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STAFF REPORT FOR THE 2014 ARTICLE IV CONSULTATION AND SECOND REVIEW UNDER THE POLICY SUPPORT INSTRUMENT—DEBT SUSTAINABILITY ANALYSIS

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The Debt Sustainability Analysis (DSA) was prepared jointly by IMF and World Bank staff, in consultation with the authorities.

The results of the debt sustainability analysis indicate that Rwanda continues to face a low risk of debt distress, similar to the analysis prepared in the previous year.[1] *Under the baseline scenario all debt burden indicators are projected to remain below the policy-dependent thresholds. Standard stress tests show a marginal temporary breach of the PV of the debt service-to-revenue ratio in 2023 when the Eurobond issued in 2013 matures. As this breach is temporary, and it is assumed that Rwanda will be able to refinance the maturing Eurobond, the final assessment of a low risk of debt distress remains. Rwanda's debt profile is expected to improve over the medium term, as exports expand and become more diversified and economic growth remains strong. These favorable medium-term macroeconomic projections and debt dynamics, along with its record of sound economic management, have contributed to Rwanda's credit rating being upgraded to B+ from B by Fitch in July 2014.*[2] *However, the maintenance of prudent macroeconomic and sound debt management policies is required to prevent Rwanda losing its "low risk" of debt distress rating. In particular, too aggressive expansion of external commercial debt would make public debt more vulnerable, as would also weaker-than-expected growth and slower-than-anticipated export expansion, resulting in a downgrade in the debt distress risk rating.*

[1] This debt sustainability analysis replaces the DSA update contained in IMF Country Report no. 13/372 (December 2013). The fiscal year for Rwanda is from July–June; however, this DSA is prepared on a calendar year basis. The results of this DSA were discussed with the authorities and they are in broad agreement with its conclusions.

[2] Further, the Country Policy and Institutional Assessment (CPIA) which assesses the quality of a country's present policy and institutional framework has classified Rwanda as a strong performer, with an average CPIA score of 3.86 over the last three years.

BACKGROUND

1. **The Rwandan economy slowed significantly in 2013.** Real GDP grew by 4.7 percent as a result of poor performance in the agricultural sector, coupled with delays in the disbursement of budget support and the consequent negative spillovers on the government's investment program and the services sector activity. However, the weak economic growth of 2013 is expected to be temporary and growth is anticipated to pick up in 2014 to about 6 percent on account of stronger agricultural growth and the catch-up effects from the implementation of government projects. Inflation declined in 2013 along with the slowdown in economic growth, with year-on-year headline inflation reaching 3.6 percent, as food, energy and import prices decelerated. Inflation is expected to decline to 3.2 percent in 2014, below the authorities' medium-term target of 5 percent.

2. **The current account improved considerably in 2013 but worsened in 2014**. The improvement in 2013 resulted from a combination of strong export growth, mainly in mining, and flat imports. A number of foreign companies have recently invested in the mining sector and contributed to the surge in mining exports. The flat imports reflected the adverse effects of delays in government-financed projects and weaknesses in private consumption due to the slowdown in economic growth. The rebound in public sector external grants also helped to strengthen the current account. However in 2014 weak exports of goods and strong growth in imports of goods of 13 percent (year-on-year) have contributed to a deterioration in both the trade and current account balances.

3. **Public sector debt remains low.** At end-2013, total public sector debt was 28.4 percent of GDP - with the external debt of the public sector at 21.4 percent of GDP and mainly comprised of concessional borrowing, and domestic debt at 7 percent of GDP. These debt ratios compare favorably with those of other countries in the region. The public debt-to-GDP ratio has increased steadily over the last three years, reflecting new borrowing, in particular large disbursements under multilateral concessional loans. In addition to the concessional loans, donors have provided significant support for Rwanda's economic development program in the form of grants – general or sectoral budget support and project grants. However, Rwanda's low-risk rating of debt distress will shift donor support further towards concessional lending going forward. In 2013, Rwanda also accessed non-concessional financing, most notably through the issuance of the 10-year Eurobond, to fund public sector investments and repay commercial debt.

UNDERLYING ASSUMPTIONS

4. **The medium and long-term macroeconomic framework underlying the DSA is consistent with the baseline scenario presented in the Staff Report for 2014 Article IV Consultation.** The main assumptions and projections for key macroeconomic variables are summarized in Box 1 and Table 1. Since the last DSA update, staff have lowered expectations of near-term growth but economic activity is expected to remain strong in the medium term. GDP growth is expected to recover after the slowdown in 2013 to 7.5 percent over the medium and long term, starting from 2017 (Table 2). Inflation is expected to remain low and stable.

Box 1. Macroeconomic Framework for the DSA

The medium-term framework underpinning the DSA assumes that Rwanda continues to enjoy rapid growth, and low and stable inflation. Key highlights:

- **Growth:** Long-run growth is projected at 7.5 percent. However, the composition of growth is expected to shift toward greater export orientation as policies geared towards expanding and diversifying the export base take hold. The role of the private sector is also assumed to expand, while public investment in infrastructure will remain high.
- **External sector:** Exports of goods and services are expected to gradually rise from 15.6 percent of GDP in 2013 to 18 percent by 2034. However, despite the completion of some current projects in the near-term import needs are expected to remain high, reflecting continued high investment needs in the economy, reaching 28.1 percent of GDP in 2034. Consequently, Rwanda's external current account is projected to remain in deficit throughout the period under consideration, though the gap is expected to narrow to 6.6 percent of GDP by 2034 (from 11.8 percent in 2014).
- **Inflation:** Inflation is expected to remain contained. After falling at the end of 2013 to 3.6 percent, the rate is expected to be anchored to the authorities' medium-term target of 5 percent. Improvements in agricultural productivity are expected to lower food prices over the long run, containing a prime driver of inflation in Rwanda.
- **Reserves:** Reserve buffers are expected achieve coverage of 4.5 months of prospective imports by 2023, which would facilitate monetary integration among East African Community members.
- **Fiscal outlook.** The key fiscal assumption is that there would be a gradual and consistent effort to raise domestic revenues (excluding grants) from 16.4 percent of GDP in 2013 to 21.9 percent by 2034. This reflects the authorities' commitment to raise Rwanda's revenue collection efforts to comparable level observed in other countries in the region. Primary expenditures are forecast to remain high at about 24-25 percent of GDP on average, reflecting the need for ongoing significant capital and current spending.
- **Grants.** The DSA assumes a tapering of external donor assistance, reflecting reduced access to grants, given Rwandan's improved debt distress risk rating, and greater capacity to mobilize and use domestic revenue. As a result, grants are forecast to decline from 8.6 percent of GDP in 2013 to 1.5 percent by 2034.
- **External borrowing.** The assumptions for new external borrowing vary over the assessment period. From 2014-19, the framework assumes external financing requirement is met mainly by the disbursements of external concessional debt and smaller shares of bilateral and non-concessional debt. From 2019 onward, the framework assumes that any external financing need of the central government will be financed by new external debt, with progressively increasing contribution from commercial debt, including bonds issued in the international capital market.
- **Domestic borrowing.** The framework assumes that domestic borrowing will continue to decline until 2019 as the authorities anchor fiscal policy on a goal of limiting net domestic financing. From 2020, domestic borrowing of 2.5 percent of GDP is assumed, which sees domestic debt rise gradually to 18 percent of GDP by 2034 – about 47 percent of outstanding public debt. Over time, the composition of domestic borrowing is also expected to shift towards medium- and long-term debt as the authorities intensify efforts to develop the local government bond market.
- **Domestic interest rates.** New domestic borrowing is expected to be contracted at a nominal interest rate of 8 percent – a weighted average of the cost of short-and long-term domestic debt.

