5.7	6.5	6.5	
Current account balance, excluding interest payments	-9.8	-7.2	-10.1	-12.4	-9.8	-9.4	-8.7	-8.4	-7.7	-7.3	-6.8	
Net non-debt creating capital inflows	1.7	1.8	1.2	2.3	1.6	1.3	1.3	1.4	1.6	1.8	1.7	

1/ Derived as [r - g - ρ(1+g) + εα(1+r)]/(1+g+ρ+gρ) times previous period debt stock, with r = nominal effective interest rate on external debt; ρ = change in domestic GDP deflator in US dollar terms, g = real GDP growth rate, ε = nominal appreciation (increase in dollar value of domestic currency), and α = share of domestic-currency denominated debt in total external debt.
2/ The contribution from price and exchange rate changes is defined as [-ρ(1+g) + εα(1+r)]/(1+g+ρ+gρ) times previous period debt stock. ρ increases with an appreciating domestic currency (ε > 0) and rising inflation (based on GDP deflator).
3/ For projection, line includes the impact of price and exchange rate changes.
4/ Defined as current account deficit, plus amortization on medium- and long-term debt, plus short-term debt at end of previous period.
5/ The key variables include real GDP growth; nominal interest rate; dollar deflator growth; and both non-interest current account and non-debt inflows in percent of GDP.
6/ Long-run, constant balance that stabilizes the debt ratio assuming that key variables (real GDP growth, nominal interest rate, dollar deflator growth, and non-debt inflows in percent of GDP) remain at their levels of the last projection year.

Figure I.2. Mauritius: External Debt Sustainability: Bound Tests 1/ 2/
(External debt in percent of GDP)



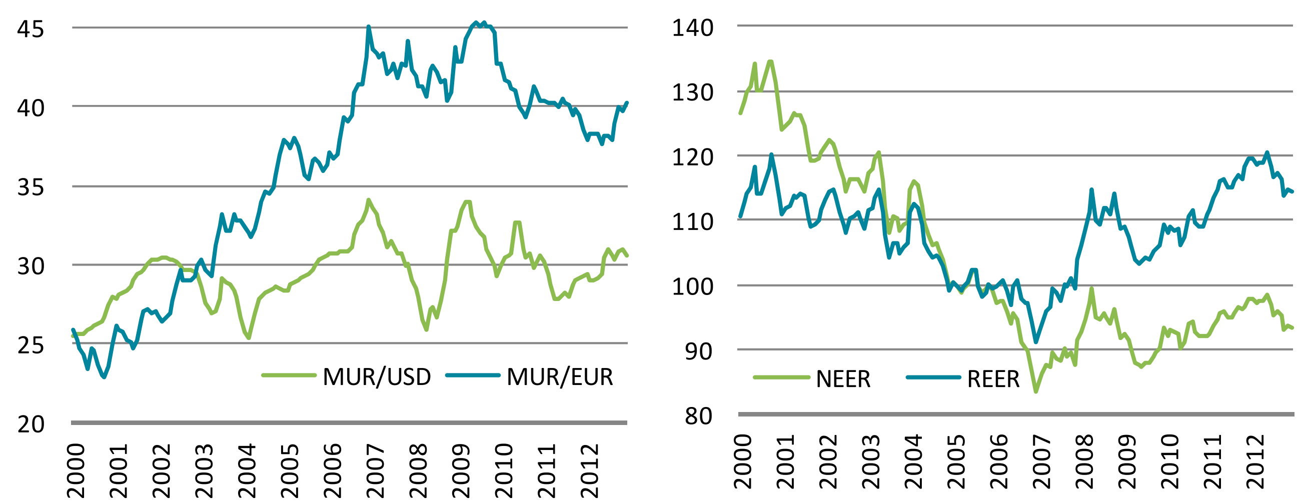
Sources: International Monetary Fund, Country desk data, and staff estimates.
1/ Shaded areas represent actual data. Individual shocks are permanent one-half standard deviation shocks. Figures in the boxes represent average projections for the respective variables in the baseline and scenario being presented. Ten-year historical average for the variable is also shown.
2/ For historical scenarios, the historical averages are calculated over the ten-year period, and the information is used to project debt dynamics five years ahead.
3/ Permanent 1/4 standard deviation shocks applied to real interest rate, growth rate, and current account balance.
4/ One-time real depreciation of 30 percent occurs in 2013.

APPENDIX II. EXCHANGE RATE, EXTERNAL STABILITY, AND COMPETITIVENESS ASSESSMENT[1]

Exchange Rate Assessment

The Mauritian rupee appreciated by an average of 1 percent in real effective terms during 2012 (Figure II.1). After a 25 percent real appreciation from trough (end-2006) to peak (May 2012), the BOM started intervening more actively in the foreign exchange market in June 2012 to build reserves and smooth the fluctuation of the rupee. The rupee appreciated by 1.3 percent in real effective terms for the year as a whole.

Figure II.1. Mauritius: Bilateral and Effective Exchange Rates, 2001–12



The rupee is estimated to be broadly in line with fundamentals. Staff applied the three Consultative Group on Exchange Rate Issues (CGER) methodologies—macroeconomic balance (MB), equilibrium real exchange rate (ERER), and external sustainability (ES) approaches. All three approaches consistently give point estimates of a mild overvaluation (less than 5 percent over the medium-term, Table II.1.), but the level of confidence in the estimates is not very high (see detailed discussion below). The results from CGER methodologies are also consistent with two additional approaches: the purchasing power parity (PPP) approach and the fundamental equilibrium exchange rate (FEER) approach, which point to smaller or zero overvaluation. Following BOM's sterilized interventions in late 2012, the estimated 2013 overvaluation declined with respect to 2012 for all methodologies. The limited targeted interventions were successful because (i) the rupee is not considered a perfect substitute for other currencies; (ii) BOM is a large player in a small market; (iii) interventions were aimed to move the currency towards the estimated equilibrium; and (iv) fiscal policy was supportive of the overall policy mix.

Table II.1 summarizes the current and medium-term exchange rate misalignment computed under the five different methodologies. Some results are sensitive to the estimates of the elasticity of the current

[1] Prepared by Yi Xiong (AFR).

account with respect to the real exchange rate. The estimates used are Mauritius-specific because as a small open economy, Mauritius is estimated to have higher import and export elasticities (Table II.I). If standard CGER elasticities (exports = –0.71; imports = 0.92) were used instead of Mauritius-specific elasticities, implied exchange rate misalignments would be larger for the MB and the ES approaches.

Table II.1. Mauritius: Exchange Rate Assessment Results[1]

Exchange Rate Misalignments (Mauritius specific elasticities)[1]

	2011	2012	2013	2017
Method				
MB	11.0	6.6	5.6	3.6
ERER	11.6	13.8	10.0	7.6
ES	15.5	12.8	12.7	8.7
PPP	0.8	2.2	-0.4	-0.4
FEER	7.8	8.1	5.8	…
Average	9.3	8.7	6.7	4.9
Trimmed Average [2]	10.1	9.2	7.1	3.7

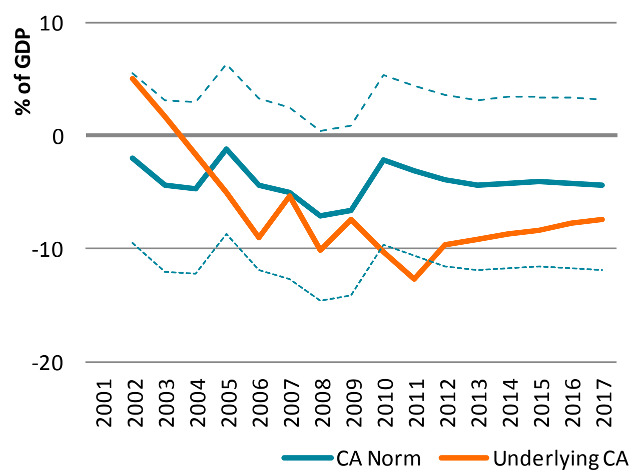
[1] Mauritius specific elasticities: exports = -1.6; imports = 1

[2] Average excluding highest and lowest results

Source: IMF Staff Estimates.

The MB approach shows that the gap between underlying and equilibrium current account deficits declined in 2012 (Figure II.2). Estimation results show that the REER might have been somewhat overvalued during 2010–11, when the difference between the norm and the actual current account was large, However, this result was partly due to the inclusion of Global Business Companies (GBCs) in the balance of payment statistics, which led to about a 2 percentage point of GDP increase in CA deficits in 2010–11. Nevertheless it is not clear that balance of payment statistics are accurately capturing exports of financial services given that net income related to GBCs is negative for the two years for which data is available. After 2011, however, the actual CA deficit narrowed; and the norm expanded, resulting in a lower measured overvaluation. The equilibrium CA deficit is estimated at 4 percent of GDP over the medium term, because of a higher growth rate than trading partners (which contributed 2.3 percentage points of GDP to the equilibrium CA deficit) and oil imports (with a contribution of 1.7 percentage points).

Figure II.2. Mauritius: MB Approach: Norm vs. Underlying CA



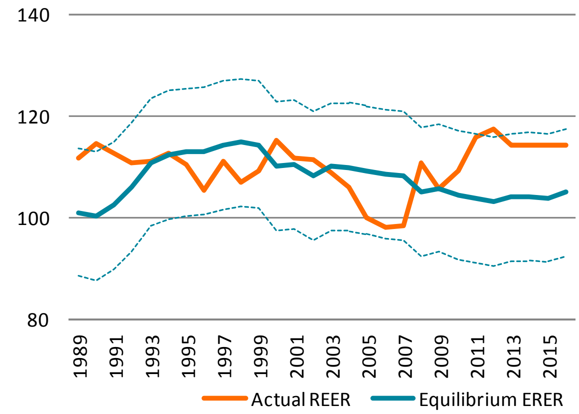
Source: IMF staff estimates and projections.

The ERER approach does not suggest a significant misalignment. The ERER approach signaled a significant overvaluation of the rupee in 2012, as the average real exchange rate breached the upper 90 percent confidence interval. But the rupee depreciated subsequently in the second half of the year. The 2013 level of overvaluation, estimated at 10 percent, is within the error bands and is projected to decrease marginally over the medium term (Figure II.3).

The ES approach estimates the level of the CA balance that stabilizes the level of net foreign assets (NFA) (Figure II.4). It shows that the rupee is projected to be overvalued by about 13 percent in 2013 and 9 percent over the medium term due to a projected decline in the CA deficit. The estimated overvaluation under the ES approach is slightly larger than that of the MB approach because of the difference in the CA norms.

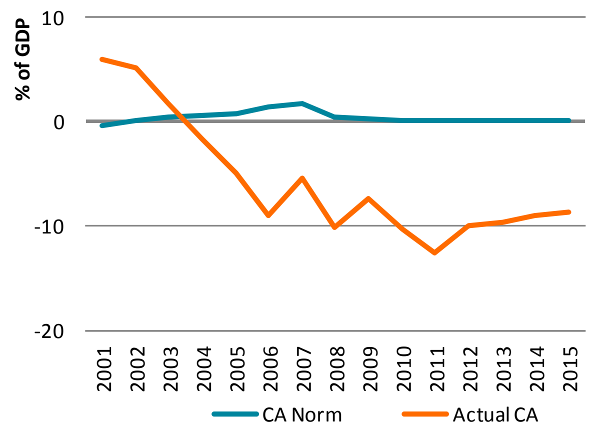
The results from CGER methodologies are in line with the results from the two other approaches. The PPP approach shows that the current level of the real exchange rate is close to its historical average. The fundamental equilibrium exchange rate (FEER) approach is conceptually similar to the ERER approach; it also seeks the long-term relationship between exchange rates and a set of economic fundamentals, including terms of trade, government consumption, and openness. Instead of running panel regressions (as in the ERER), the FEER is a country-specific analysis based on time series data for Mauritius only.[2] Results from FEER also show that the exchange rate misalignment estimate declined between 2012 and 2013 and remained within the statistical error bands (Figure II.5).

Figure II.3. Mauritius: ERER Approach: Actual and Equilibrium REER



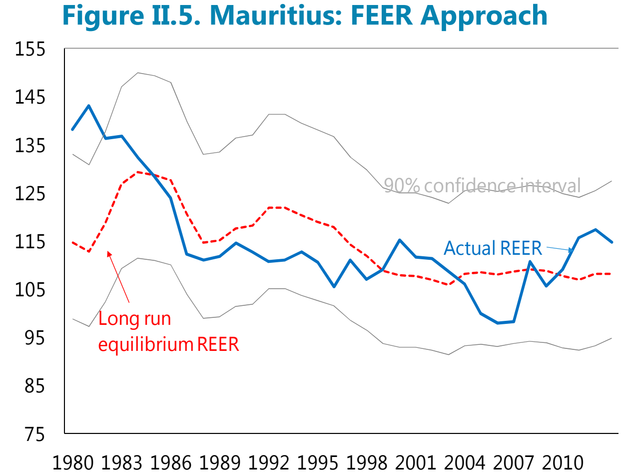
Source: IMF staff estimates and projections.

Figure II.4. Mauritius: ES Approach: Norm vs. Underlying CA



Source: IMF staff estimates and projections.

Figure II.5. Mauritius: FEER Approach



Source: IMF staff estimates. Equilibrium REER is determined by fundamentals, include terms of trade, government consumption, and trade openness.

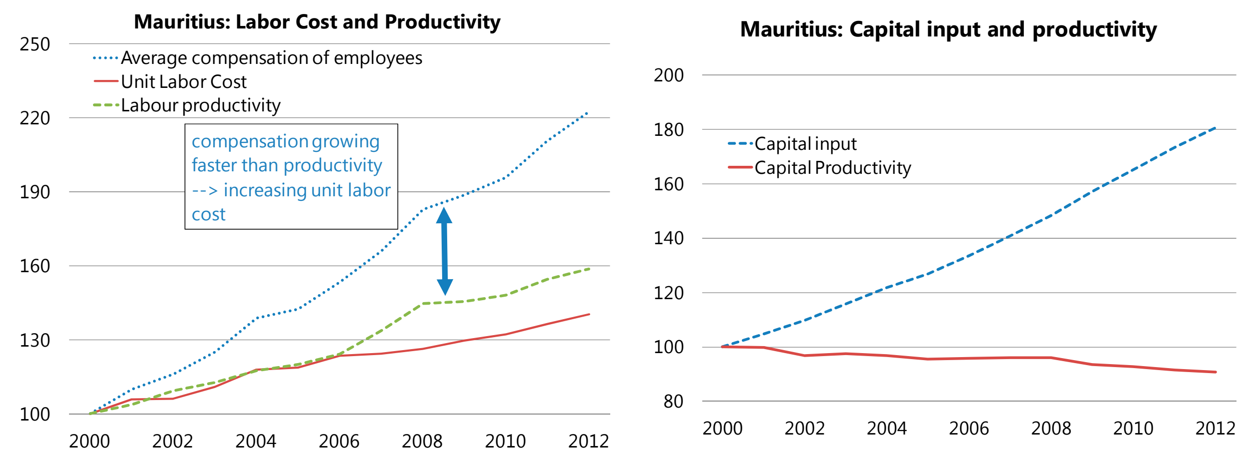
[2] Imam and Minoiu (2008), "*Mauritius: A Competitiveness Assessment*," IMF WP/08/212 describes the FEER methodology.