Table 1. Key Assumptions

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2024	2029	2034
	(Percent of GDP, unless otherwise indicated)												
Nominal GDP (RF billions)	3,323	3,846	4,437	4,864	5,328	5,940	6,722	7,590	8,572	9,670	17,719	32,467	59,490
Real GDP (percentage change)	6.3	7.5	8.8	4.7	6.0	6.0	7.0	7.5	7.5	7.5	7.5	7.5	7.5
GDP deflator (percentage change)	3.6	7.7	6.1	4.7	3.3	5.2	5.8	5.0	5.1	4.9	5.0	5.0	5.0
Fiscal (central government)													
External grants (incl. HIPC relief)	13.3	10.8	9.3	8.6	8.2	5.8	4.1	3.5	3.3	3.1	2.5	1.9	1.5
Revenue (excl. external grants)	13.0	13.8	15.0	16.4	17.4	18.4	19.0	19.3	19.4	19.5	20.3	21.0	21.8
Revenue (incl. external grants)	24.6	24.2	25.1	25.6	24.2	23.1	22.8	22.7	22.7	22.7	22.8	23.0	23.3
Primary expenditures	25.1	26.9	28.8	29.4	27.7	25.8	25.6	25.6	25.8	25.8	25.8	25.1	24.4
Primary current expenditures	14.7	13.9	13.5	13.8	14.0	13.1	12.4	12.1	12.0	12.0	12.3	12.1	11.9
Capital expenditure and net lending	11.6	11.3	13.4	15.0	15.5	14.6	13.4	13.5	13.6	13.8	13.6	13.0	12.6
Primary balance, incl. external grants	-0.5	-2.6	-3.8	-3.8	-3.5	-2.7	-2.8	-3.0	-3.1	-3.1	-3.1	-2.2	-1.1
Primary balance, excl. external grants	-13.3	-11.3	-11.9	-12.4	-12.0	-9.3	-6.8	-6.3	-6.3	-6.3	-5.6	-4.1	-2.6
Net domestic financing	-0.7	0.3	-1.8	0.0	1.8	0.1	-0.8	-0.8	-0.8	-0.8	2.5	2.5	2.5
Interest rate (percent)		8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
New external borrowing[1]		3.3	2.6	1.9	4.2	5.3	5.3	5.4	5.3	5.1	2.6	2.4	0.5
Grant element of new external borrowing (percent)					42.6	46.1	47.6	43.0	42.3	38.6	27.8	16.8	8.8
Balance of payments													
Exports of goods and services	11.1	14.0	14.0	15.6	15.5	15.2	14.8	15.6	16.2	16.3	17.3	18.0	18.0
Imports of goods and services	28.8	34.1	34.3	32.5	34.9	32.2	28.9	29.0	28.6	28.5	28.1	28.1	28.0
Current account, incl. official transfers	-5.4	-7.2	-11.3	-7.1	-11.8	-11.0	-9.1	-9.2	-8.4	-8.1	-7.1	-6.5	-6.6
Foreign Direct Investment	0.7	1.7	2.2	2.0	2.0	2.9	3.2	3.4	3.6	3.9	4.4	4.8	4.9
Gross official reserves (months of imports of G&S)	4.5	5.1	4.1	5.0	3.9	3.8	4.0	4.1	4.2	4.3	4.5	4.5	4.5

Source: Rwandan authorities, IMF and World Bank staff.

[1] Includes publicly guaranteed external borrowing.

5. **Under the baseline, the current account balance is expected to be negative over 2014–34.** Exports of goods and services are expected to gradually rise from 15.6 percent of GDP in 2013 to 18 percent by 2034, as the export base expands and diversifies, though at a slightly slower pace than was envisaged under the previous DSA. The authorities are implementing a series of measures to boost both traditional and non-traditional exports and tourism, which are assumed to be successful.[3] Imports of goods and services, though falling from their peak in early years, are expected to remain high throughout the assessment period, reflecting continued high investment needs in the economy, partly related to new infrastructure projects, and the overall expansion of the economy, reaching 28.1 percent of GDP in 2034. As a result, Rwanda's current account is projected to remain in deficit throughout the assessment period, though the deficit is expected to narrow to 6.6 percent of GDP by 2034 (from 11.8 percent in 2014). Hence, the current account is now projected to be slightly worse than was assumed in the last DSA update (Table 2).

6. **Assumptions regarding external borrowing remain similar to the macroeconomic framework underpinning last year's DSA (see Table 2).**[4] In particular, the new external borrowing in the period from 2014-19 mainly reflects concessional loans and smaller shares of bilateral and non-concessional debt. From 2019 onward, the framework assumes that any external financing need of the central government will be financed by new external debt, with progressively increasing contributions from non-concessional debt, contracted by a combination of loans and bonds issued in the international capital market.

[3] Some of these measures have been described in IMF Country Report no. 13/372 (December 2013).

[4] The baseline financing assumption is similar to that made in the DSA update presented in IMF Country Report no. 13/372 (December 2013).

7. **The authorities have identified several investment projects in support of the EDPRS 2 objectives.** These are mainly in the energy and transportation sectors. Plans include a new airport and several large regional projects such as the regional oil pipeline and railway. These are still at an early stage, and financing for these projects has not yet been identified. Given the uncertainties in the timing of project implementation and the availability of alternative sources of financing, the authorities did not have an explicit timeline for contracting non-concessional debt. As a consequence the baseline does not assume any additional large-scale non-concessional borrowing.

Table 2. Baseline External DSA Compared to Previous DSA Update, 2014-16

	Previous DSA[1]			Current DSA		
	2014 Proj.	2015 Proj.	2016 Proj.	2014 Proj.	2015 Proj.	2016 Proj.
Stock of public and publicly-guaranteed (PPG) external debt						
Millions of U.S. dollars	2,108	2,388	2,560	1,847	2,259	2,628
Percent of GDP	21.5	23.2	23.7	23.9	27.0	28.6
Present value (PV) of PPG external debt						
Millions of U.S. dollars	1,275	1,473	1,641	1,350	1,573	1,769
Percent of GDP	15.4	16.2	16.3	17.5	18.8	19.3
PV of PPG external debt to revenues (percent)	90.6	88.4	84.7	89.1	95.5	95.6
PV of PPG external debt to exports (percent)	90.8	101.5	102.9	112.8	124.2	130.6
PPG external debt service to revenues (percent)	5.6	5.1	4.6	4.8	6.5	6.1
PPG external debt service to exports (percent)	5.6	5.9	5.6	6.1	8.5	8.4
Discount rate (percent)	5.0	5.0	5.0	5.0	5.0	5.0
	(Percent of GDP, unless indicated otherwise)					
Nominal GDP (RF billions)	5,618	6,354	7,267	5,328	5,940	6,722
Real GDP (percentage change)	7.5	7.5	7.5	6.0	6.0	7.0
GDP Deflator (percentage change)	6.1	5.2	6.4	3.3	5.2	5.8
Fiscal						
External grants (incl. HIPC relief)	8.3	7.2	6.0	8.2	5.8	4.1
Revenue (excl. external grants)	17.0	18.4	19.3	17.4	18.4	19.0
Primary expenditures	29.3	28.4	27.1	29.4	27.7	25.8
Primary balance, incl. external grants	-4.0	-2.8	-1.9	-3.8	-3.5	-2.7
Primary balance, excl. external grants	-12.2	-9.9	-7.8	-12.0	-9.3	-6.8
Grant element of new external borrowing (percent)[2]	41.0	40.1	41.7	42.6	46.1	47.6
Balance of payments						
Exports of goods and services	17.0	16.0	15.8	15.5	15.2	14.8
Millions of U.S. dollars	1,425	1,473	1,619	1,215	1,285	1,375
Imports of goods and services	35.1	31.5	29.6	34.9	32.2	28.9
Millions of U.S. dollars	2,944	2,902	3,023	2,730	2,730	2,695
Current account, incl. official transfers	-10.9	-10.3	-8.4	-11.8	-11.0	-9.1

Source: Rwandan authorities, IMF, and World Bank staff.

[1] See IMF Country Report No. 13/372, December 2013.

[2] Includes publicly-guaranteed external borrowing.

8. **External and domestic financing terms are similar to last DSA update, except the IDA terms which now reflect their new features.** All new non-concessional debt is assumed to have 10-year maturity and interest rates of 7-8 percent, with amortizing or bullet repayment structures, depending on whether commercial loans are contracted or international bonds are issued. Financing terms for multilateral and bilateral loans are the standard terms typically associated with the respective multilateral and bilateral lenders from which Rwanda is assumed

to borrow and reflects the new terms for IDA loans.[5] Finally, the DSA assumes more use of domestic borrowing after 2019, reflecting efforts to tap domestic savings and the authorities' goal to develop financial markets through the provision of a wider variety of instruments denominated in Rwandan francs. This debt is assumed to carry a nominal interest rate of 8 percent – a weighted average of the interest rates on the short- and long-term debt instruments issued by the government.