External Balance and Competitiveness: 2000–2012

The sustained increase in the current account deficit in the past decade is explained by a decrease in private savings. By definition, the current account deficit is equal to the excess of domestic investment over domestic savings. Because investment stayed relatively stable at around 25 percent of GDP, most of the CA deficit is explained by the significant fall in national savings from over 25 percent of GDP in the early 2000s to 15 percent in 2012. Almost the entire decline is due to a fall in private savings as public savings stayed stable during the period.

Available indicators suggest that Mauritius has become less competitive. Between 2000 and 2012, the exports-to-GDP ratio fell and the terms-of-trade worsened. Productivity indicators also point to possible losses in competitiveness. On the one hand, compensation of employees in manufacturing more than doubled in 2000–12, while labor productivity increased by only about 60 percent, resulting in sustained increases in unit labor cost. On the other hand, capital productivity decreased in the same period (Figure II.6). Indeed, rising labor costs might have reduced the return to capital and eroded competitiveness of the economy.[3]

Figure II.6. Mauritius: Labor and Capital Productivity



Sources: Mauritian authorities; and IMF staff estimates.

The emerging external imbalances should be addressed through measures to increase national savings (including fiscal consolidation) and to foster competitiveness. Continued fiscal adjustments could increase public savings, and pension reform could increase public and private savings. Productivity could be enhanced by investments that reduce infrastructure bottlenecks and by training programs that reduce skill mismatches in the labor market. Exchange rate policies could be used to resist further appreciation of the rupee, but the current flexible exchange rate regime has served the country well, and interventions should not be used as the primary policy instrument to correct external imbalances, particularly if fundamentals do not suggest an overvaluation of the real exchange rate.

[3] There are, however, two caveats to this labor cost-competitiveness analysis: (i) total factor productivity may have increased because of technology and institutional improvements; and (ii) productivity increases in the services sector are hard to measure and may have been underestimated.

Capital Flows and Reserve Adequacy

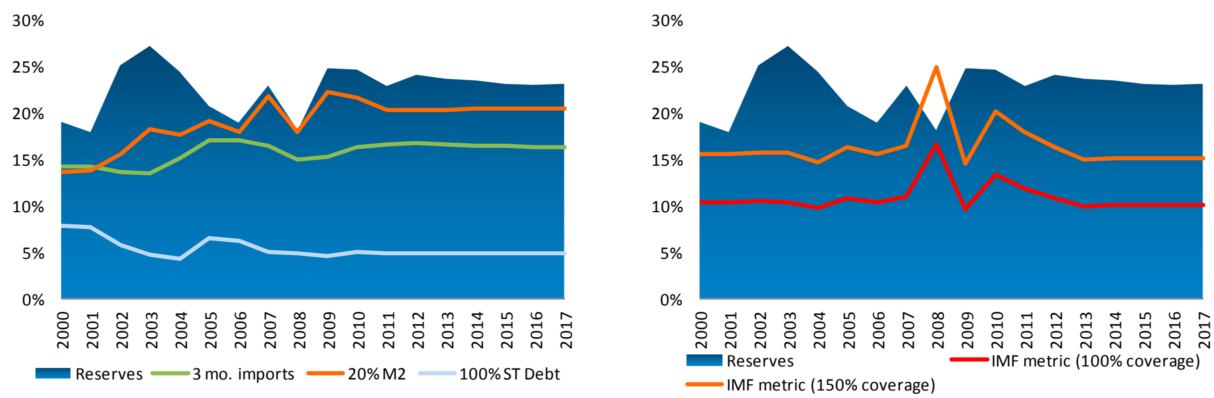
Despite significant volatility in external markets, Mauritius continues to attract sizeable private capital inflows that have helped to finance the current account deficit. FDI flows and flows related to the GBCs account for most capital inflows into Mauritius, with net inflows amounting to 1.6 percent and 7.8 percent of GDP respectively in 2011. After recovering to pre-global financial crisis levels in 2010 (to about 3 percent of GDP), net FDI inflows decelerated in 2011 and are projected to remain relatively subdued in 2012 and 2013. In the first three quarters of 2012, FDI inflows into the country were mostly directed to real estate, financial, and hotel sectors. The flows originated mostly from Europe, South Africa and Asia; although the share of FDI flows originating from Europe has been declining rapidly since 2010. The quality of data on GBC flows has improved since the first surveys were undertaken in 2010, but it is still too noisy to allow for a comprehensive analysis of the dynamics of these flows. The authorities continue to pursue efforts to improve these balance of payments statistics with support from STA.

The Bank of Mauritius should continue to maintain adequate levels of international reserves. As illustrated in Figure II.7, international reserves are comfortable when measured against the traditional threshold of import cover (above four months against the benchmark of three months). Amounting to about 10 times short-term external debt, reserves are also largely above the traditional benchmark of 100 percent. Reserves are also adequate relative to the IMF composite indicator (150 percent) and are projected to remain so over the medium-term.[4] However, reserves have barely kept up with financial deepening and are only slightly above the 20 percent of M2, a benchmark intended to capture the risk of capital flight and the potential need for bank support in/after crisis. Against the backdrop of the country's exposure to natural disasters and its status as an international financial center, there is a rationale for continuing to accumulate reserves, so as to keep reserve coverage adequate as outlined in the BOM's reserve reconstitution program.

Figure II.7. Mauritius: Reserve Adequacy Measures (in % of GDP)

Reserve levels are largely comfortable relative to most traditional metrics.

The composite IMF adequacy metric also suggests that international reserve levels are adequate.



Source: Mauritian Authorities and IMF staff estimates.

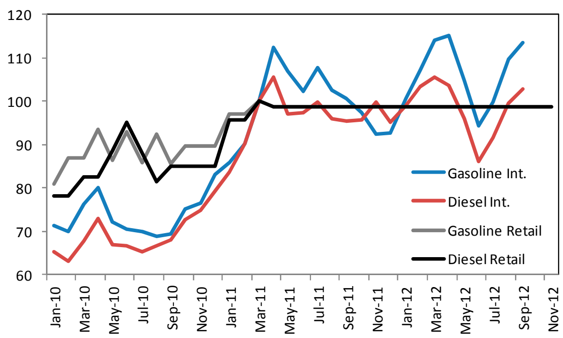
[4] For a discussion of the IMF composite reserve adequacy measure see IMF (2011) "*Assessing Reserve Adequacy,*" February, International Monetary Fund, Washington, DC.

APPENDIX III. ENERGY PRICING AND SUBSIDY REFORM[1]

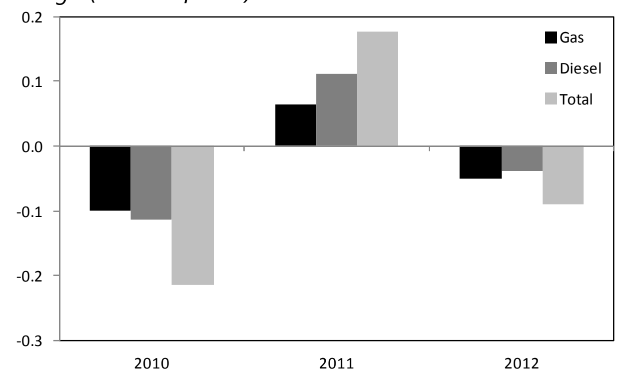
The pass-through of international prices to retail petroleum products is incomplete. The State Trading Corporation (STC) is responsible for imports and sales to retailers of petroleum products, LPG, wheat flour, and rice. Rice, flour and LPG prices are subsidized at a cost of about 0.3 percent of GDP in 2012, financed by cross-subsidies from sales of gasoline and diesel. Gasoline and diesel prices are set administratively. Retail prices are only adjusted when there are significant changes in international prices, according to a system of triggers and caps, subject to approval by the Petroleum Pricing Committee (PPC). Before the latest adjustment in early March 2013, retail prices had not been adjusted since March 2011, despite significant movements in international prices (Figure III.1). Staff estimates that net losses from the incomplete pass-through of international prices in 2012 reached 0.1 percent of GDP.

Figure III.1. Mauritius: Pass-Through of Fuel Prices and Quasi-Fiscal Costs of STC

Incomplete Pass-through of Gasoline and Diesel Prices (March 2011=100)

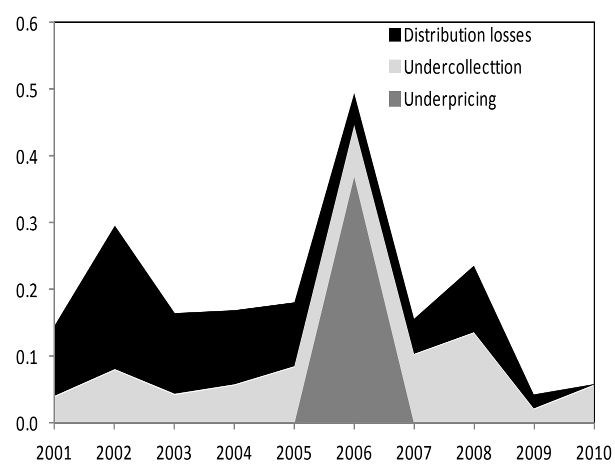


Net revenues/losses for STC as a result of incomplete pass-through (as a % of GDP)



Source: Mauritian authorities and IMF staff estimates. Net revenues/losses calculated as the difference between the retail price and a benchmark price per liter, multiplied by the amounts of the relevant product that is consumed.

Figure III.2. Mauritius: Quasi-Fiscal Costs of CEB (% GDP)



Sources: Mauritian authorities; and IMF staff estimates.

Electricity tariff adjustments are made mainly on an ad-hoc basis and do not reflect full-cost recovery. IMF staff estimates of quasi-fiscal costs for the power utility (CEB) over the 2000s indicate that costs were relatively low and mostly linked to excess distribution losses up to the mid-2000s (Figure III.2).[2] But inadequate pricing of electricity posed a burden in 2006, when underpricing costs are estimated to have reached close to 0.4 percent of GDP. Despite its overall positive performance, according to World Bank analysis (World Bank, 2012), the

[1] Prepared by Antonio David (AFR).

[2] Thereafter, excess losses (i.e. losses over 7 percent) were reduced to best international practice levels.

sector is subject to significant vulnerabilities, in particular because of infrequent and backward looking tariff adjustments that do not cover planned investment costs. Going forward, this could lead to the emergence of supply bottlenecks, if not addressed.

Good Practices in Energy Pricing

Actual costs should guide the pricing of petroleum products. The international experience suggests that the most sustainable policies for domestic pricing of petroleum products are either full liberalization or transparent and simple automatic adjustment mechanisms for administered prices. Price adjustment formulas should be based on actual costs of supply including full transport, storage and other costs incurred assuming efficient operations. Price adjustment mechanisms should also include a desired level of taxes and should be automatic and frequent in line with changes in international prices.

A simple and transparent adjustment mechanism is preferable. Excessive smoothing leads to low pass-through and increases the volatility of fuel-related revenues. Simulations performed by FAD (Coady and others, 2012) show that price bands with monthly adjustments with no minimum but a maximum of (+/- 3 percent) provide the best results in terms of reducing retail price volatility while stabilizing fiscal revenues. In practice, automatic price adjustment mechanisms are subject to significant implementation risks. The pricing formula should be insulated from political influence, perhaps by delegating its implementation to an independent and transparent body that includes representatives from different stakeholders (importers, distributors, transporters, among others) and with appropriate disclosure to the public.

Automatic adjustments also limit the risks of underpricing electricity. Kenya is an example of a country that implemented automatic tariff adjustments over an extended period of time. There, tariffs are based on a formula that reflects long-run marginal costs, but also features monthly automatic pass-through of fuel costs and exchange rate movements. Furthermore, every six months, the formula adjusts for domestic inflation. The calculation of tariff adjustments is available on the regulator's website. Nevertheless, the tariff adjustment mechanism was not fully implemented recently due to political economy constraints.

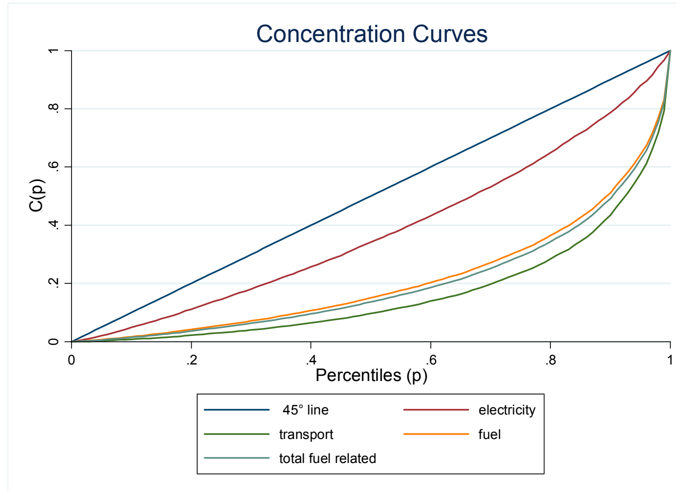
Energy pricing should be transparent and consider social impact. Recent IMF research (IMF 2013) highlights the need for effective public communication campaigns and transparency (in particular regarding the measurement and incidence of subsidies) to build support for reform efforts. Another crucial aspect is the need to mitigate the impact of reform on the poor through the existing social assistance programs (targeted cash transfers) or an increase in expenditure on public transportation. For the electricity sector, lifeline tariffs for the poor are also an important mitigating measure.

Reform options for Mauritius

Fuel and electricity pricing have a different social impacts. Household survey data indicates that in Mauritius, fuel-related expenditures (including transportation) are more concentrated towards richer segments of the population, as the concentration curves for these expenditures lie well below the 45 degree line (see Figure III.3). Expenditures on electricity seem to be much more evenly distributed across households than expenditures on petroleum products.

A fully automatic formula for pricing petroleum products would be appropriate for Mauritius. Given the relatively small size of the market, full scale liberalization of prices for petroleum products could pose significant strains on existing regulatory structures and result in significant price volatility. In the case of petroleum products, the authorities have some experience in implementing automatic formulas and the challenge seems to be to find ways to actually implement the adjustment resulting from the application of the formula, even in the face of political pressure not to do so. The current pricing formula, which combines a system of triggers and caps on adjustments, can lead to low pass-through from movements in international prices and increases the volatility of net fiscal revenues linked to petroleum products. Staff would suggest a fully automatic formula that results in monthly adjustments with no minimum but a maximum change of +/-3 percent to limit volatility.[3]

Figure III.3. Mauritius: Concentration Curves for Fuel and Electricity Spending



Source: Staff estimates based on 2006/07 HBS Survey.

Electricity tariffs should reflect current costs and cover investment plans. Generation costs are particularly vulnerable to swings in international fuel prices. It would be desirable to use an automatic formula based on international prices, exchange rates and inflation to avoid the emergence of quasi-fiscal deficits at CEB. Electricity tariffs should also cover the costs of new investments in generation. This would help to ensure that there will not be future bottlenecks due to inadequate investment.

The impact of price increases on the most vulnerable should be mitigated. Mauritian authorities could use the recently established Social Registry of Mauritians (SRM) to provide targeted cash transfers. Potential fiscal savings could also be allocated to investments in public transportation.

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Coady, D.; Arze del Granado, J.; Eyraud, L.; Jin, H.; Thakoor, V.; Tuladhar, A.; and Nemeth, L. (2012) "*Automatic Fuel Pricing Mechanisms with Price Smoothing: Design, Implementation, and Fiscal Implications*", IMF Fiscal Affairs Department Technical Notes and Manuals, December, Washington, DC.

IMF (2013) "*Energy Subsidy Reform: Lessons and Implications*", forthcoming, Washington, DC.

World Bank (2012) "*Mauritius: Electricity Sector: Global Assessment*", Washington, DC.

[3] This would help pass-through fuel costs to the rest of the economy and make the CPI more reflective of underlying economic developments; something that is limited currently by the wide-spread use of administered prices.

APPENDIX IV. PENSION REFORM OPTIONS[1]

Mauritius recently implemented several reforms to ensure the long-run sustainability of the public pension system, but additional actions would be desirable. This annex will review policy actions and analyze their macroeconomic impact including on national savings and emerging external imbalances.

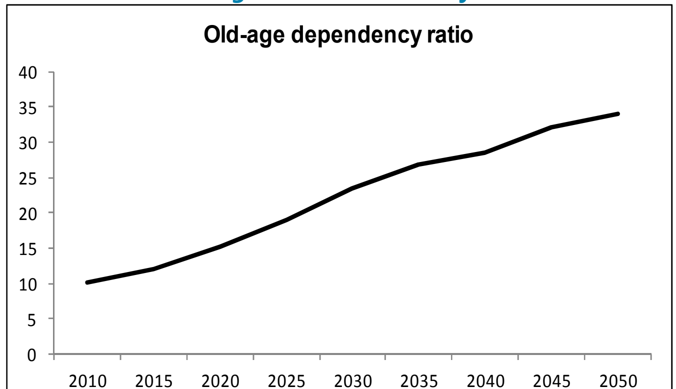
The pension system in Mauritius consists of five components: the universal basic retirement pension (BRP); The National Pension Fund (NPF); pensions for public sector workers; the National Savings Fund (NSF); and private pension plans. Overall, at 4 percent of GDP, public pension expenditures in Mauritius are close to the typical level observed for an emerging market.

The BRP is a non-contributory pension payable to every Mauritian citizen aged 60 years and above. In 2011, BRP expenditures amounted to 2.2 percent of GDP, but these expenditures are poorly targeted with close to 39 percent of the pension benefits going to the richest 20 percent of the population (David and Petri, 2013).

The NPF is a defined-benefit scheme for all private sector employees funded by mandatory contributions from employees (3 percent of earnings) and employers (6 percent). The system is partially pre-funded and as of end-2012, the total assets of the NPF amounted to 24 percent of GDP; mainly invested in Mauritian government securities (around 60 percent). On the liability side, the NPF had around 89,000 beneficiaries in 2011 and expenditures on benefits amounted to less than 0.5 percent of GDP. The retirement age is being gradually increased from 60 to 65 years, with the full transition expected to be implemented by 2018, to help secure its long-term sustainability because the increase in the old-age dependency ratio is a major factor in Mauritius (Figure IV.1).

Civil servants who joined before December 2012 have a defined-benefit scheme to which they contribute 6 percent of earnings. Expenditures on civil servants pensions were 1.3 percent of GDP in 2011, but are rising rapidly. Since January 2013, all new entrants are enrolled in a new system in which they pay 6 percent and the government 12 percent of earnings. The new scheme will result in major long-term fiscal savings, but its institutional set-up, distribution rules, and the investment strategy still need to be determined.

Figure IV.1. Mauritius: Ageing Will Pose Challenges to the Pension System



Source Statistics Mauritius and IMF staff calculations

The NSF is a compulsory defined-contribution scheme for public and private sector workers funded by 2 percent of employees' earnings. Beneficiaries receive a lump sum at retirement, which is determined by past contributions and investment performance, subject to a "no-capital loss" guarantee. Total assets of the NSF amounted to 4.3 percent of GDP at end-2012, with over 75 percent of assets allocated to government bonds and t-bills. In 2011, the NSF paid 0.1 percent of GDP to over 7,500 persons.

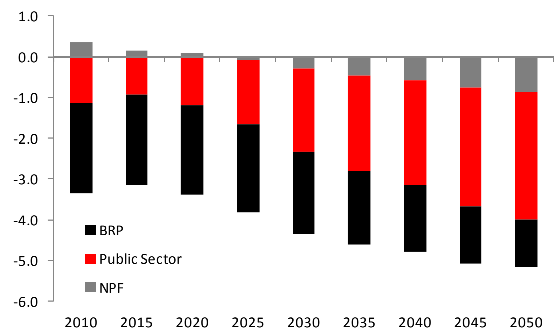
[1] Prepared by Antonio David (AFR).

The outlook for the Pension System 2015–2050

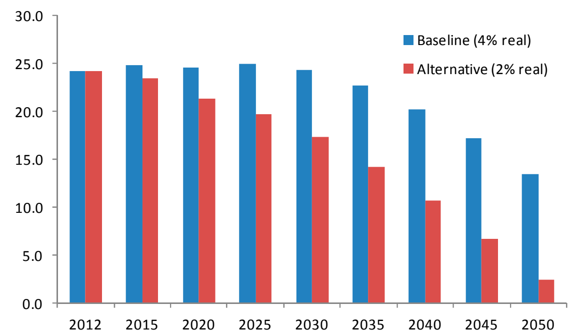
Imbalances might reach close to 5 percent of GDP by 2040 (Figure IV.2). Following the methodology outlined in IMF (2011) "*The Challenge of Public Pension Reform in Advanced and Emerging Economies*", staff projected the imbalances (flow difference between expenditures and contributions) for the three main components of the public pension system for 2015–50 (Figure IV.2). The main assumptions were (i) 4.5 percent in real GDP growth, in line with potential growth estimates; (ii) stable participation rates; and (iii) inflation adjustments-only for BRP benefits. The projections take into account the recent reforms to increase the retirement age in the NPF and civil servants' system, but do not include the impact of the new system for new entrants in the civil service.

Figure IV.2 Mauritius: Public Pension System Outlook (% of GDP)

Imbalances are increasingly driven by public sector pensions



NPF assets are sensitive to assumptions about returns



Source: IMF staff estimates and projections.

Initially, the BRP would be the main driver of imbalances. BRP imbalances will remain around 2.2 percent of GDP until 2030, when they are expected to decline as a share of GDP given the assumptions about the adjustment of benefits in line with CPI. This assumption reflects current policies, but might be difficult to sustain politically as the economy grows and pressures to increase the real value of pensions materialize.

Civil servants' pensions would pose an increasing burden over the longer term. Imbalances for public sector workers would increase from about 1 percent of GDP in 2015 to close to 3 percent of GDP by 2045. This will be somewhat mitigated by the reforms enacted in 2013, but the new civil system will generate savings only in about 30–40 years because until then retirees will be in the old system. During the transition, imbalances will be higher than presented, as the government contributes to the new system and pays pensions under the old system.

Expenditures of the NPF are projected to outstrip contributions by 2025, thus requiring withdrawals from the fund to cover pension obligations. Figure IV.2 presents preliminary estimates of the evolution of NPF assets under different assumptions about asset returns. Under the baseline scenario of relatively high rates of return (4 percent in real terms, assumed for the last NPF actuarial report), the fund would have sufficient resources to meet benefit obligations over the projection period. However, under more realistic assumption of lower rates of return, the system could come under stress earlier.

Macroeconomic Implications and Considerations for Reform

Additional reforms to the public pension system are necessary and their macroeconomic impact should be considered. Recent pension reforms should help reduce imbalances in the long-run, but they are not enough. In addition, there will be some transition costs that will need to be financed in a context of limited fiscal space. The sustained increase in the current account deficit in Mauritius over the past decade is largely explained by a fall in national savings. In this context, the pension system might play an important role in increasing savings and the recent reform of the civil servants system provides an opportunity to reexamine the entire public system holistically.

Pension reforms in pay-as-you-go systems can have very different macroeconomic effects depending on the nature of changes and assumptions about rationality. Overall, the less forward-looking and credit constrained agents are, the less they change their voluntary (non-pension) savings and the less they change their labor supply in response to reform.[2] IMF (2012) shows that the introduction of a defined-contribution pillar can increase private savings, although the overall impact on national savings will depend on how the transition costs are financed (debt versus reductions in government consumption).

There is some evidence that pre-funded mandatory retirement savings schemes can boost national savings. While the empirical evidence on the impact of general pension reforms on savings tends to be ambiguous (IMF, 2011), this appears less so for reforms that are designed to address behavioral problems that might lead to insufficient retirement savings. For example, the high mandatory contribution rates are thought to be a determinant of the high private savings rates in Singapore with an estimated elasticity of national savings to pension wealth of 0.3 (Faruqee and Hussain, 1998). Similarly, national savings increased after the introduction of a broadly pre-funded defined-contribution system in Chile in 1980.

Jointly increasing contribution rates and the target replacement rates of the NPF might increase national savings and provide better social protection in Mauritius. Total mandatory contributions from employees and employers to the NPF at 9 percent are at the 16th percentile internationally and thus rather low (Figure IV.3). At the same time, the target replacement rate for the NPF of about 33 percent might not be sufficient to provide adequate living standards to an ageing population and could result in contingent liabilities.[3] Raising contribution and replacement rates in an actuarially sustainable way might meet social protection and national savings objectives (given imbalances for the NPF, the contribution rates might have to be raised somewhat more than benefits to make the NPF fully sustainable). The mandatory inclusion of self-employed workers in the NPF could also contribute to boost savings.

It would also be desirable to target BRP expenditures and to better integrate the BRP and NPF. Projected BRP expenditures can be thought as a lower bound, because political pressures to increase BRP benefits in real terms are likely to materialize as the economy grows. Given limited fiscal space and the fact that most of the spending benefits the non-poor, it would make sense to means-test these pensions to turn them into true poverty pensions. Moreover, it should be studied how the BRP could be integrated into the NPF to provide greater savings incentives and a better overall protection system.

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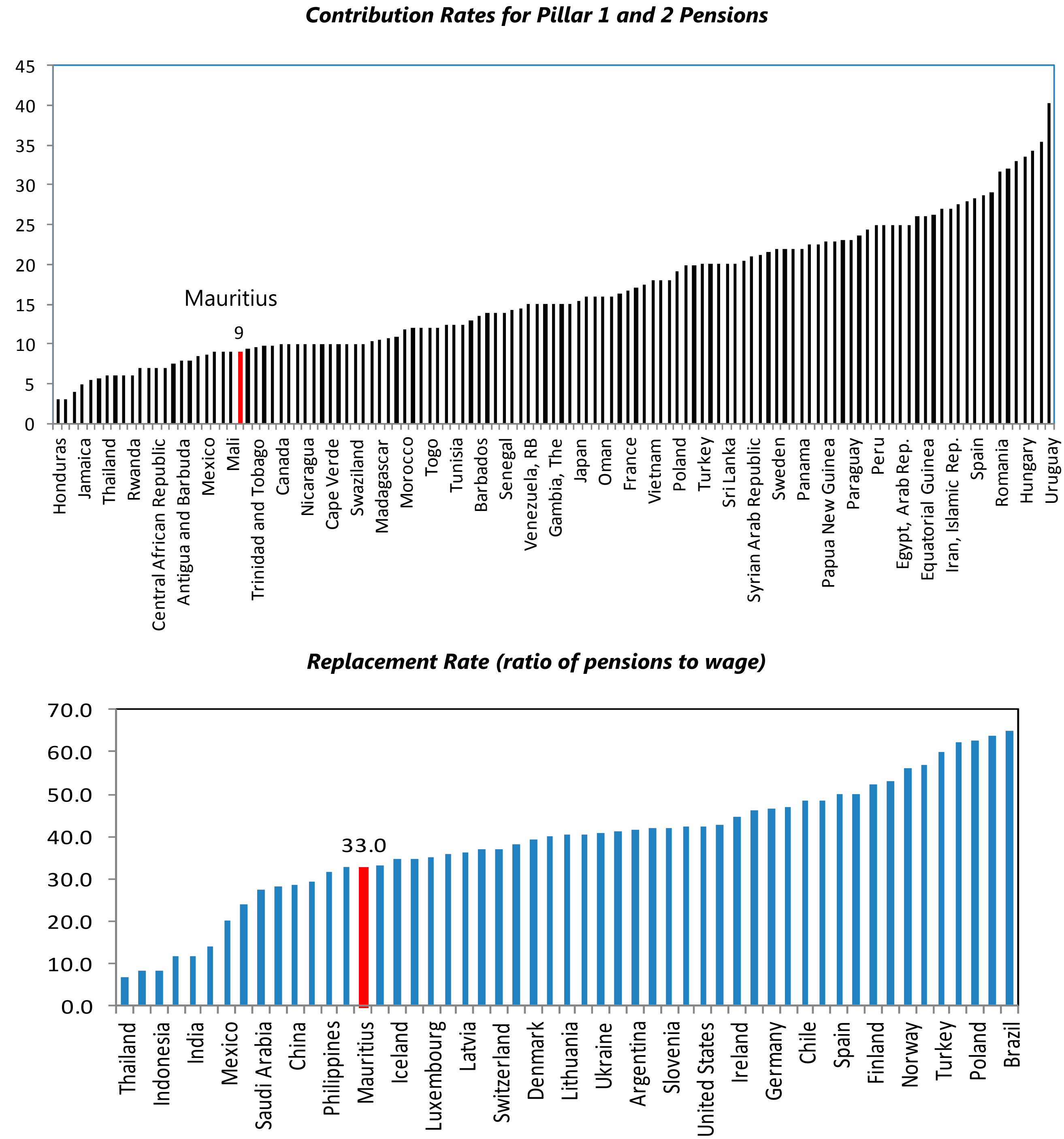
[2] Catalan and Magud (2012) and IMF (2012) are recent applications in a dynamic general equilibrium context.