9. **The macroeconomic outlook is subject to risks.** Although there have been downward revisions to some key macroeconomic variables, including exports, relative to the baseline of last year's DSA, the baseline scenario is still built around relatively favorable assumptions, most notably about long-term economic growth and expansion and diversification in exports, commodity prices and improvement in tax revenues. Given the low export base, the Rwandan economy remains vulnerable to external shocks, for example, to a fall in mineral prices or a slowdown in trading partners' demand which could retard the envisaged export expansion and diversification efforts. A prolonged worsening of the terms of trade or foreign demand could lead to severe external sector imbalances and require additional foreign borrowing to avoid a sharp contraction in income. This could have negative implications for debt sustainability, resulting in the deterioration in the risk of debt distress rating.

DEBT SUSTAINABILITY ANALYSIS

A. External DSA

10. **Based on the assumptions outlined above, Rwanda's debt is assessed to be sustainable with low risk of debt distress (Appendix Figure 1a and Tables 1a and 1b).** Similar to the last DSA update, the joint Bank-Fund debt sustainability framework (DSF) for low-income countries classifies Rwanda as a "strong" performer, based on the quality of the country's policies and institutions as measured by the 3-year average of the ratings under the World Bank's Country Policy and Institutional Assessment (CPIA). This is reflected in higher debt sustainability thresholds compared to countries operating in a weak policy environment.[6] Under the baseline scenario all debt burden indicators are projected to remain comfortably below the policy-dependent thresholds. Standard stress tests show in 2023 (when the Eurobond issued in 2013 is set to mature) a marginal temporary breach of the debt service-to-revenue (24.9 percent) ratio[7], and the debt service-to-exports ratio being identical to its threshold. These findings highlight the vulnerability of the Rwandan economy to external shocks and liquidity pressures at the time the Eurobond matures. However, as the breach of the debt service-to-revenue ratio is small and temporary, and taking into account the low level of external debt and strengthening

[5] New IDA loans will have a maturity of 38 years, with 6 years of grace and equal annual principal payments. The interest charge remains unchanged at 0.75 percent. The implication of these new terms is that the level of concessionality is lower (about 7.3 percentage points) than under the old terms.

[6] The thresholds for strong performers are 200, 50 and 300 percent for the PV of debt to exports, GDP and government revenue, respectively. Debt service thresholds are 25 and 22 percent of exports and revenue, respectively.

[7] This is 1.8 percentage points above the upper limit for a borderline classification.

indicators of repayment capacity (the expansion of Rwanda's export base and tax revenues), and that Rwanda is assumed to refinance the maturing Eurobond, the final assessment for Rwanda's external public and public guaranteed debt is a low risk of debt distress.

B. Public DSA

11. **Adding domestic public debt to external debt does not change the results of the analysis (see Appendix Figure 1b and Tables 2a and 2b).** The evolution of the total public debt indicators broadly follows that of external debt under the baseline. The DSA suggests that public debt remains stable under the baseline. Based on the 3 indicators examined—PV of public debt-to-GDP, PV of public debt-to-revenue and debt service of public debt-to-revenue—the long-term path of total public debt is projected to be stable in the baseline (Appendix Figure 1b). PV of public debt-to-GDP remains comfortably below the indicative benchmark throughout the assessment period. The PV of total public debt is expected to increase from 24.8 percent of GDP in 2014 to 36 percent in 2032 and then decline thereafter to 33.4 percent in 2034. Over the assessment period, domestic public debt as share of GDP rises (from 7 percent in 2014 to 18.9 percent of GDP by 2034), reflecting the substitution of domestic borrowing to partially offset the decline in foreign aid. The sharp increase in the PV of debt-to-revenue indicator when the primary balance is assumed fixed at 2014 level highlights the importance of securing the revenue gains assumed under the baseline. With the primary deficit anchored at 4.3 percent of GDP (and hence not reflecting the assumed revenue improvements), the PV of debt-to-revenue indicator rises sharply from 96.6 percent in 2014 to reach 223.1 percent by 2034.

C. External and Public DSA under Alternative Financing Scenarios

12. **External and Public DSAs were also done for two alternative financing cases.** In the first alternative scenario (NCB A US$230 million) it is assumed that the authorities contract US$230 million non- concessional debt– equivalent to 2.7 percent of 2015 GDP. This amount is equivalent to the current remaining non-concessional borrowing space under the PSI. In the second alternative scenario non-concessional borrowing is expanded more aggressively and the authorities contract US$500 million of non-concessional debt equivalent to about 6 percent of 2015 GDP.

13. **Under the first alternative scenario, debt vulnerabilities would be similar to the current baseline scenario (Figure 2a).** Under the baseline scenario all debt burden indicators are projected to remain below the policy-dependent thresholds. Standard stress tests show marginal temporary breaches of the debt service-to-exports (26.3 percent) and debt service-to-revenues (25.6 percent) ratios in 2023 when the Eurobond issued in 2013 matures. However, as these breaches are minor and temporary, and it is still judged that Rwanda's ability to rollover these maturing Eurobonds would not be impaired, the risk of debt distress would remain low.

14. **Under the second alternative scenario, debt vulnerabilities would also remain similar to the current baseline and the risk rating would still remain unchanged (Figure 2b).** Under the baseline scenario all debt burden indicators are still projected to remain below the policy-dependent thresholds. However, figure 2b illustrates that standard stress tests show a borderline breach of the PV of debt-to exports ratio threshold (208.2 percent) in 2016 and breaches of the debt service-to-exports (26.7 and 25.8 percent) and debt service-to-revenues (26.0 and 25.5 percent) ratios in 2023 and 2025 when the Eurobonds issued in 2013 and 2015 are

set to mature. However, as these breaches are all temporary and maturing non-concessional debt can be refinanced the risk of debt distress would still remain low.

AUTHORITIES' VIEW

15. **The Rwandan authorities broadly agree with the results of this DSA and the overall assessment of low risk of debt distress.** They concur with the assessment that the main risk to debt vulnerability remains the narrow export base. However, at the same time, they also expect that the on-going investments in the mining and non-traditional exports and tourism sectors will make the expansion in the export base sufficiently durable to limit this risk. Further, the authorities agree that maintaining a prudent medium-term debt management strategy and carefully and prudently assessing future projects and their financing remain important to prevent public debt from becoming unsustainable.

CONCLUSION

16. **Rwanda continues to face a low risk of debt distress but remains subject to external vulnerabilities**. Under the current set of baseline assumptions, Rwanda's debt burden indicators remain below the policy-related thresholds under baseline scenario, with one temporary breach of the debt-service-to-revenue ratio in 2023, and the debt service-to-exports ratio being identical to its threshold under standard stress tests. This breach and near-breach of these two liquidity ratios underscore Rwanda's susceptibility to external shocks and potential risk of liquidity pressures in the future. However it is judged that the risk arising from this breach of the debt-service-to-revenue ratio can be mitigated by the ability of the authorities to refinance non-concessional debt falling due in 2023, provided that sound macroeconomic and fiscal policies are maintained. Public debt is low and primarily consists of concessional borrowing. Rwanda's external debt burden profile is also expected to improve further, given the anticipated strong growth and expansion in exports.

17. **The main risk to Rwanda's debt sustainability remains the narrow export base.** Previous DSAs have highlighted risks stemming from its narrow export base. This risk is expected to be mitigated by the improvement in export performance experienced over the assessment period. However, should these anticipated export gains fail to materialize, resulting in lower than expected export volumes, the risks to debt sustainability over the longer term would increase.

18. **In addition, Rwanda remains highly dependent on foreign aid.** While the underlying macroeconomic framework assumes a gradual decline in aid flows over the longer term, a much sharper correction cannot be ruled out. The developments in 2012 demonstrated the still-high reliance on external assistance, which will be difficult to address in the short run. Over the medium term, as the authorities are better able to reduce their reliance on aid, the risks from an aid shortfall would decline.

19. **The low domestic revenue base reduces the capacity to substitute for shortfalls in foreign aid in the near term.** The framework builds in an improvement in domestic revenue collection over the medium term- it is assumed that Rwanda's revenue collection efforts converge to the average for the region. However, in the event that the envisaged gains from

revenue mobilization are not realized, there would be implications on either debt sustainability as additional borrowing is used to finance the authorities' economic development program, or there would have to be a scaling down in expenditure, and hence growth, as plans would need to be adjusted to the prevailing financing envelope. In either case, the envisaged improvement in Rwanda's debt profile would be harder to achieve.