[3] Including the BRP would only increase the average replacement rate to close to 40 percent, which is still low.

Figure IV.3. Mauritius: Internatl. Comparison of Contribution and Replacement Rates (in %)



Sources: IMF staff estimates based on Pallares-Miralles, Romero and Whitehouse (2012).

The authorities should consider merging the NSF and the new civil servants system into the NPF. For the NSF, this would result in higher pension benefits instead of a lump-sum payment with beneficial social protection results. For the new civil servants system, a merger with the NPF instead of setting up a new defined contribution system should be beneficial because the risk-adjusted returns in an actuarially-fair, pre-funded defined benefit system are likely to exceed those of a defined contribution system. Contribution rates could be harmonized in a reformed NPF or benefits adjusted in line with contributions in an actuarially fair way, which would also allow for higher voluntary contributions. Combining the different pension systems would also allow achieving economies of scale in administration costs.

The overall investment strategy for the NPF, NSF and the newly created fund for public sector workers needs to be carefully reviewed. In addition to economies of scale, international portfolio diversification should result in higher risk-adjusted returns for a small economy, as suggested by modern portfolio theory. The investment governance structure and capacity of the NPF could be improved to ensure better investment results. There may also be savings from pursuing a mostly index-based, passive investment strategy, which is particularly suited for pension funds with limited investment capacity.

The external investment and financing strategy of the public sector should be viewed from a sovereign asset liability management perspective. The move towards greater international diversification of public pension fund investments will have macroeconomic consequences. Larger capital outflows might initially result in exchange rate depreciation pressures, and would need to be coordinated with BOM reserve accumulation policies. In addition, investing in non-government securities while borrowing increases the leverage of the public sector. This is would only be beneficial, if the expected long-run return on the marginal foreign investment is higher than the government borrowing rate. Thus, the pension fund's external investment, the governments' borrowing, and the BOM's reserve accumulation strategy should be coordinated to ensure that overall public sector objectives are reached in a cost minimizing way.

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Faruqee, H. and Husain, A. M. (1998) "*Saving Trends in Southeast Asia: A Cross-Country Analysis,*" Asian Economic Journal, Vol.12, No.3, p.195-217.

IMF (2012) "*Brazil: Selected Issues Paper,*" IMF Country Report 12/192, Washington, DC.

Pallares-Miralles, M., Romero, C. and Whitehouse, E. (2012) "*International Patterns of Pension Provision II: A Worldwide Overview of Facts and Figures,*" Social Protection and Labor Discussion Paper no.1211, World Bank, Washington, DC.

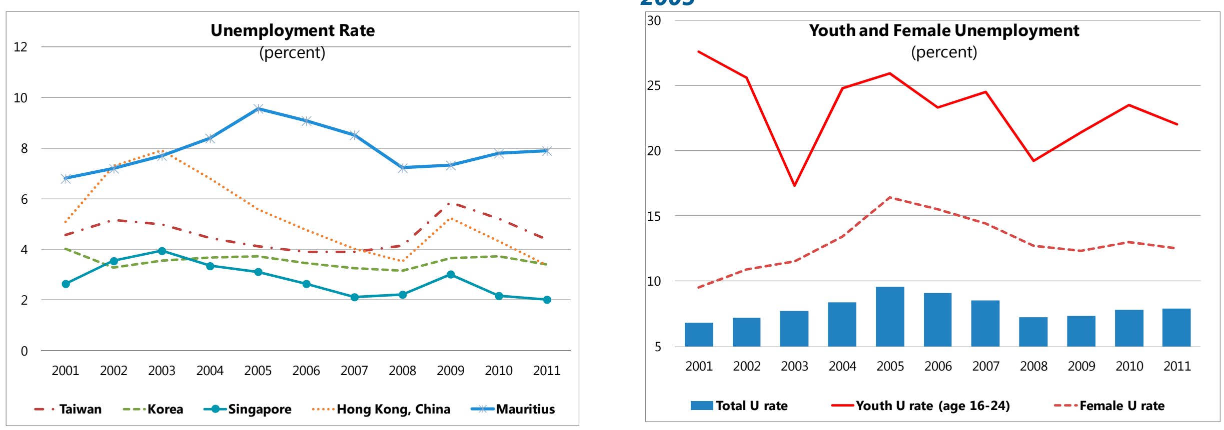
APPENDIX V. LABOR MARKET ISSUES AND OUTLOOK[1]

Unemployment in Mauritius predominantly affects the low-skilled young and women. After the year 2000 there has been a moderate increase in unemployment driving up the total unemployment rate to near 8 percent (Figure V.1). Stronger demand for skilled workers in the financial services, ITC, health care and tourism sectors has partly offset the fall in labor demand for the lower-skilled textile and sugar sectors, which also increasingly employ expatriate workers (4 percent of today's total labor force). About 44 percent of the unemployed in 2012 were below the age of 25; this group experiences an unemployment rate of 22 percent.

Figure V.1. Mauritius: Labor Market Developments

Unemployment was higher than in comparator countries over the past decade...

...with youth and female unemployment high, although female unemployment declined after 2005



Sources: Mauritian authorities, World Bank, ILO, WEO, and IMF staff estimates.

Weak educational attainment is a strong factor explaining unemployment. Around a third of students fail to complete primary education, which does not compare well with countries such as Mexico, Turkey, or Vietnam where 90 percent of students graduate from primary education. 2011 data show that 27 percent of the unemployed had only primary education. There are no statistics on unemployment by educational attainment, but there is evidence that the unemployed have low educational attainment, which is an impediment for vocational training and leads to skills mismatches.

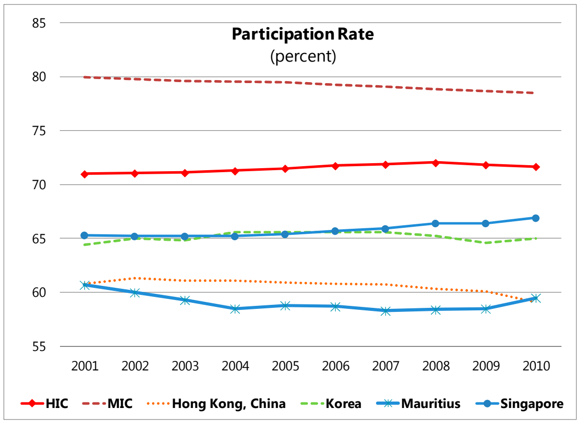
Mauritius embarked on a broad set of labor reforms since 2006. Policies and institutional changes included more flexible labor legislation and the launch of training and education reforms. The creation of a more level playing field between large companies and SMEs bolstered economic competitiveness and translated into strong job creation in the services sector. The introduction of the advisory National Pay Council (NPC) in 2007 helped link wage growth better to productivity gains. Wage adjustments became more differentiated across sectors thereby reducing wage rigidity and containing the wage-price spiral. The unemployment rate fell from its 9.5 percent peak in 2005 (following the end of the Multifibre Arrangement (MFA)) to 7.2 percent in 2008. Female unemployment fell by 3½ percentage points to

[1] Prepared by Patrick Gitton and Floris Fleermuys (both AFR).

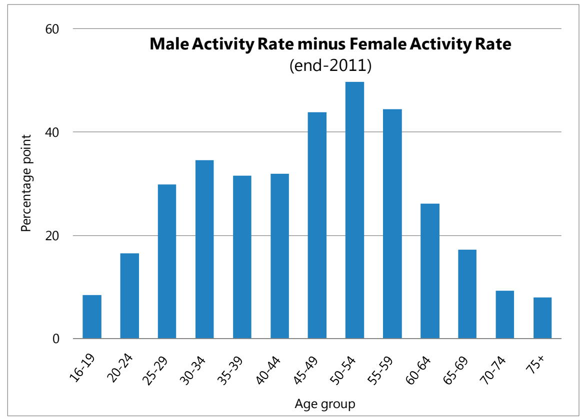
13 percent, as young female entrants continued to be absorbed into the services sector (Figure V.2). The October 2010 decision to abolish the NPC might risk returning to a system where wage increases are linked rigidly to the CPI: real wages grew faster than labor productivity before the NPC.

Figure V.2. Mauritius: Labor Market Participation, Mismatches, and Vulnerability

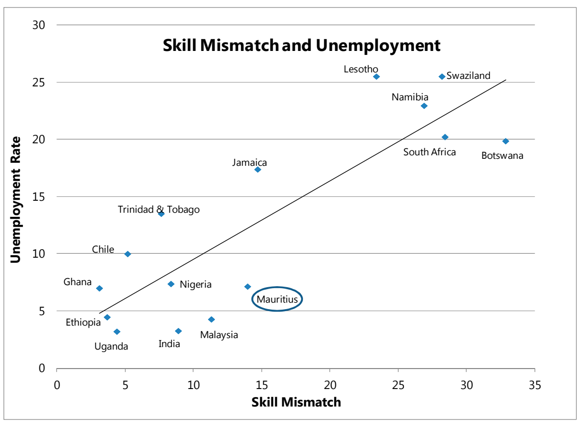
Labor participation lags behind some comparator countries ...



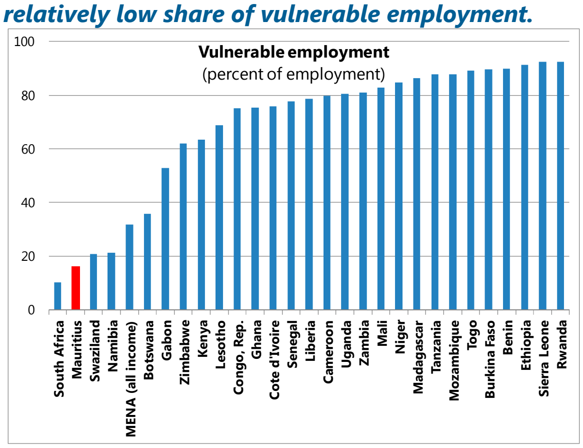
... explained largely by low female activity rates particularly in the 45-59 age group.



Some skill mismatch exists in Mauritius, although its impact on UE is less than in other countries.



Largely formal sector employment leads to a relatively low share of vulnerable employment.



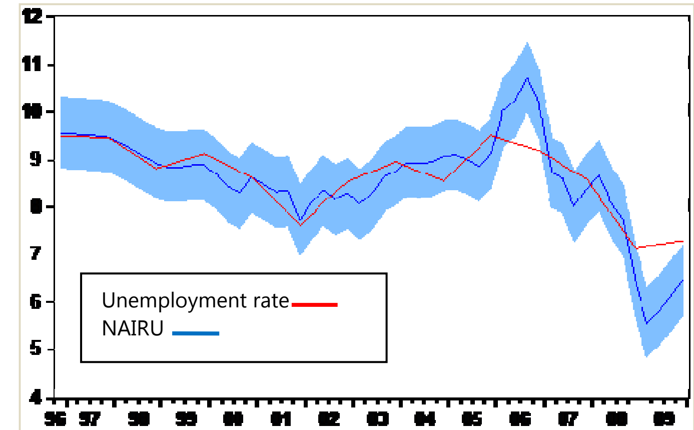
Sources: Mauritian authorities, World Bank, ILO, WEO, and IMF staff estimates.

Some evidence suggests that unemployment is primarily of a structural nature. Preliminary estimates show that the Non-Accelerating Inflation Rate of Unemployment (NAIRU) was generally in line with the unemployment rate suggesting a narrow output gap.[2] However the difference became positive recently providing support for structural unemployment factors (Figure V.3). Also, there has been limited job destruction during periods of economic slowdown, indicating that cyclical adjustments do not take place through massive labor lay-offs. The reforms implemented after the 2008 crisis helped cushion the impact on jobs and were complemented by short-term microeconomic measures to protect jobs, such as the Mechanism for Transitional Support to Private Sector (MTSP), whereby the government took equity stakes in weakening private firms participating in restructuring plans. In addition, previous studies

[2] NAIRU was derived using a multivariate Kalman filter using price and labor market developments information.

suggest that unemployment is largely related to skills mismatches on the supply side and rigidities on the labor demand side through wage setting institutions and laws.[3] Overall indicators of labor market flexibility show that Mauritius compares relatively well, but two areas of particular rigidity are the hiring and firing regulations and the centralized collective bargaining.[4] These two areas of concern are also highlighted in the World Economic Forum 2012–2013 Global Competitiveness Report, where Mauritius ranks 78th for "stringent hiring and firing practices" and 108th for "rigid wages determination".

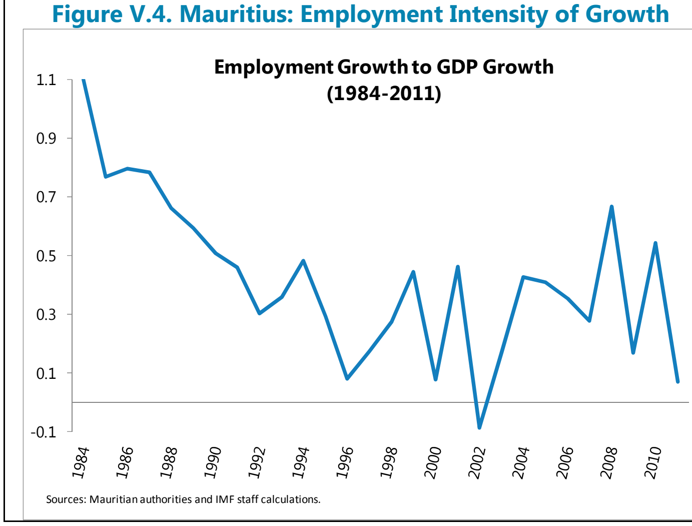
Figure V.3. Mauritius: NAIRU and Actual Unemployment



Source: IMF staff estimates.

The employment intensity of output growth seems to have declined overtime (Figure V.4). Existing theoretical and empirical evidence of determinants of employment-output elasticity includes economic openness and export orientation, product market regulation and competitiveness, size of public sector, labor market rigidities and institutions.[5] Alongside some of the above-mentioned market rigidities, the shift of growth towards less labor-intensive sectors and a more rapid labor productivity growth could explain the decline in the employment intensity of growth in Mauritius. Based on historical data since 1990, using a newly developed IMF template, staff estimated an employment-output elasticity of 0.28, which was used for baseline unemployment projections.

Figure V.4. Mauritius: Employment Intensity of Growth



Unemployment should decline somewhat over the medium term, but Mauritius would need stronger growth and targeted labor market reforms to reduce unemployment significantly (Figure V.5). Under the baseline scenario (average real GDP growth of 4.1 percent) the unemployment rate would decline by 1 percentage point to 7 percent over the next five years. An unemployment rate of 6 percent by 2017 would require real GDP growth of 5 percent, which is slightly above staff's estimate of potential economic growth (4½ percent). Structural reforms to increase the employment elasticity by about one third (from 0.28 to 0.38), would more drastically contribute to a dent in unemployment.

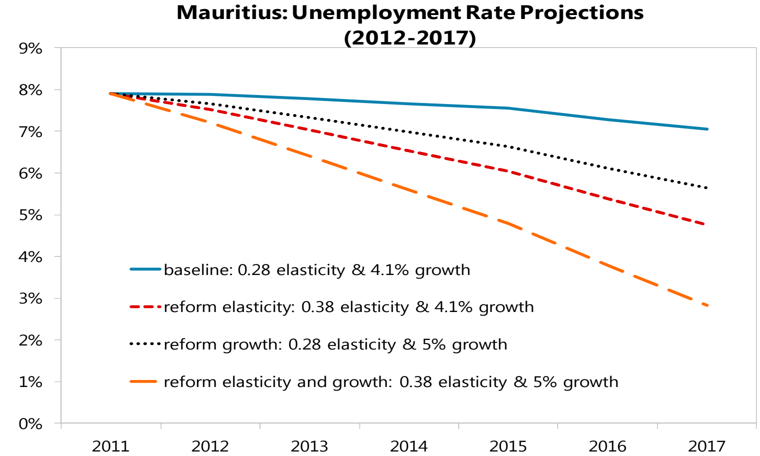
[3] See, for instance, McDonald and Yao (2003) and Porter (2004).

[4] Fraser Institute: Economic Freedom of the World (EFW): http://www.fraserinstitute.org/research-news/overview.aspx. However, it is not clear how important these factors are for explaining structural unemployment.

[5] Crivelli, Ernesto et al. (2012) "Can Policies Affect Employment Intensity of Growth?" IMF Working Paper.

Addressing skill shortages through short-term measures could step up employment.[6] Policy measures should primarily target the employability of Mauritian youth with low skills and educational attainment and facilitate adjustments through subsidized training, as envisaged under the 2013 budget. Further, developing existing active labor market programs, strengthening life skills training programs and intensifying special migration arrangements with foreign companies can play a role in upgrading capacities. Reducing skill mismatches is essential for increasing employment in expanding sectors, most notably banking, ITC, health care and tourism. The experience of Singapore's Workforce Development Agency provides a relevant example of what can be done to develop the labor force through education and training and support to SMEs' management.

Figure V.5. Mauritius: Unemployment Projections Under Different Scenarios



Source: IMF staff estimates.

Supporting appropriately flexible labor markets, in particular with respect to the wage determination process, could provide further incentive for job creation. The wage setting framework should align real wage increases closer with labor productivity improvements. A review of relative public sector wages might be useful in this respect because relatively high wages for low-skilled civil servants can increase private sector reservation wages. In this context, the authorities could study introducing an earned income tax credit to encourage low-wage earners to take jobs on which they can acquire skills. The transition to a knowledge-based economy requires a labor market that supports flexibility (with safeguards), rewards higher productivity and allows expansion into novel activities.

The most pressing longer-term challenge for Mauritius consists in enhancing educational attainment and vocational training of the young. Raising the educational attainment is the best way to upgrade the future workforce. The results of the Program for International Student Assessment (PISA) 2009+ indicate that the minimum proficiency in reading literacy, mathematics, and science is achieved by respectively 53, 50 and 53 percent of students. This compares to an average of, respectively, 81, 75 and 82 percent in OECD countries. The passing rates of primary and secondary exams need to improve. Continued cooperation between the Ministries of Finance and Education through the budget allocation and performance monitoring processes will support achieving this objective. Equally important is to ensure that those young that are not well served by the standard academically-oriented educational system receive vocational training to provide them with practical skills. In this context, the authorities should aim at better aligning the education and vocational curriculum to industry demands and increase private sector involvement in vocational education

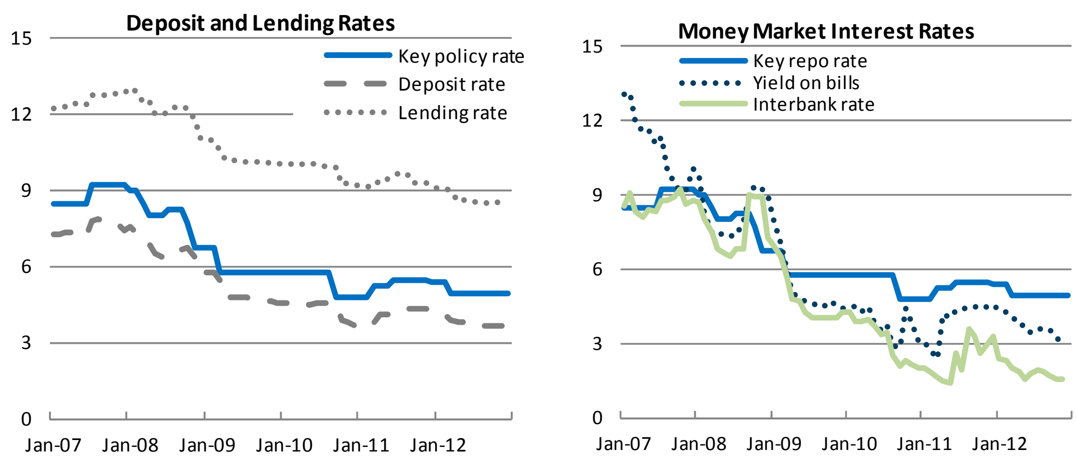
[6] See also World Bank (2010) "*Enhancing and Sustaining Competitiveness in Mauritius: Policy Notes on Trade and Labor.*"

APPENDIX VI. ASPECTS OF THE MONETARY TRANSMISSION MECHANISM[1]

Policy interest rate pass-through to other interest rates is important for effective monetary policy. Under the current hybrid inflation targeting framework, monetary policy influences the real economy mainly through moving the market interest rates, rather than other channels such as money aggregates and exchange rates. Tsangarides (2010) emphasized the need for Mauritius to strengthen its monetary policy transmission mechanism.[2] The paper found that changes in the policy rate have a small impact on CPI inflation, but a statistically insignificant impact on output.

Pass-through from the policy rate to deposit and lending rates appears strong (Figure VI.1, left panel). Saborowski and Weber (2013) estimated that policy rate pass-through to the lending rate is about 80 percent in Mauritius, one of the highest among sub-Saharan African countries.[3] Pass-through has improved over the past decade because of increased competition and reduced non-performing loans and also because that the BOM switched to using the more market-oriented key repo rate as its policy rate instrument rather than using the Lombard rate.

Figure VI.1. Mauritius: Interest Rate Pass-Through, 2007–12



Sources: Bank of Mauritius; and IMF staff calculations.

However, policy rate pass-through to more market-determined interest rates appears to be weak (Figure VI.1, right panel). The interbank overnight borrowing rate fell below the key repo rate in 2009 and stayed significantly below since. As of end-2012 the gap widened to 330 basis points. The yield on 91-day treasury bills fell also below the key repo rate in 2009; it was about 2 percentage points below the key repo rate at end-2012.

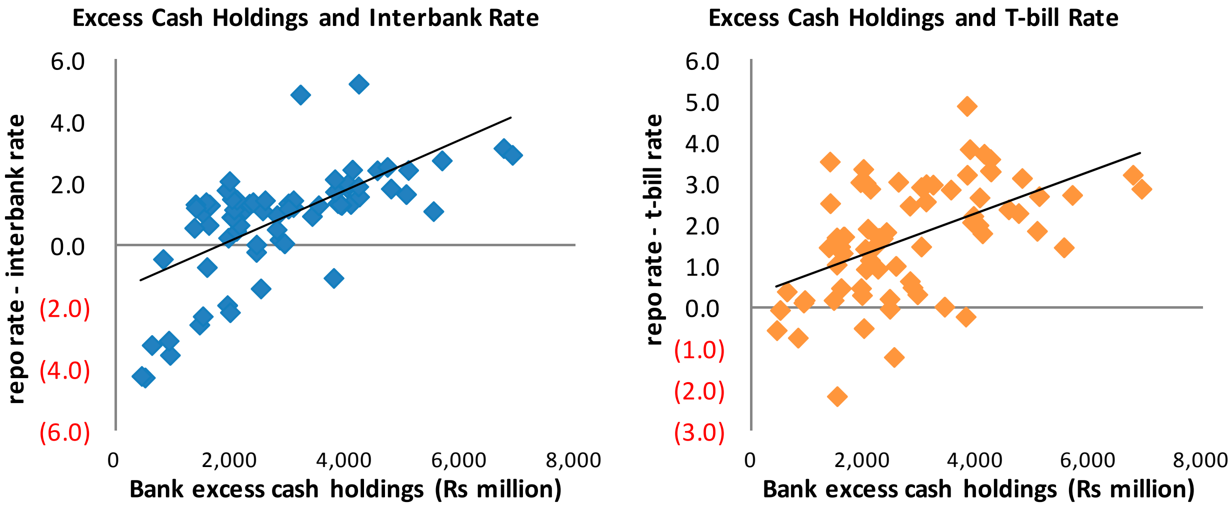
[1] Prepared by Yi Xiong (AFR).

[2] Tsangarides (2010), "*Monetary Policy Transmission in Mauritius Using a VAR Analysis,*" IMF WP/10/36.

[3] Saborowski and Weber (2013), "*Assessing the Determinants of Interest Rate Transmission through Conditional Impulse Response Functions,*" IMF WP/13/23.

The lack of pass-through is largely explained by excess liquidity in the banking system. The average daily excess cash balance of banks (cash holdings in excess of required cash reserves; the required reserve ratio is 7 percent currently) was about 3 billion rupees in 2012 (1 percent of GDP). Banks compete for liquid assets when they hold excess cash, which drives down market interest rates. Indeed, as expected there is a positive correlation between the excess cash holdings and the gaps between policy and the interbank and T-bill interest rates (Figure VI.2).

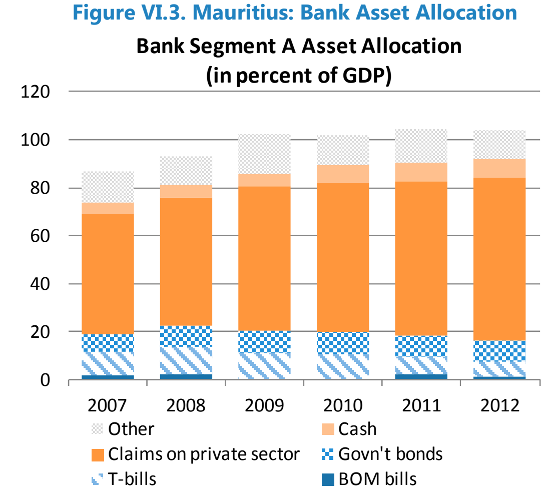
Figure VI.2. Mauritius: Excess Liquidity and Market Interest Rates, 2007–12



Sources: Bank of Mauritius; and IMF staff calculations.

Current liquidity and interest rate conditions are suboptimal. Excess liquidity weakens monetary transmission and reduces the effectiveness of monetary policy. Ensuring that the interbank rate stays within the mandated ±125bps band from the repo rate would help with the signaling function of the repo rate. Low money market rates also distort banks' deposit-taking and lending incentives. It encourages banks to take more risks in asset allocation, and discourages banks from taking deposits. Already banks' liquid assets' share in total assets have decreased and credit to private sector has increased over the past few years (Figure VI.3).

Figure VI.3. Mauritius: Bank Asset Allocation



Sources: Bank of Mauritius; and IMF staff calculations.

The BOM should resume its repo operations to remove excess liquidity. BOM is concerned about its profitability, but it can be recapitalized with government bonds to ensure that it has enough repo collateral assets. The market could also benefit from an increased supply of liquid assets. In the short term government t-bills issuance can be increased and a secondary bond market for both government and corporate bonds can be developed over the medium term.

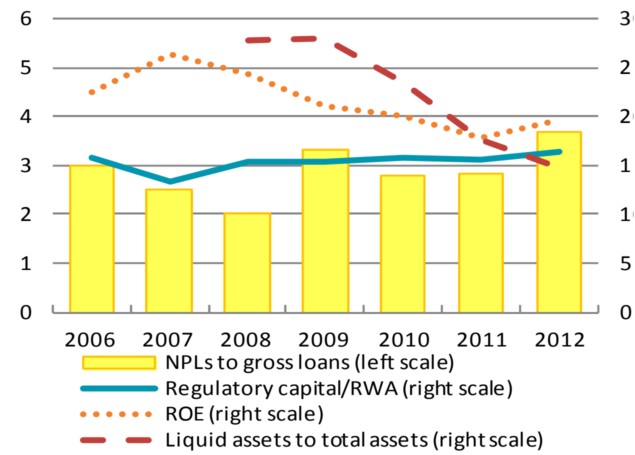
APPENDIX VII. STRESS TESTING OF BANKS[1]

The recent global financial crisis revealed the importance of assessing financial stability at the level of individual financial institutions. Staff applied several methodologies to assess the resilience of Mauritian banks and to identify vulnerabilities of the system as a whole. The system appears sound, but there are some vulnerabilities with respect to large borrower exposure and liquidity risks.

Financial Soundness Indicators (FSIs) and bank health heat map

FSIs at the aggregate level portray Mauritius as a healthy banking system (Figure VII.1). The capital adequacy ratio (CAR) stands well above the regulatory minimum of 10 percent and has increased over time. The non-performing loan (NPL) ratio increased slightly from 2.8 percent to a still low 3.7 percent in 2011, and provisions are adequate. Profitability remains comfortable.

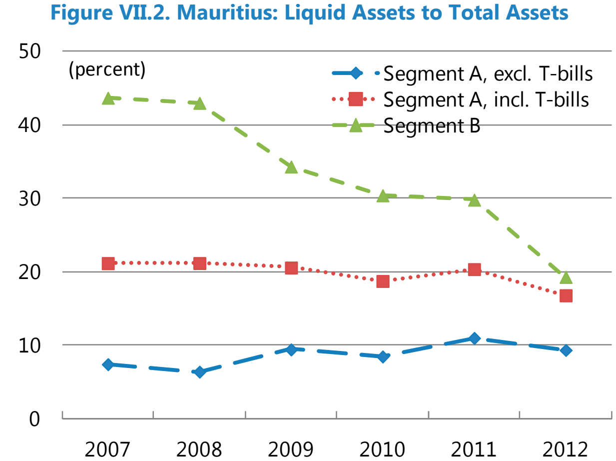
Figure VII.1. Mauritius: Financial Soundness Indicators



Source:Bank of Mauritius.