20. **The DSA suggests that Rwanda does have some flexibility to use non-concessional financing options, but this space is limited.** Alternative financing scenarios show that non-concessional borrowing of about US$ 500 million in 2015, would not adversely affect Rwanda's debt profile. However, increasing rapidly external non-concessional debt much more beyond this would result in public debt vulnerability rising to the extent that Rwanda would risk losing its "low-risk" of debt distress rating. Therefore, it is vital that the authorities continue to exercise caution going forward. In particular, in terms of the choice of financing options, Rwanda should continue to avail itself of concessional financing to the extent possible. The "low risk" rating has expanded the set of new sources of concessional financing, which should be prioritized over commercial borrowing. Any non-concessional borrowing should be distributed over a multi-year horizon to help manage rollover risks and minimize the carry costs associated with the timing difference between the contracting of the debt and the use of the proceeds. Care should be taken also on both the selection of projects that they wish to implement and the modalities of financing these investments. Projects need to be prioritized and sequenced, and supported by strong, independent cost-benefit analyses to ensure the economic benefits are commensurate with the opportunity costs of utilizing Rwanda's limited debt space.

Appendix Table 1a: External Debt Sustainability Framework, Baseline Scenario, 2011-2034[1]
(In percent of GDP, unless otherwise indicated)

	Actual			Historical 6/ Average	Standard 6/ Deviation	Projections									
	2011	2012	2013			2014	2015	2016	2017	2018	2019	2014-2019 Average	2024	2034	2020-2034 Average
External debt (nominal) 1/	**16.1**	**20.8**	**26.1**			**28.3**	**30.9**	**31.9**	**33.9**	**35.7**	**37.2**		**33.9**	**22.5**	
of which: public and publicly guaranteed (PPG)	12.6	16.2	21.4			23.9	27.0	28.6	31.1	33.3	35.1		32.1	19.5	
Change in external debt	-0.4	4.7	5.4			2.1	2.6	1.0	2.0	1.8	1.5		-1.1	-2.2	
Identified net debt-creating flows	4.7	8.0	4.3			8.2	6.5	4.0	3.6	2.5	1.7		0.3	0.0	
Non-interest current account deficit	**6.8**	**10.8**	**6.4**	**4.1**	**4.3**	**11.1**	**10.0**	**8.2**	**8.4**	**7.6**	**7.2**		**6.7**	**5.9**	6.3
Deficit in balance of goods and services	20.1	20.2	16.9			19.3	17.0	14.2	13.4	12.4	12.4		10.8	10.0	
Exports	14.0	14.0	15.6			15.5	15.2	14.8	15.6	16.2	16.1		17.3	18.0	
Imports	34.1	34.3	32.5			34.9	32.2	28.9	29.0	28.6	28.5		28.1	28.0	
Net current transfers (negative = inflow)	-13.7	-10.0	-11.3	-12.2	1.7	-9.4	-7.9	-6.6	-5.8	-5.4	-3.6		-3.1	-2.5	-3.0
of which: official	-11.3	-7.5	-8.9			-3.8	-3.0	-2.5	-2.0	-1.7	-1.5		-1.0	-0.5	
Other current account flows (negative = net inflow)	0.5	0.6	0.8			1.1	0.9	0.7	0.7	0.6	-1.7		-1.0	-1.6	
Net FDI (negative = inflow)	**-0.7**	**-1.5**	**-2.0**	**-1.2**	**0.8**	**-2.0**	**-2.9**	**-3.2**	**-3.4**	**-3.6**	**-3.9**		**-4.4**	**-4.9**	-4.6
Endogenous debt dynamics 2/	**-1.5**	**-1.4**	**-0.1**			**-0.8**	**-0.5**	**-1.0**	**-1.3**	**-1.5**	**-1.6**		**-1.9**	**-0.9**	
Contribution from nominal interest rate	0.4	0.4	0.7			0.7	1.0	0.9	0.9	0.9	0.9		0.5	0.7	
Contribution from real GDP growth	-1.1	-1.3	-0.9			-1.5	-1.6	-2.0	-2.2	-2.3	-2.4		-2.4	-1.7	
Contribution from price and exchange rate changes	-0.7	-0.6	0.1			...	...	...	...	...	...		...	...	
Residual (3-4) 3/	**-5.1**	**-3.3**	**1.1**			**-6.1**	**-3.9**	**-2.9**	**-1.6**	**-0.7**	**-0.2**		**-1.5**	**-2.2**	
of which: exceptional financing	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
PV of external debt 4/	...	...	21.3			21.8	22.6	22.5	23.3	24.1	24.9		24.1	18.4	
In percent of exports	...	...	136.7			140.9	149.4	152.7	149.3	148.3	155.2		139.1	102.0	
PV of PPG external debt	**...**	**...**	**16.6**			**17.5**	**18.8**	**19.3**	**20.5**	**21.7**	**22.9**		**22.3**	**15.5**	
In percent of exports	**...**	**...**	**106.4**			**112.8**	**124.2**	**130.6**	**131.5**	**133.6**	**142.3**		**128.8**	**85.8**	
In percent of government revenues	**...**	**...**	**83.9**			**89.1**	**95.5**	**95.6**	**102.0**	**107.9**	**113.1**		**106.8**	**69.7**	
Debt service-to-exports ratio (in percent)	**3.7**	**6.1**	**8.4**			**9.2**	**11.8**	**11.9**	**10.9**	**10.5**	**11.3**		**11.8**	**19.3**	
PPG debt service-to-exports ratio (in percent)	**3.2**	**3.6**	**5.3**			**6.1**	**8.5**	**8.4**	**7.5**	**7.1**	**7.7**		**7.1**	**8.7**	
PPG debt service-to-revenue ratio (in percent)	**2.2**	**2.6**	**4.2**			**4.8**	**6.5**	**6.1**	**5.8**	**5.7**	**6.1**		**5.9**	**7.0**	
Total gross financing need (Billions of U.S. dollars)	0.4	0.8	0.5			0.8	0.8	0.7	0.7	0.7	0.7		1.0	3.2	
Non-interest current account deficit that stabilizes debt ratio	7.2	6.2	1.0			8.9	7.4	7.2	6.3	5.8	5.7		7.8	8.1	
Key macroeconomic assumptions															
Real GDP growth (in percent)	7.5	8.8	4.7	7.5	2.1	6.0	6.0	7.0	7.5	7.5	7.5	6.9	7.5	7.5	7.5
GDP deflator in US dollar terms (change in percent)	4.6	3.6	-0.5	5.7	5.7	-1.8	2.1	2.7	2.0	2.0	1.9	1.5	2.0	2.0	2.0
Effective interest rate (percent) 5/	2.4	3.0	3.6	2.1	1.4	2.8	3.9	3.3	3.0	2.8	2.7	3.1	1.4	3.3	2.1
Growth of exports of G&S (US dollar terms, in percent)	41.5	13.2	15.5	21.8	22.8	3.8	5.8	7.0	15.9	14.0	8.5	9.2	10.9	9.7	10.5
Growth of imports of G&S (US dollar terms, in percent)	33.1	13.3	-1.4	19.6	14.0	11.8	0.0	-1.3	10.0	8.1	9.1	6.3	9.7	9.4	9.5
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	42.6	46.1	47.6	43.0	42.3	38.6	43.4	27.8	8.8	20.8
Government revenues (excluding grants, in percent of GDP)	19.6	19.7	19.7			19.6	19.7	20.1	20.1	20.1	20.2		20.9	22.2	21.3
Aid flows (in Billions of US dollars) 7/	0.3	0.7	0.8			0.7	0.7	0.6	0.7	0.7	0.7		0.6	0.6	
of which: Grants	0.3	0.3	0.4			0.5	0.4	0.3	0.3	0.3	0.3		0.4	0.5	
of which: Concessional loans	0.0	0.4	0.4			0.3	0.4	0.4	0.4	0.4	0.4		0.3	0.0	
Grant-equivalent financing (in percent of GDP) 8/	...	...	...			8.0	6.9	5.0	4.9	4.8	4.4		2.6	1.2	2.2
Grant-equivalent financing (in percent of external financing) 8/	...	...	...			74.7	70.7	68.5	61.6	61.3	58.4		58.1	71.8	52.5
Memorandum items:															
Nominal GDP (Billions of US dollars)	6.4	7.2	7.5			7.8	8.5	9.3	10.2	11.2	12.3		19.4	48.8	
Nominal dollar GDP growth	12.4	12.7	4.1			4.1	8.2	9.9	9.6	9.6	9.5	8.5	9.7	9.7	9.7
PV of PPG external debt (in Billions of US dollars)			1.2			1.4	1.6	1.8	2.1	2.4	2.8		4.3	7.4	
(PVt-PVt-1)/GDPt-1 (in percent)						2.0	2.8	5.1	3.2	3.2	3.3	3.3	1.6	-0.3	1.5
Gross workers' remittances (Billions of US dollars)	0.2	0.2	0.2			0.2	0.2	0.2	0.2	0.2	0.3		0.4	0.7	
PV of PPG external debt (in percent of GDP + remittances)	...	...	16.2			17.1	18.4	18.9	20.1	21.3	22.4		21.9	15.3	
PV of PPG external debt (in percent of exports + remittances)	...	...	93.5			98.8	108.8	114.1	116.4	118.8	126.2		114.9	79.5	
Debt service of PPG external debt (in percent of exports + remittanc	...	...	4.6			5.3	7.5	7.3	6.6	6.3	6.8		6.4	8.0	

Sources: Rwandan authorities; and staff estimates and projections.