However, the liquidity ratio continued to decline in 2012 (Figure VII.2). While the ratio was stable for the onshore (Segment A) sector, it fell from 40 percent in 2008 to 20 percent in 2012 for the offshore (Segment B) sector. It is not entirely clear why banks reduced holding of liquid assets for the offshore business. Possible explanations include (1) banks pursuing higher yield in a low interest rate environment, and (2) a shift in business model as banks diversify to the African market. The BOM is analyzing this trend with a view to better understand the offshore sector.

Figure VII.2. Mauritius: Liquid Assets to Total Assets



Sources: Bank of Mauritius; and IMF staff calculations.

To capture the differences between individual banks, staff generated a heat map of the banking system. The map is based on a bank health index, which is defined as the average of 5 normalized financial ratios: (i) capital adequacy ratio; (ii) NPL ratio; (iii) return on assets; (iv) liquidity ratio; and (v) tangible common equity to tangible assets (inverse of leverage ratio). The value of each ratio is normalized by the three-year mean and standard deviation among all banks to obtain a z-score. The sample consists of 12 Mauritian banks with data in the BankScope database and the 5 largest international banks as a reference group.

[1] Prepared by Yi Xiong (AFR).

Results suggest that larger banks in Mauritius are healthier than smaller banks (Table VII.1). Large banks appear to have higher CARs, better asset quality, and are more profitable. When compared to the large international banks, the results show that the financial health of the larger Mauritian banks is similar to or slightly better than the international banks in the reference group, while the smaller banks appear relatively less healthy.

Table VII.1. Mauritius: Overall Bank Health Heat Map, 2008–11

	Institution	Total Assets (USD million)	Overall bank health 2008	2009	2010	2011
Mauritius Banks	Mauritius Commercial Bank	6,179	0.2	0.1	-0.1	0.1
	HSBC (Mauritius)	4,591	0.3	0.0	0.0	0.0
	Standard Chartered (Mauritius)	4,098	0.1	-0.3	-0.4	0.1
	State Bank of Mauritius	3,188	1.0	0.9	0.8	0.7
	Barclays Bank	3,127	0.0	-0.2	0.3	0.1
	SBI (Mauritius)	1,223	0.5	0.2	-0.3	
	Investec Bank (Mauritius)	1,161	0.8	2.1	1.6	1.2
	AfrAsia Bank	723		0.4	-0.1	-0.1
	Banque des Mascareignes	715				-1.2
	Bank One	535	-1.1	-0.6	-0.5	-0.5
	Mauritius Post and Cooperative Bank	416	-0.1	-0.3	-0.6	-0.6
	Bramer Banking Corporation	241	-0.2	-0.4	-0.4	-0.8
Reference Group	Deutsche Bank	2,799,978	-0.3	-0.1	-0.1	-0.1
	HSBC	2,555,579	-0.5	-0.3	-0.5	-0.4
	JP Morgan Chase	2,265,792	0.1	0.2	0.2	0.2
	Citigroup	1,873,878	-0.5	0.1	0.2	0.1
	BNP Paribas	2,542,739	-0.3	-0.6	-0.5	-0.5

Sources: BankScope; and IMF staff calculations. A positive (negative) value indicates that the financial ratios are above (below) the average of the banks in this sample. A positive (negative) value is relative, and does not imply that the bank is financially healthy (unhealthy) in an absolute sense.

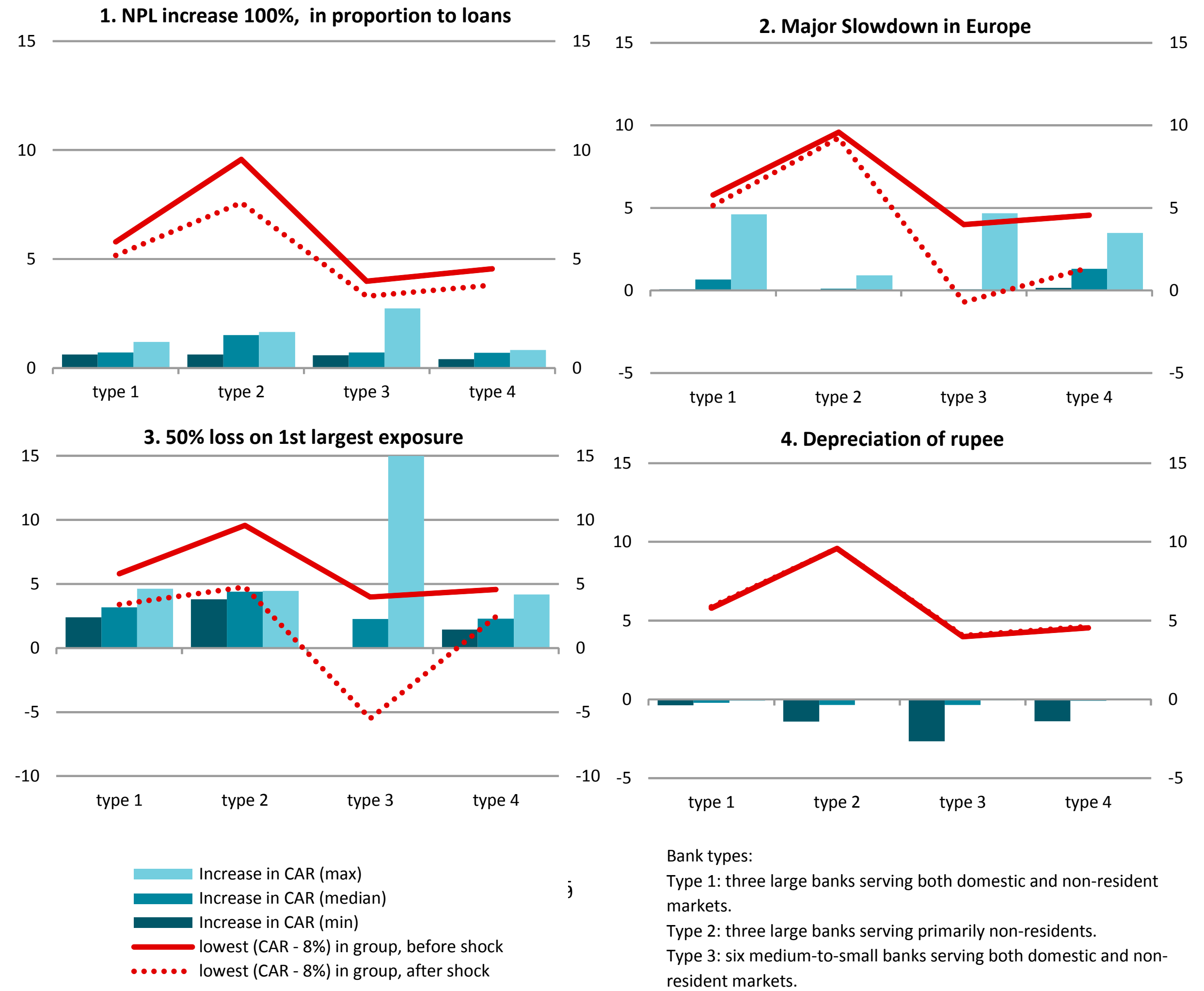
Stress-testing the banking system

Staff updated the 2012 Article IV consultation stress tests for 18 of the 20 Mauritian banks based on June 2012 data. Banks were divided into four types for analytical purposes: (1) three large banks serving both domestic and non-residents; (2) three large banks serving primarily non-residents; (3) six medium-to-small banks serving both domestic and non-residents; and (4) six medium-to-small banks serving mostly residents. Two smaller banks were excluded because they are primarily equity-funded, which would have distorted results.

Stress tests suggest that bank capital is sufficient to withstand a wide range of shocks. Banks would meet the Basel II capital adequacy requirement (CAR) under credit shocks, macroeconomic shocks, exchange rate shocks and interest rate shocks.

The banking system appears to be resilient to credit risk shocks. A 100 percent increase in NPLs, in proportion to existing loans, would only lead to limited drops in CARs (Figure VII.3, Panel 1). After-shock CARs would be above 10 percent for all banks, thanks to the relatively low NPL ratios and adequate capital in the banking system.

Figure VII.3. Mauritius: Bank Stress Test Results



Bank types:
Type 1: three large banks serving both domestic and non-resident markets.
Type 2: three large banks serving primarily non-residents.
Type 3: six medium-to-small banks serving both domestic and non-resident markets.
Type 4: six medium-to-small banks serving mostly the domestic market.

Sources: Bank of Mauritius; and IMF staff estimates.

Banks have sufficient capital buffers against external growth shocks. The stress test scenario envisaged a major slowdown in Europe that would lead to a 2 percentage point drop in real GDP growth in Mauritius for 2013 (Figure III.3, Panel 2). The impact on Mauritian banks would be mainly through their export financing business. The smaller banks (type-3 and type-4) with larger export exposures appear more vulnerable with one type-3 bank's CAR dropping marginally below 8 percent.

Exposure to large borrowers remains a concern. With a 50 percent loss from their largest borrowing group, the median drop in CARs would be 3 percentage points (Figure VII.3, Panel 3). One type-3 bank would see its CAR drop to below the required 8 percent. BOM considers the bank's default risk to be minimal in this case, but imposed additional capital adequacy requirements on this bank in line with regulatory guidelines on credit concentration.

Direct exchange rate and interest rate risks appear contained, but credit risk may arise from interest rate shocks. Most banks have small long net positions in foreign currency and FX loans to non-exporting companies appear to be minimal. Thus, a rupee depreciation equal to the most severe over the last 10 years would result in a small gain (Figure VII.3, Panel 4). An increase in the policy interest rate would be neutral because most deposits and loans have floating interest rates, but a rate increase might generate credit risks, particularly in the real estate sector.

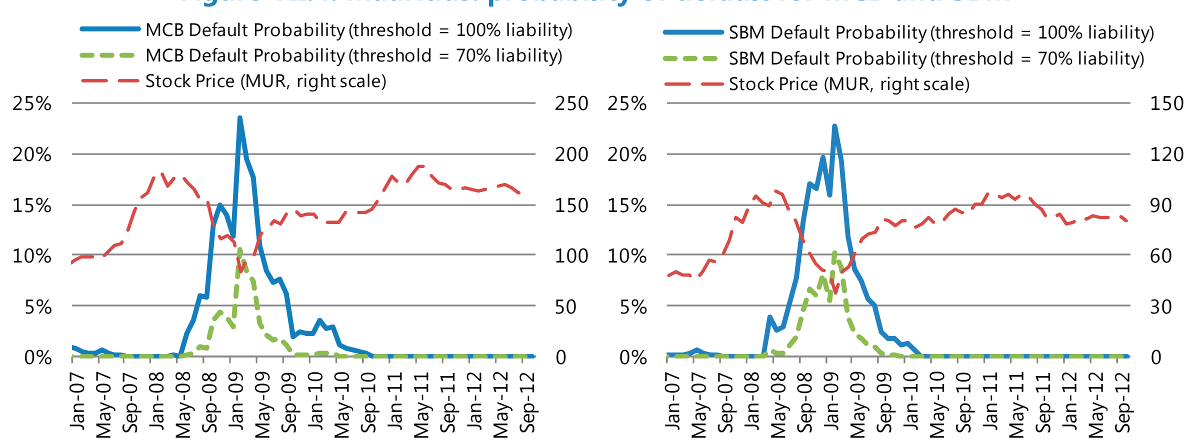
Liquidity is sufficient under most stress situations. Staff applied a hypothetical 5-day bank run across all banks, assuming that 15 percent of domestic demand deposits and 10 percent of foreign demand deposits would be withdrawn each day. 4 out of the 18 banks would run out of liquid assets in the absence of any interbank borrowing or external support, but the banking system as a whole would still be liquid, with the liquid assets-to-total assets ratio at 10 percent by the end of day 5.

Distance to Default Analysis

The expected default frequency is estimated for the two largest Mauritian banks. The Mauritius Commercial Bank (MCB) and the State Bank of Mauritius (SBM) are the only two banks that meet the data requirements of having been listed for more than 5 years. The approach estimates the implied probability of default using stock market prices and balance sheet information, and it can be interpreted as the market's estimate of default probability. The main assumption for the approach is that the stock price can be seen as a call option on the bank's assets over a time horizon (12 months in this study). The payoff at the end of the time horizon is the assets' value in excess of liabilities when the bank is solvent (asset > liability), or zero when the bank is insolvent (asset < liability). The payoff follows a probability distribution and thus a probability that can be estimated by applying option pricing theory to the data.[2]

The implied default probabilities are zero for both MCB and SBM over the next 12 months (Figure VII.4). This holds regardless of the assumption on default threshold. Interestingly, the results show a moderate default probability during the 2008/09 financial crisis, which is perhaps a reflection of global banking conditions at the time (contagion). Also, the trading activity is low for both banks and thus the crisis results require careful interpretation. The latest results are consistent with stress test results that capital is sufficient to withstand a broad range of shocks.

Figure VII.4: Mauritius: probability of default for MCB and SBM



Sources: Bloomberg; and IMF staff estimates.

[2] Given equity stock price E and default threshold B, and using the Black-Scholes-Merton formula: $E = AN(d_1) - Be^{-rT}N(d_1 - \sigma_A\sqrt{T})$ the asset value A and volatility σ_A can be estimated iteratively. The default threshold is a key assumption because in practice many banks do not default even if their assets fall below liabilities as long as they do not face liquidity pressures. Staff applied a conservative threshold of 100 percent of liabilities and an alternative default threshold of 70 percent, with the true threshold likely in between the two estimates.

INTERNATIONAL MONETARY FUND

MAURITIUS

March 19, 2013

STAFF REPORT FOR THE 2013 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

Prepared By The African Department

Approved by David Robinson and Vivek Arora.

CONTENTS

RELATIONS WITH THE FUND

(As of February 28, 2013)

Membership Status: Joined: September 23, 1968; Article VIII

General Resources Account:	**SDR Million**	**%Quota**
Quota	101.60	100.00
Fund holdings of currency (Exchange Rate)	67.98	66.91
Reserve Tranche Position	33.65	33.12

SDR Department:	**SDR Million**	**%Allocation**
Net cumulative allocation	96.81	100.00
Holdings	99.95	103.25

Outstanding Purchases and Loans: None

Latest Financial Arrangements:

Type	Date of Arrangement	Expiration Date	Amount Approved (SDR Million)	Amount Drawn (SDR Million)
Stand-By	Mar 01, 1985	Aug 31, 1986	49.00	49.00
Stand-By	May 18, 1983	Aug 17, 1984	49.50	49.50

Projected Payments to Fund [1/]

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

	Forthcoming				
	2012	2013	2014	2015	2016
Principal					
Charges/Interest	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00

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

Implementation of HIPC Initiative: Not Applicable

Implementation of Multilateral Debt Relief Initiative (MDRI): Not Applicable

Implementation of Post-Catastrophe Debt Relief (PCDR): Not Applicable

Exchange Rate Arrangement

Starting in July 1, 2010, Mauritius intervened occasionally in the foreign exchange market to smooth excess volatility and the de facto exchange rate arrangement was reclassified from free floating to floating. Mauritius has accepted the obligations of Article VIII, Section 2, 3, and 4. It maintains an exchange system free of multiple currency practices and of restrictions on the making of payments and transfers for current international transactions. Mauritius also maintains a liberal capital account. On March 8, 2013, US$1 was equivalent to MUR 30.65.

Article IV Consultation

Mauritius is on the standard 12-month cycle. The last Article IV consultation staff report (Country Report No. 12/62, March, 2012) was completed by the Executive Board on March 14, 2012. A Financial System Stability Assessment update was completed by a joint IMF–World Bank team on April 20, 2007.

Technical Assistance (2004–2013)

FAD mission on revenue administration and tax policy, February 2004.

MFD mission on banking supervision and legislation, October 2004.

MFD mission on banking supervision during 2005: the first mission in January 2005, and the second in March-April 2005.

FAD mission on revenue administration and tax policy, January 2005.

MFD mission on financial sector policy and strategy, January 2006.

FAD mission on fiscal adjustment strategy and Poverty and Social Impact Analysis (PSIA), February-March 2006.

MFD mission on financial sector policy and strategy, July 2006.

MFD mission on banking supervision/monetary operations/monetary policy, October 2006.

STA mission on multisector statistics, November 2006.

MCM mission on financial sector policy and strategy, January 2007.

MCM primary mission on Financial Sector Assessment Program (FSAP), February 2007.

FAD mission on Public Financial Management (PFM) and Medium-Term Expenditure Framework (MTEF), March 2007.

MCM mission on financial sector policy and strategy, March-April 2007.

STA mission on balance of payments statistics, March 2007.

MCM mission on foreign exchange markets, August 2007.

STA balance of payments module mission, October 2007.

STA mission on Phase II SDSS balance of payments statistics, October-November 2007.

STA Report on the Observance of Standards and Codes (ROSC) mission, November-December 2007.

FAD mission on Public Financial Management (PFM): Implementing Program-Based Budgeting: Next Steps, February 2008.

STA mission on national accounts statistics, February 2008.

STA mission on Phase II SDSS Government Finance Statistics, March 2008.

MCM mission on Central Bank-FSAP follow-up, March 2008 (2 missions).

STA mission on Phase II SDSS Multisector Statistics, March-April 2008.

STA mission on monetary and financial statistics, April 2008.

STA mission on balance of payments statistics, May 2009.

FAD mission on refining program budgeting and performance management, September 2009

STA mission on national accounts statistics, November 2009

STA mission on national accounts statistics, April 2010

STA mission on balance of payments statistics, July 2010

MCM mission on anti-money laundering (AML), August 2010

MCM mission on macroeconomic modeling, August/September 2010

FAD mission on refining program budgeting and performance management, September 2010

STA mission on international investment position, October 2010

FAD mission on PEFA, November 2010

STA mission on government finance statistics, January 2011

FAD mission on revenue administration, June 2011

LEG mission on AML/CFT, July 2011

STA mission on balance of payment statistics, September 2011
STA/DFID mission on external sector statistics, October 2011
MCM mission on macroeconomic modeling and forecasting, October 2011
MCM mission on technical assistance needs assessment, October 2011
LEG mission on AML/CFT, February 2012
LEG mission on central banking legislation, February 2012
AFRITAC South mission on updating the Finance & Audit Act (2008) and drafting revised underlying financial regulations, February 2012.
MCM multi-topic mission on financial sector reform, April/May 2012
AFRITAC South multi-topic mission on PFM Legal framework and developing a new PFM Act, May/June 2012
AFRITAC South mission on Implementation of Basel III, September 2012
AFRITAC South mission on Fiscal Legal Framework, September 2012
STA mission on Balance of Payments Statistics and International Investment Position, November 2012
MCM mission on Liquidity and Debt management and Secondary Market Development, December 2012
STA multi-sector statistics mission, January/February 2013
AFRITAC South multi-topic mission on revenue mobilization and on the finalization of the Tax Administration Act, February/March 2013

Resident Representative: None.

THE JMAP BANK-FUND MATRIX (2013)

(As of February 7, 2013)

The IMF and World Bank Mauritius teams met on January 21 to discuss a Joint Managerial Action Plan (JMAP). The team from the World Bank comprised of Mr. Muñoz (Country Representative), Mr. D'Hoore (lead Economist), Mrs. Mobasher (Research Analyst) and from the IMF of Messrs. Petri, David, Gitton and Xiong (all AFR).

The IMF's work program entails continued engagement through the Article IV consultation process as well as technical assistance in: public financial management provided through AFRITAC South (AFS); financial sector stability, monetary policy frameworks, and central bank legislation through the Monetary and Capital Markets Department (MCM) and Legal (LEG) Departments, and enhancements to macroeconomic statistics with the support of the Statistics Department (STA).

The World Bank Group's work program entails continuing work on infrastructure, competitiveness, public sector reform and social sectors. The World Bank Country Partnership Strategy for Mauritius up to 2015 aims at helping the Government to deal with (i) short-term trade shocks and (ii) the transition to a more competitive and diversified economy, while minimizing negative social impacts along the transition. On-going and planned Bank assistance to Mauritius is:

- **Infrastructure.** The Mauritius Infrastructure Project signed in December 2009 seeks to support the government investment program in transport, water and electricity. The Road Asset Management and Safety Project investment lending under preparation will seek to reduce transport costs and improve maintenance on the primary and secondary road network in two pilot regions over a 7 year period, whilst strengthening the management of road safety in Mauritius. This is expected to be realized by the following components: (a) the piloting of output and performance based road contracts for a seven year period in two pilot regions of Mauritius; (b) the improvement of the management of road safety; (c) the strengthening of the institutional framework for transport; (d) institutional assistance and implementation support.

- **Preparation of a Grid Code, Feed-in-Tariffs & Model Energy Supply Purchase Agreements for Renewable Energy Systems Greater than 50kW** through a SIDS DOCK Grant will seek to promote investment in renewable energy infrastructure, contribute to energy security, reduce GHG emissions, and encourage household-private sector investment in renewable energy technologies.

- **Policy Reforms.** The Bank is expected to approve in March and April 2013 the Second Public Sector Performance Development Policy Loan of US$20 million and the Second Private Sector Competitiveness Development Policy Loan of US$15 million respectively. The Public Sector Performance DPL aims to support improvement in the performance of the public sector in Mauritius by assisting the government to implement reforms within the following three pillars: (i) strengthening services that support and empower the most vulnerable; (ii) streamlining trade regulation and processes; and (iii) improving human resource management in the civil service and monitoring of SOE performance. The Private Sector Competitiveness DPL aims to support competitiveness and enterprise development in three areas: (i) improving competitiveness and growth of enterprises; (ii) improving access to finance; and (iii) promoting ICT and e-Gov for enhancing competitiveness and transparency.

- **Analytical support.** The Bank is preparing a Public Expenditure Review report in FY13 to increase efficiency and effectiveness in the public sector through a detailed review of the education and health sectors. The Improving Competitiveness technical assistance will aim to improve competitiveness and economic diversification.

- **Strengthening Public Sector Performance.** The Strengthening Governance and Anti-Corruption in Mauritius technical assistance will aim at strengthening governance and anti-corruption in Mauritius through support to performance management, M&E and institutional strengthening across the public sector, with a focus on strengthening M&E at the MoFED.

- **International Finance Corporation (IFC).** The IFC has focused its intervention in Mauritius along three axes: (i) supporting the banking sector with access to long term funding to offset local banks' difficulty in accessing long term foreign exchange to support trade finance, cross-border south–south initiatives and long term investments in key infrastructure; (2) investing in regional private equity funds to increase regional integration with investments mainly along the Madagascar-Mauritius axis; and, (3) supporting IFC clients to improve internal capacity by providing specialist training to bank's SME loan officers and SME-Owner managers to improve financial and managerial literacy.

The JMAP Bank-Fund Matrix (2013)

Title	**Products**	**Provisional timing of mission**	**Expected delivery date**
	A. Mutual Information on Relevant Work Programs		
The World Bank work program in the next 12 months	Second Private Sector Competitiveness DPL	Not foreseen	April 2013
	Second Public Sector Performance DPL	Not foreseen	March 2013
	Public Expenditure Review	March 2013	FY13
	Mauritius Infrastructure Project	February 2013	FY14
	Road Asset Management and Safety Project preparation	February 2013	FY14
	Strengthening Governance and Anti-Corruption	March/April 2013	FY14
	Improving Competitiveness	Not foreseen	FY14
	Preparation of a Grid Code, Feed-in-Tariffs & Model Energy Supply Purchase Agreements for Renewable Energy Systems Greater than 50ks	March/April 2013	FY14
	A. Mutual Information on Relevant Work Programs		
The IMF work program in the next 12 months	2013 Article IV consultation	January 2013	Board meeting in April 2013
	Multi-sector statistics mission (STA)	January 2013	
	Central Banking Law and Monetary Policy Frameworks (LEG, MCM, AFR)	Second Quarter of 2013	
	B. Requests for Work Program inputs		
Bank request to Fund	Macroeconomic framework		January 2013
	Assessment Letter		January 2013
Fund request to Bank	Background sector information to complement Article IV report.		January 2013

RELATIONS WITH THE AFRICAN DEVELOPMENT BANK GROUP

(As of February 7, 2013)

The African Development Bank (AfDB)'s 2009–2013 Country Strategy Paper (CSP) for Mauritius provides the framework for its partnership with the country. The CSP has two pillars (i) reducing bottlenecks to competitiveness and trade and (ii) Enhancing public sector efficiency and social service delivery. The Bank's assistance to Mauritius combines lending and non-lending activities. Within the first pillar, the lending program currently focuses on infrastructure development particularly transport, ports and energy. The lending program within the second pillar focuses on an operation supporting water and sanitation services. The largest on-going lending operation is a policy-based lending in form of direct budget support that supports both pillar I and II. About US$200 million has been disbursed. The Bank is currently reviewing the Government's request to extend the operation for another two years to allow disbursement of the outstanding balance to finance its infrastructure program. The Bank is also providing MIC grants to support policy reforms, capacity building and studies in specific areas within the framework of the two strategic pillars. These include support to public debt management, public sector investment program, preparation of the sewerage master plan, review of outline planning, statistical capacity building and preparation of sector strategies for health, gender and ICT to improve the Performance based budgeting (PBB). In line with its Regional Integration Strategy for Southern African, the Bank is supporting the country's vision of becoming a regional center of excellence. In this area the Bank has collaborated with the IOC in partnership with the EU, COMESA and SADC to support the Regional Multi-Disciplinary Centre of Excellence. The Bank also partnered with the Commonwealth Secretariat in supporting Capacity Building for Public Debt Management. Other past collaboration with the World Bank (and other partners) has included the following sectors: water, sewerage, and sanitation (the Plaines Wilhems Sewerage Project) and transport (Southeastern Highway). The Bank also collaborates very closely with other development partners including the World Bank, EU, AFD and UNDP in supporting structural reforms through its policy based lending. The CSP Mid Term Review Report of 2011 envisages continued collaboration on the policy based lending, MIC Grants and studies. The Bank will in 2013 prepare a new CSP for Mauritius for period 2014–2018.

STATISTICAL ISSUES

MAURITIUS—STATISTICAL ISSUES APPENDIX As of March 12, 2013	
I. Assessment of Data Adequacy for Surveillance	
General: Data provision is adequate for surveillance. However, balance of payments (BOP) and international investment position (IIP) statistics could be further improved. The authorities are aware of this situation and are continuing work in this regard.	
Balance of Payments and International Investment Position Statistics: The authorities are in the process of reinforcing the statistical framework. Already, there were significant improvements in reducing the errors and omissions category in the BOP statistics.	
II. Data Standards and Quality	
Participant in the GDDS since September 2000, Mauritius subscribed to Special Data Dissemination Standard (SDDS) on February 28, 2012. Mauritius is the second Sub-Saharan African country to subscribe to the SDDS.	A data ROSC report was published in August 2008.

Mauritius: Table of Common Indicators Required for Surveillance

March 12, 2013

	Date of latest observation	Date received	Frequency of data[7]	Frequency of reporting[7]	Frequency of publication[7]	Memo Items: Data Quality-Methodological soundness [8]	Memo Items: Data Quality-Accuracy and reliability[9]
Exchange Rates	March 2013	03/2013	D	D	D		
International Reserve Assets and Reserve Liabilities of the Monetary Authorities[1]	January 2013	03/2013	M	M	M		
Reserve/Base Money	January 2013	03/2013	M	M	M	O, LO, LO, LO	O, O, O, O, LO
Broad Money	January 2013	03/2013	M	M	M		
Central Bank Balance Sheet	January 2013	03/2013	M	M	M		
Consolidated Balance Sheet of the Banking System	January 2013	03/2013	M	M	M		
Interest Rates[2]	January 2013	03/2013	M	M	M		
Consumer Price Index	January 2013	02/2013	M	M	M	O, LO, O, O	O, O, O, O, O
Revenue, Expenditure, Balance and Composition of Financing[3] – General Government[4]	Q4/2012	02/2013	Q	Q	Q	LO, O, O, O	LO, O, O, O, NO
Revenue, Expenditure, Balance and Composition of Financing[3]– Central Government	Q4/2012	02/2013	Q	Q	Q		
Stocks of Central Government and Central Government-Guaranteed Debt[5]	Q4/2012	02/2013	Q	Q	Q		

Mauritius: Table of Common Indicators Required for Surveillance
March 12, 2013 (concluded)

	Date of latest observation	Date received	Frequency of data[7]	Frequency of reporting[7]	Frequency of publication[7]	Memo Items:	
						Data Quality-Methodological soundness [8]	Data Quality-Accuracy and reliability[9]
Exports and Imports of Goods and Services	Q3/2012	01/2013	Q	Q	Q		
External Current Account Balance	Q3/2012	01/2013	Q	Q	Q	O, LO, LO, LO	LNO, LNO, LO, LO, NO
GDP/GNP	Q3/2012	02/2013	Q	Q	Q	O, LO, O, LO	LO, O, LNO, LO, O
Gross External Debt	Q4/2012	02/2013	Q	Q	Q		
International Investment Position[6]	Q3/2012	02/2013	Q	Q	Q		

[1] Any reserve assets that are pledged of otherwise encumbered should be specified separately. Also, data should comprise short-term liabilities linked to a foreign currency but settled by other means as well as the notional values of financial derivatives to pay and to receive foreign currency, including those linked to a foreign currency but settled by other means.