1/ Includes both public and private sector external debt.

2/ Derived as [r - g - ρ(1+g)]/(1+g+ρ+gρ) times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate, and ρ = growth rate of GDP deflator in U.S. dollar terms.

3/ Includes exceptional financing (i.e., changes in arrears and debt relief); changes in gross foreign assets; and valuation adjustments. For projections also includes contribution from price and exchange rate changes.

4/ Assumes that PV of private sector debt is equivalent to its face value.

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

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

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

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

Table 1b. Rwanda: Sensitivity Analysis of Key Indicators of Public and Publicly Guaranteed External Debt, 2014-2034[1/]
(In percent)

	Projections							
	2014	2015	2016	2017	2018	2019	**2024**	2034
PV of debt-to GDP ratio								
Baseline	17	19	19	21	22	23	**22**	15
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2014-2034 1/	17	15	13	13	13	14	**15**	19
A2. New public sector loans on less favorable terms in 2014-2034 2	17	20	22	24	26	28	**30**	24
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2015-2016	17	19	19	21	22	23	**22**	16
B2. Export value growth at historical average minus one standard deviation in 2015-2016 3/	17	19	21	22	23	24	**23**	15
B3. US dollar GDP deflator at historical average minus one standard deviation in 2015-2016	17	19	20	21	22	24	**23**	16
B4. Net non-debt creating flows at historical average minus one standard deviation in 2015-2016 4/	17	19	18	19	21	22	**21**	15
B5. Combination of B1-B4 using one-half standard deviation shocks	17	17	15	16	17	19	**19**	15
B6. One-time 30 percent nominal depreciation relative to the baseline in 2015 5/	17	26	27	29	30	32	**31**	21
PV of debt-to-exports ratio								
Baseline	113	124	131	131	134	142	**129**	86
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2014-2034 1/	113	98	91	83	83	90	**89**	106
A2. New public sector loans on less favorable terms in 2014-2034 2	113	131	146	153	162	177	**172**	134
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2015-2016	113	122	129	129	131	140	**127**	84
B2. Export value growth at historical average minus one standard deviation in 2015-2016 3/	113	136	166	165	166	175	**154**	99
B3. US dollar GDP deflator at historical average minus one standard deviation in 2015-2016	113	122	129	129	131	140	**127**	84
B4. Net non-debt creating flows at historical average minus one standard deviation in 2015-2016 4/	113	122	123	124	127	135	**124**	84
B5. Combination of B1-B4 using one-half standard deviation shocks	113	107	92	96	100	108	**105**	75
B6. One-time 30 percent nominal depreciation relative to the baseline in 2015 5/	113	122	129	129	131	140	**127**	84
PV of debt-to-revenue ratio								
Baseline	89	95	96	102	108	113	**107**	70
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2014-2034 1/	89	75	66	65	67	71	**74**	86
A2. New public sector loans on less favorable terms in 2014-2034 2	89	101	107	119	131	141	**143**	109
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2015-2016	89	95	96	102	108	114	**107**	70
B2. Export value growth at historical average minus one standard deviation in 2015-2016 3/	89	98	105	111	116	121	**111**	70
B3. US dollar GDP deflator at historical average minus one standard deviation in 2015-2016	89	96	99	105	111	117	**110**	72
B4. Net non-debt creating flows at historical average minus one standard deviation in 2015-2016 4/	89	94	90	96	102	108	**103**	68
B5. Combination of B1-B4 using one-half standard deviation shocks	89	85	72	79	86	92	**93**	66
B6. One-time 30 percent nominal depreciation relative to the baseline in 2015 5/	89	133	133	142	150	158	**149**	97

Table 1b. Rwanda: Sensitivity Analysis of Key Indicators of Public and Publicly Guaranteed External Debt, 2014-2034 1/ (Concluded)

(In percent)

				Debt service-to-exports ratio				
Baseline	6	9	8	8	7	8	**7**	9
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2014-2034 1/	6	6	6	5	4	5	**5**	7
A2. New public sector loans on less favorable terms in 2014-2034 2	6	7	7	7	7	8	**10**	13
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2015-2016	6	7	7	7	6	7	**8**	8
B2. Export value growth at historical average minus one standard deviation in 2015-2016 3/	6	7	9	8	8	8	**10**	10
B3. US dollar GDP deflator at historical average minus one standard deviation in 2015-2016	6	7	7	7	6	7	**8**	8
B4. Net non-debt creating flows at historical average minus one standard deviation in 2015-2016 4/	6	7	7	6	6	7	**8**	8
B5. Combination of B1-B4 using one-half standard deviation shocks	6	7	6	5	5	6	**6**	7
B6. One-time 30 percent nominal depreciation relative to the baseline in 2015 5/	6	7	7	7	6	7	**8**	8
				Debt service-to-revenue ratio				
Baseline	5	7	6	6	6	6	**6**	7
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2014-2034 1/	5	5	4	4	4	4	**4**	5
A2. New public sector loans on less favorable terms in 2014-2034 2	5	5	5	5	5	7	**8**	10
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2015-2016	5	5	5	5	5	5	**7**	7
B2. Export value growth at historical average minus one standard deviation in 2015-2016 3/	5	5	5	5	5	6	**8**	7
B3. US dollar GDP deflator at historical average minus one standard deviation in 2015-2016	5	5	6	5	5	6	**7**	7
B4. Net non-debt creating flows at historical average minus one standard deviation in 2015-2016 4/	5	5	5	5	5	5	**7**	7
B5. Combination of B1-B4 using one-half standard deviation shocks	5	5	5	4	4	5	**6**	6
B6. One-time 30 percent nominal depreciation relative to the baseline in 2015 5/	5	7	7	7	7	8	**10**	9
Memorandum item:								
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	21	21	21	21	21	21	**21**	21

Sources: Rwandan authorities; and staff estimates and projections.

1/ Variables include real GDP growth, growth of GDP deflator (in U.S. dollar terms), non-interest current account in percent of GDP, and non-debt creating flows.
2/ Assumes that the interest rate on new borrowing is by 2 percentage points higher than in the baseline., while grace and maturity periods are the same as in the baseline.
3/ Exports values are assumed to remain permanently at the lower level, but the current account as a share of GDP is assumed to return to its baseline level after the shock (implicitly assuming an offsetting adjustment in import levels).
4/ Includes official and private transfers and FDI.
5/ Depreciation is defined as percentage decline in dollar/local currency rate, such that it never exceeds 100 percent.
6/ Applies to all stress scenarios except for A2 (less favorable financing) in which the terms on all new financing are as specified in footnote 2.