[2] Both market-based and officially determined, including discount rates, money market rates, rates on treasury bills, notes, and bonds.

[3] Foreign, domestic bank, and domestic nonbank financing.

[4] The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state and local governments.

[5] Including currency and maturity composition.

[6] Includes external gross financial asset and liability positions vis-à-vis nonresidents.

[7] Daily (D); Weekly (W); Monthly (M); Quarterly (Q); Annually (A); Irregular (I); Not Available (NA).

[8] Reflects the assessment provided in the data ROSC published in August, 2008, and based on the findings of the mission that took place during November 29–December 7, 2007 for the dataset corresponding to the variables in each row. The assessment indicates whether international standards concerning concepts and definitions, scope, classification/sectorization, and basis for recording are fully observed (O), largely observed (LO), largely not observed (LNO), or not observed (NO).

[9] Same as footnote 8, except referring to international standards concerning source data, assessment and validation of source data, statistical techniques, assessment and validation of intermediate data and statistical outputs, and revision studies.

INTERNATIONAL MONETARY FUND
Public Information Notice
EXTERNAL RELATIONS DEPARTMENT

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April 3, 2013

International Monetary Fund
700 19th Street, NW
Washington, D. C. 20431 USA

IMF Executive Board Concludes 2013 Article IV Consultation with Mauritius

On April 3, 2013, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation with Mauritius, and considered and endorsed the staff appraisal without a meeting.[1]

Background

The Mauritian economy performed reasonably well in a difficult external environment in 2012. Growth decelerated to 3.3 percent, due to weak sugar and textile exports and a slowdown in the construction sector, though the information and communication technology and financial services sectors saw strong growth. The output gap is estimated to have been small (around ½ percent) and consumer price inflation moderated to 3.9 percent. Estimates of the unemployment rate suggest a marginal increase from 7.9 percent in 2011 to 8 percent in 2012. Credit growth to the private sector was robust. On the external front, the current account deficit narrowed, but remains relatively high at 10 percent of gross domestic product (GDP) in 2012. The Bank of Mauritius (BOM) managed to accumulate additional international reserves and the reserve cover of imports of goods and services rose to 4.4 months from 4.3 months at end-2011. In June 2012, Moody's upgraded the country's credit rating to Baa1.

The fiscal policy stance was broadly neutral and less expansionary than previously projected. The structural primary deficit was broadly unchanged relative to 2011. The overall deficit including extra-budgetary funds is estimated at 2.3 percent of GDP, a reduction of over 1 percentage point of GDP relative to previous projections and similar to the 2011 outcome. The positive fiscal outturn was partly due to a reduction in transfers and subsidies, which decreased by over 1 percent of GDP compared to 2011 (particularly

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

transfers to state-owned enterprises). Expenditures on goods and services were lower, but extra-budgetary spending increased relative to 2011. On the revenue side, better than expected tax revenue performance (in particular for value added tax receipts) was offset by lower levels of non-tax revenue and grants so that total revenues remained stable as a percentage of GDP.

Monetary policy was supportive of the overall policy mix. In March 2012, the BOM reduced the policy rate by 50 basis points to 4.9 percent given the deceleration in global growth and prudent fiscal policies. The BOM maintained the policy rate at that level in light of continued uncertainty in the global outlook. Excess liquidity in the banking system remained elevated, and the yield on 3-month treasury bills fell by 120 basis points to 2.7 percent at end-2012. After June 2012, the authorities started intervening more actively in foreign exchange markets to build international reserves and moderate excessive fluctuations of the rupee exchange rate.

The banking system is well-capitalized. Regulatory Tier I capital to risk-weighted assets are well above Basel II and the proposed Basel III requirements. Non-performing loans (NPL) increased slightly in 2012, but banks remained profitable with a 20 percent return on equity, despite low leverage ratios. However, liquidity-to-assets ratios have worsened in recent years and are on the low side in international comparisons. As a first step towards gradual phase-in of the Basel III requirements, the BOM circulated a consultation paper to banks in October 2012. BOM continued to publish its bi-annual CAMEL (capital adequacy, asset quality, management, earnings & liquidity) ratings for all domestic banks.

Over the past decade wide-ranging structural reforms supported by prudent macroeconomic policies have established Mauritius as a top regional performer. Mauritius statistical capacity continues to be strengthened; the country subscribed to the IMF's Special Data Dissemination Standard (SDDS) in February 2012, being the second Sub-Saharan African country to do so. The authorities aim at subscribing to SDDS Plus in the future.

Executive Board Assessment

In concluding the 2013 Article IV consultation with Mauritius, Executive Directors endorsed the staff's appraisal, as follows:

The authorities have a good track record of prudent macroeconomic management and implementing structural reforms even though challenges remain. Macroeconomic management has delivered low inflation, declining debt-to-GDP ratios, and, given the difficult external environment, satisfactory growth. This outcome has been helped by consistent efforts to improve public financial management, the business climate, social assistance, and the sustainability of public finances. Recent efforts to improve the human and capital infrastructure (especially road congestion) should continue.

Going forward, staff recommended a neutral fiscal policy stance for 2013 in order to smooth medium-term fiscal consolidation and to facilitate external adjustment. A neutral stance is also likely to facilitate the rebuilding of policy buffers. Over the medium term staff suggested that fiscal consolidation should focus on reductions in transfers and subsidies and revenue raising measures. Increases in the revenue-to-GDP ratio would provide additional space for priority spending for building human and physical capital.

The current accommodative monetary policy stance remains appropriate, but the authorities should stand ready to tighten monetary conditions if inflation accelerates beyond current expectations. Inflationary pressures relate to wage increases and adjustments in administered prices, but expectations appear to be well-anchored. Excess liquidity should be reduced to better align the policy rate with market rates and help strengthen the monetary transmission mechanism. The Mauritian banking system is well-capitalized and profitable. Stress testing indicates the sector to be resilient against a range of shocks. Real estate developments should be monitored and cooperation between the BOM and the Financial Services Commission further improved.

Increasing national savings and fostering competitiveness would reduce the large external current account deficit. Medium-term fiscal consolidation should facilitate external adjustment. Efforts to improve competitiveness through structural reforms and investment in infrastructure and human capital are also crucial. The floating exchange rate regime continues to serve the country well, in particular by allowing the exchange rate to act as a shock absorber. Staff estimates that the real exchange rate is broadly in line with fundamentals.

The pension system could be used as a lever to increase national savings. Recent reforms have put the system on a much better footing, but further reforms would be helpful. An increase in mandatory contribution rates for the National Pension Fund (NPF) combined with an actuarially-sustainable increase in benefits is likely to lead to higher overall national savings. The inclusion of most public pensions systems within a strengthened NPF and mandatory inclusion of self-employed workers in the NPF might also be considered.

Labor market reform should primarily target the employability of the low-skilled youth and women, who comprise the majority of the unemployed. Measures to better align the education curriculum to the needs of industry and increase private sector involvement in vocational education could also contribute to reduce skills mismatches, particularly for the young. Wage setting mechanisms should be reviewed with the objective of aligning real wage increases closer with labor productivity improvements. In addition, an earned income tax credit could be introduced to encourage low-wage earners to take jobs on which they can acquire skills.

Table 1. Mauritius: Selected Economic and Financial Indicators, 2010–2018

	2010	2011	2012		2013		2014	2015	2016	2017	2018
	Actual	Actual	Last SR	Est.	Last SR	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.
National income, prices and employment											
Real GDP	4.1	3.8	3.7	3.3	4.1	3.7	4.4	4.7	4.6	4.5	4.5
Real GDP per capita	3.6	3.4	3.1	2.7	3.5	3.2	3.8	4.1	4.2	4.1	4.1
GDP per capita (in U.S. dollars)	7,562	8,725	8,403	8,850	8,789	9,395	9,912	10,486	11,101	11,806	12,561
GDP deflator	1.7	4.1	3.9	3.3	5.9	5.7	4.6	4.7	5.0	5.0	5.0
Consumer prices (period average)	2.9	6.5	4.8	3.9	5.3	5.7	4.6	4.7	5.0	5.0	5.0
Consumer prices (end of period)	6.1	4.9	5.0	3.2	5.5	6.0	5.1	5.0	5.0	5.0	5.0
Unemployment rate (percent)	7.8	7.9	…	8.0	…	…	…	…	…	…	…
			(Annual percent change, in US Dollars)								
External sector											
Exports of goods and services, f.o.b.	18.9	19.6	3.0	4.8	6.1	6.7	6.3	6.7	6.8	7.1	7.3
Of which: tourism receipts	15.9	23.0	2.9	1.7	10.3	4.3	5.5	5.4	5.8	5.8	5.9
Imports of goods and services, f.o.b.	20.5	20.8	3.0	3.9	4.3	5.9	5.3	6.0	5.7	6.5	6.5
Nominal effective exchange rate (annual averages)	3.2	3.3	...	0.5	…	...	...	...	...	...	...
Real effective exchange rate (annual averages)	3.2	6.2	...	1.3	…	...	...	...	...	...	...
Terms of trade	-5.5	-5.3	...	0.5	…	...	...	...	...	...	...
			(Annual change in percent of beginning of period M2)								
Money and credit											
Net foreign assets	20.2	-7.7	16.9	9.2	...	6.9	...	...	...	...	...
Domestic credit	10.3	8.6	10.0	14.6	...	11.8	...	...	...	...	...
Net claims on government	1.0	-1.4	1.5	-1.3	...	1.0	...	...	...	...	...
Credit to non-government sector [1]	9.9	10.2	8.2	18.2	...	10.7	...	...	...	...	...
Broad money (end of period, annual percentage change)	7.6	4.6	12.3	8.6	...	9.7	...	...	...	...	...
Income velocity of broad money	0.9	1.0	0.9	1.0	...	1.0	...	...	...	...	...
Interest rate (weighted average TBs, primary auctions)	3.9	4.6	...	3.3	...	...	...	...	...	...	...
			(Percent of GDP, unless otherwise indicated)								
Central government finances											
Overall consolidated balance (including grants) [2]	-3.0	-2.1	-3.7	-2.3	-3.2	-2.6	-1.9	-1.4	-1.5	-1.5	-1.8
Primary balance (including grants)	0.4	0.9	-0.5	0.7	-0.6	0.1	0.7	1.2	1.1	1.1	0.9
Structural primary balance (including grants)	0.4	0.9	-0.5	0.8	-0.6	0.2	0.8	1.2	1.1	1.1	0.8
Structural primary balance (excluding grants)	-0.3	0.2	-1.4	0.1	-1.2	-0.4	0.3	0.9	0.8	0.7	0.5
Revenues and grants	21.9	21.4	21.8	21.4	20.9	21.9	21.3	20.3	20.2	20.2	20.3
Expenditure, excl. net lending	24.9	23.5	25.5	23.7	24.1	24.5	23.2	21.7	21.7	21.8	22.0
Domestic debt of central government	43.1	42.6	40.5	41.5	38.1	39.7	37.6	37.4	36.0	34.5	33.2
External debt of central government	7.5	8.4	10.0	8.7	11.6	10.3	12.4	12.6	12.6	11.7	10.9
Investment and saving											
Gross domestic investment	23.6	25.7	24.8	24.7	25.3	25.1	25.3	25.5	25.6	25.8	25.9
Public	6.1	5.5	7.4	5.5	7.7	7.6	7.1	7.2	5.6	5.4	5.0
Private	17.5	20.2	17.5	19.2	17.5	17.5	18.2	18.2	20.0	20.4	20.9
Gross national savings	13.3	13.1	14.8	14.7	16.4	15.4	16.2	16.7	17.5	18.1	18.7
Public	-0.5	-0.5	0.2	1.0	0.5	1.3	1.1	0.9	0.7	0.7	0.4
Private	13.8	13.6	14.7	13.7	15.8	14.1	15.2	15.8	16.7	17.4	18.2
External sector											
Balance of goods and services	-12.2	-13.2	-13.8	-13.0	-12.7	-12.5	-11.8	-11.5	-10.8	-10.5	-10.1
Exports of goods and services, f.o.b.	50.9	52.6	53.9	54.0	54.4	54.0	54.1	54.3	54.6	54.8	55.0
Imports of goods and services, f.o.b.	-63.1	-65.8	-67.7	-67.0	-67.2	-66.5	-66.0	-65.8	-65.4	-65.2	-65.1
Current account balance	-10.3	-12.6	-10.2	-10.0	-9.1	-9.7	-9.1	-8.8	-8.1	-7.7	-7.2
Overall balance	2.1	1.6	-2.4	1.8	0.2	1.2	1.3	1.1	1.4	1.7	1.7
Total external debt [3]	22.3	23.7	16.1	23.7	17.7	25.1	26.7	26.5	25.9	24.9	23.8
Net international reserves (millions of U.S. dollars)	2,448	2,631	2,420	2,834	2,512	2,977	3,144	3,298	3,497	3,766	4,044
Months of imports of goods and services, f.o.b.	4.8	4.3	3.9	4.4	3.9	4.4	4.4	4.4	4.4	4.4	4.5
Memorandum items:											
GDP at current market prices (billions of Mauritian rupees)	298.8	322.8	350.0	344.6	385.9	377.9	412.5	451.9	496.2	544.5	597.5
GDP at current market prices (millions of U.S. dollars)	9,706	11,244	…	11,466	…	...	...	...	...	...	...
Public sector debt (percent of GDP) [4]	57.4	57.4	57.0	56.2	55.7	55.8	55.0	54.2	52.6	50.0	47.6
Foreign and local currency long-term debt rating (Moody's)	Baa2	Baa2	…	Baa1	…	…	…	…	…	…	…

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

[1] Includes credit to parastatals.

[2] *GFSM 2001* concept of net lending/net borrowing, includes special and other extra budgetary funds.

[3] Numbers were revised to include private external debt transactions as reported in the 2011 Foreign Assets and Liabilities Survey (FALS).

[4] These figures do not discount certain types of State-owned enterprises' debt. Such discounting is envisaged under the 2008 Public Debt Management Act for the purposes of calculating the public debt ceiling. In 2011, discounted SOE debt amounted to 3.3 percent of GDP.