Table 2a: Rwanda: Public Sector Debt Sustainability Framework, Baseline Scenario, 2011-2034[1/]

(In percent of GDP, unless otherwise indicated)

	Actual			Average 5/	Standard Deviation 5/	Estimate	Projections								
	2011	2012	2013			2014	2015	2016	2017	2018	2019	2014-19 Average	2024	2034	2020-34 Average
Public sector debt 1/	20.1	21.7	28.4			31.2	33.5	33.6	34.7	35.6	36.4		40.7	37.5	
of which: foreign-currency denominated	12.6	16.2	21.4			23.9	27.0	28.6	31.1	33.3	35.1		32.1	19.5	
Change in public sector debt	0.1	1.5	6.7			2.8	2.4	0.0	1.1	1.0	0.8		0.6	-1.9	
Identified debt-creating flows	-8.0	-4.4	-0.1			0.7	0.4	-0.9	-0.3	-0.1	-0.2		-0.4	-1.4	
Primary deficit	0.4	2.5	3.8	0.4	1.8	4.3	3.6	2.8	3.0	3.1	2.9	3.3	3.2	1.0	2.5
Revenue and grants	24.6	24.2	25.0			25.6	24.2	23.1	22.7	22.7	22.7		22.8	23.3	
of which: grants	5.0	4.5	5.3			6.0	4.4	2.9	2.6	2.6	2.4		1.9	1.1	
Primary (noninterest) expenditure	25.0	26.7	28.8			30.0	27.8	25.9	25.7	25.7	25.6		26.0	24.3	
Automatic debt dynamics	-2.0	-1.6	-0.1			-1.1	-1.5	-2.2	-2.1	-2.2	-2.2		-2.9	-2.0	
Contribution from interest rate/growth differential	-1.5	-1.5	-0.5			-1.2	-1.3	-1.9	-2.1	-2.2	-2.3		-2.9	-2.0	
of which: contribution from average real interest rate	-0.1	0.1	0.5			0.4	0.5	0.3	0.2	0.2	0.2		-0.1	0.7	
of which: contribution from real GDP growth	-1.4	-1.6	-1.0			-1.6	-1.8	-2.2	-2.3	-2.4	-2.5		-2.8	-2.7	
Contribution from real exchange rate depreciation	-0.5	-0.1	0.4			0.1	-0.2	-0.3	0.0	0.0	0.0		...	...	
Other identified debt-creating flows	-6.4	-5.4	-3.8			-2.6	-1.8	-1.5	-1.1	-0.9	-0.9		-0.7	-0.4	
Privatization receipts (negative)	-6.8	-5.6	-4.1			-2.8	-1.9	-1.7	-1.3	-1.1	-1.0		-0.8	-0.5	
Recognition of implicit or contingent liabilities	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Debt relief (HIPC and other)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Other (specify, e.g. bank recapitalization)	0.3	0.3	0.3			0.2	0.2	0.2	0.2	0.2	0.2		0.1	0.0	
Residual, including asset changes	8.1	5.9	6.8			2.2	2.0	0.9	1.4	1.0	1.0		0.9	-0.5	
Other Sustainability Indicators															
PV of public sector debt	...	...	23.5			24.8	25.3	24.2	24.1	24.0	24.2		31.0	33.4	
of which: foreign-currency denominated	...	...	16.6			17.5	18.8	19.3	20.5	21.7	22.9		22.3	15.5	
of which: external	...	...	16.6			17.5	18.8	19.3	20.5	21.7	22.9		22.3	15.5	
PV of contingent liabilities (not included in public sector debt)	...	...	...			...	...	...	...	...	...		...	...	
Gross financing need 2/	2.9	6.7	7.1			8.6	8.5	7.3	6.4	6.4	5.4		10.5	19.2	
PV of public sector debt-to-revenue and grants ratio (in percent)	...	...	94.0			96.6	104.9	104.8	105.9	106.0	106.6		135.8	143.3	
PV of public sector debt-to-revenue ratio (in percent)	...	...	119.0			126.1	128.5	120.1	119.7	119.6	119.5		148.1	150.6	
of which: external 3/	...	...	83.9			89.1	95.5	95.6	102.0	107.9	113.1		106.8	69.7	
Debt service-to-revenue and grants ratio (in percent) 4/	3.0	3.4	4.5			4.7	6.4	6.3	6.1	5.9	6.1		7.4	12.3	
Debt service-to-revenue ratio (in percent) 4/	3.8	4.2	5.7			6.1	7.8	7.2	6.9	6.7	6.8		8.1	12.9	
Primary deficit that stabilizes the debt-to-GDP ratio	0.2	1.0	-2.9			1.5	1.3	2.8	1.8	2.1	2.2		2.6	2.9	
Key macroeconomic and fiscal assumptions															
Real GDP growth (in percent)	7.5	8.8	4.7	7.5	2.1	6.0	6.0	7.0	7.5	7.5	7.5	6.9	7.5	7.5	7.5
Average nominal interest rate on forex debt (in percent)	7.5	6.9	5.9	4.6	2.6	2.5	3.8	3.2	2.8	2.6	2.6	2.9	1.2	3.0	1.8
Average real interest rate on domestic debt (in percent)	-12.0	-7.8	-5.6	-8.4	3.7	0.8	-1.2	-1.8	-0.3	1.0	1.9	0.1	2.4	3.2	-0.4
Real exchange rate depreciation (in percent, + indicates depreciation	-3.6	-0.5	2.3	-3.1	4.4	0.6	...	...	...	...	...	...	...	...	...
Inflation rate (GDP deflator, in percent)	7.7	6.1	4.7	8.1	3.8	3.3	5.2	5.8	5.0	5.1	4.9	4.9	5.0	5.0	5.0
Growth of real primary spending (deflated by GDP deflator, in percer	2.7	16.3	12.8	4.6	6.9	10.4	-1.7	-0.3	6.6	7.7	6.8	4.9	7.1	7.2	7.2
Grant element of new external borrowing (in percent)	...	...	...	...	...	42.6	46.1	47.6	43.0	42.3	38.6	43.4	27.8	8.8	...

Sources: Rwandan authorities; and staff estimates and projections.

1/ [Indicate coverage of public sector, e.g., general government or nonfinancial public sector. Also whether net or gross debt is used.]

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

3/ Revenues excluding grants.

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

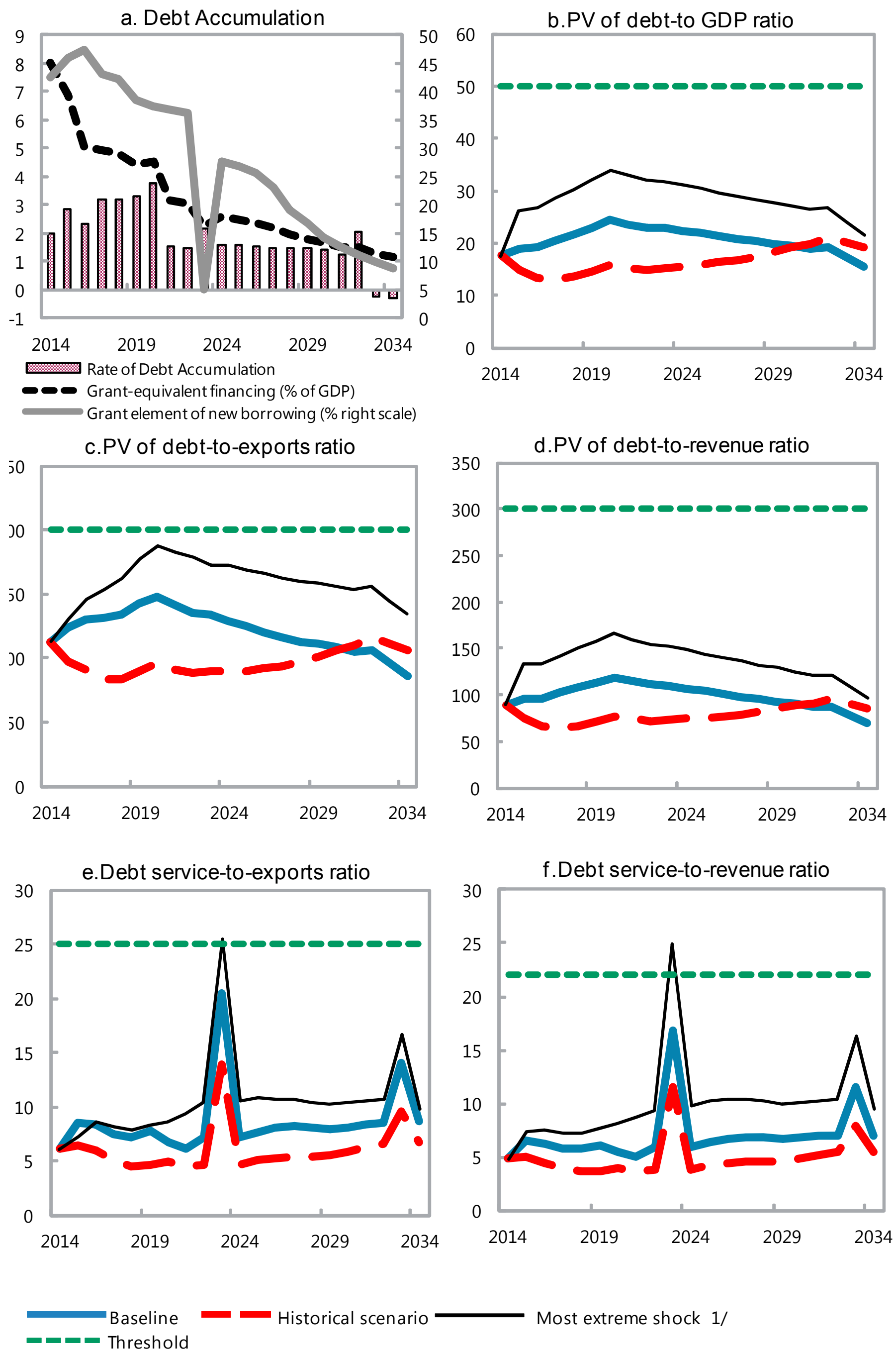
5/ Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability.

Table 2b. Rwanda: Sensitivity Analysis for Key Indicators of Public Debt 2014–2034

	Projections							
	2014	2015	2016	2017	2018	2019	2024	2034
PV of Debt-to-GDP Ratio								
Baseline	25	25	24	24	24	24	31	33
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	25	22	20	18	16	15	13	14
A2. Primary balance is unchanged from 2014	25	26	26	27	28	29	38	52
A3. Permanently lower GDP growth 1/	25	26	25	25	25	26	36	48
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2015-20	25	26	25	25	26	26	34	38
B2. Primary balance is at historical average minus one standard deviations in 2015-201	25	24	23	23	23	23	30	33
B3. Combination of B1-B2 using one half standard deviation shocks	25	23	21	21	21	22	29	33
B4. One-time 30 percent real depreciation in 2015	25	32	30	29	28	27	34	38
B5. 10 percent of GDP increase in other debt-creating flows in 2015	25	33	32	31	31	31	36	36
PV of Debt-to-Revenue Ratio 2/								
Baseline	97	105	105	106	106	107	136	143
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	97	93	85	78	71	64	56	59
A2. Primary balance is unchanged from 2014	97	107	112	118	122	127	165	223
A3. Permanently lower GDP growth 1/	97	106	106	109	110	113	156	205
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2015-20	97	106	109	111	113	115	150	165
B2. Primary balance is at historical average minus one standard deviations in 2015-201	97	100	98	99	100	101	131	141
B3. Combination of B1-B2 using one half standard deviation shocks	97	97	92	94	95	96	128	140
B4. One-time 30 percent real depreciation in 2015	97	133	129	126	122	120	148	163
B5. 10 percent of GDP increase in other debt-creating flows in 2015	97	138	137	137	135	135	157	156
Debt Service-to-Revenue Ratio 2/								
Baseline	5	6	6	6	6	6	7	12
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	5	6	6	5	5	4	3	6
A2. Primary balance is unchanged from 2014	5	6	6	6	6	7	9	17
A3. Permanently lower GDP growth 1/	5	6	6	6	6	6	8	16
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2015-20	5	6	6	6	6	6	8	14
B2. Primary balance is at historical average minus one standard deviations in 2015-201	5	6	6	6	6	6	7	12
B3. Combination of B1-B2 using one half standard deviation shocks	5	6	6	5	5	6	7	12
B4. One-time 30 percent real depreciation in 2015	5	8	9	9	8	9	11	17
B5. 10 percent of GDP increase in other debt-creating flows in 2015	5	6	8	8	8	8	10	14

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

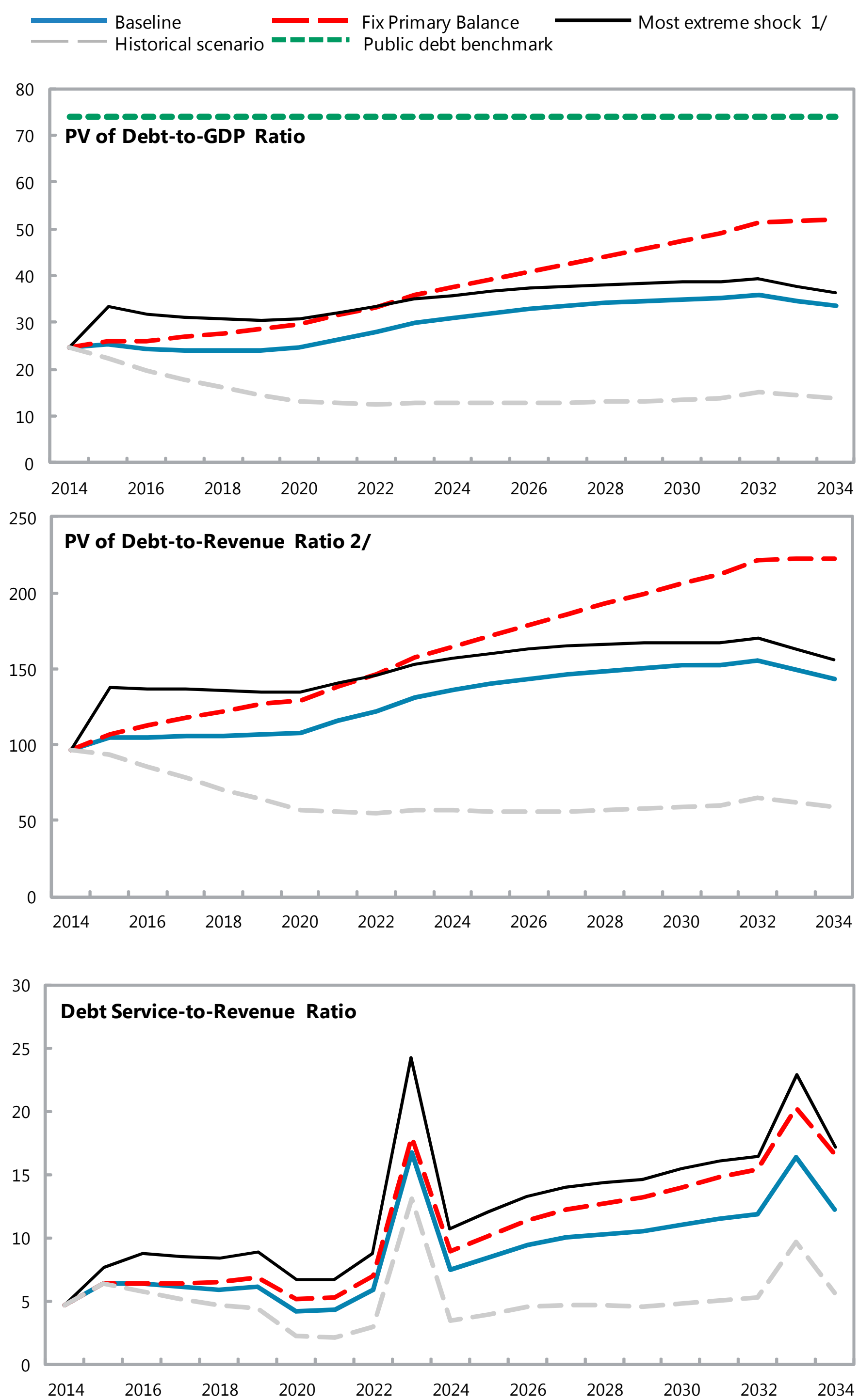
Figure 1a. Rwanda: Indicators of Public and Public Guaranteed External Debt under Alternative Scenarios, 2014-2034 1/



Sources: Rwandan authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio on or before 2024. In figure b. it corresponds to a One-time depreciation shock; in c. to a Terms shock; in d. to a One-time depreciation shock; in e. to a Exports shock and in figure f. to a One-time depreciation shock

Figure 1b. Rwanda: Indicators of Public Debt under Alternative Scenarios, 2014-2034 1/

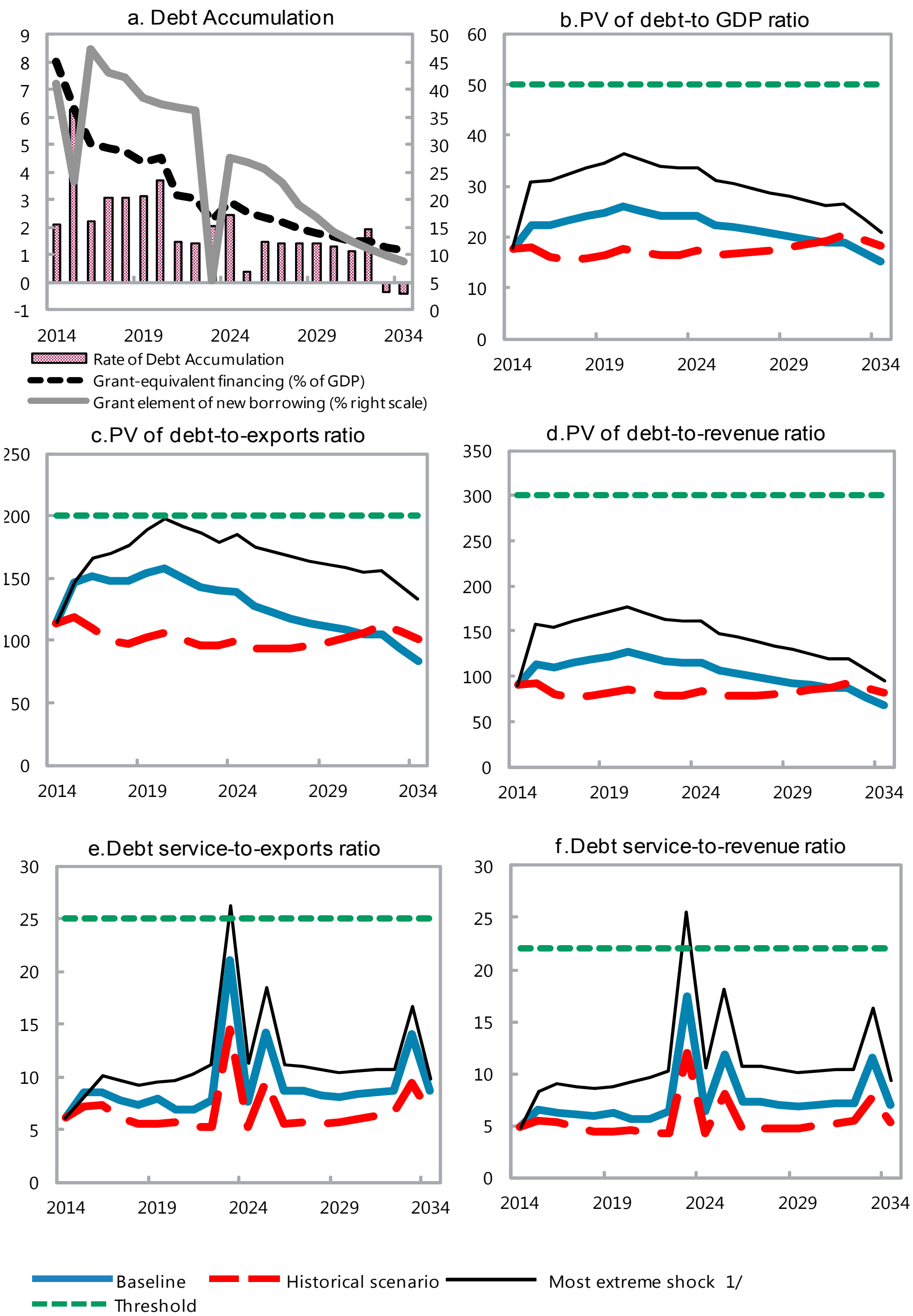


Sources: Rwandan authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio on or before 2024.

2/ Revenues are defined inclusive of grants.

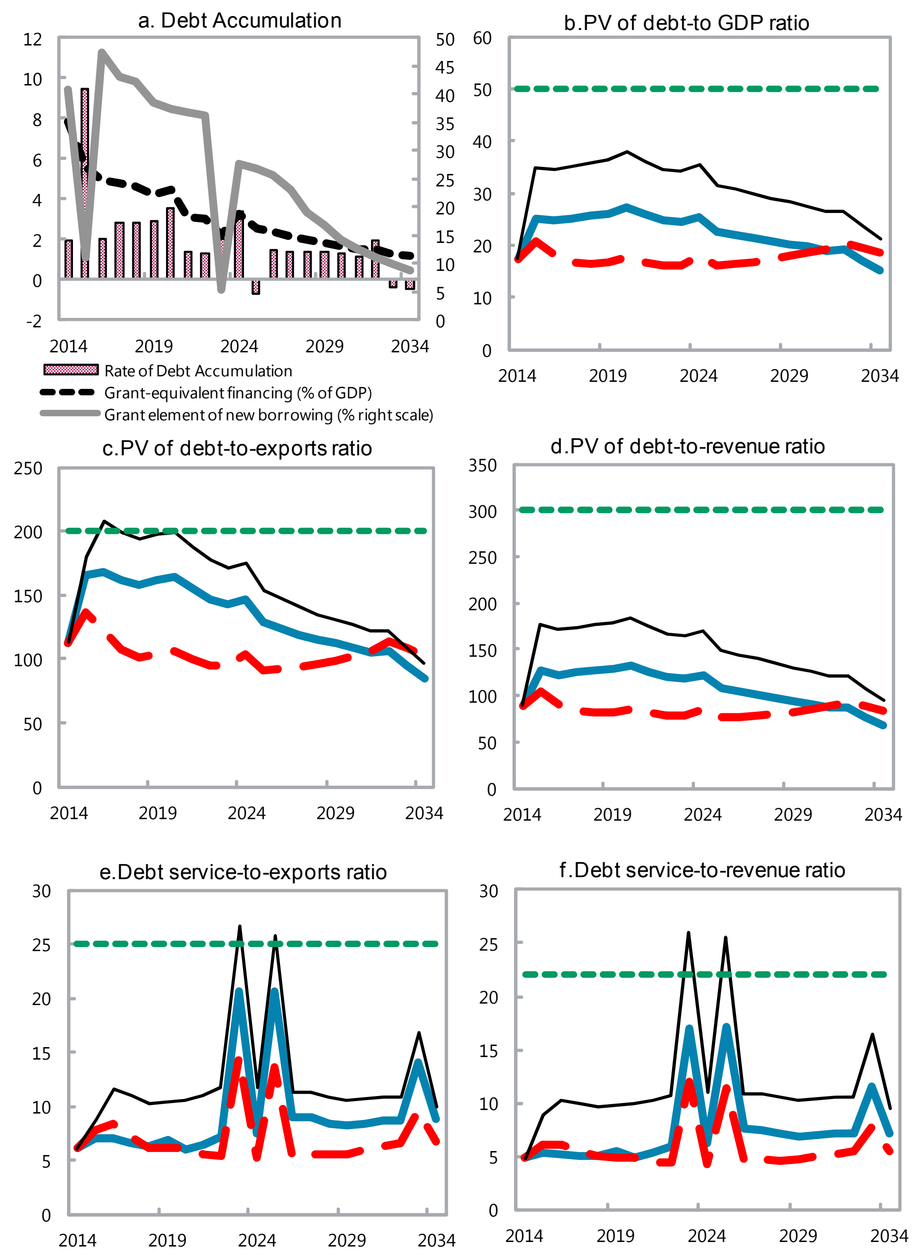
Figure 2a. Rwanda: Indicators of Public and Public Guaranteed External Debt under Alternative Scenarios, 2014-2034 1/ - NCB A (US$ 230 million)



Sources: Rwandan authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio on or before 2024. In figure b. it corresponds to a One-time depreciation shock; in c. to a Terms shock; in d. to a One-time depreciation shock; in e. to a Exports shock and in figure f. to a One-time depreciation shock

Figure 2b. Rwanda: Indicators of Public and Public Guaranteed External Debt under Alternative Scenarios, 2014-2034 1/ - NCB B (US$ 500 million)



Baseline — Historical scenario — Most extreme shock 1/ — Threshold

Sources: Rwandan authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio on or before 2024. In figure b. it corresponds to a One-time depreciation shock; in c. to a Exports shock; in d. to a One-time depreciation shock; in e. to a Exports shock and in figure f. to a One-time depreciation shock

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IMF Executive Board Completes Second PSI Review for Rwanda and Concludes 2014 Article IV Consultation

On December 8, 2014 the Executive Board of the International Monetary Fund completed the second review of Rwanda's economic performance under the program supported by the Policy Support Instrument (PSI)[1] and also concluded the 2014 Article IV consultation[2] with Rwanda.

The PSI for Rwanda was approved on December 2, 2013 (see Press Release No.13/483).

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

"The Rwandan authorities are to be commended for their strong implementation of the economic program supported by the Policy Support Instrument, carried out against a challenging economic environment. Poverty has declined over time, economic growth has recovered since 2013, and inflation remains contained.

"Fiscal policies remain prudent and the objectives of the FY2014/15 budget are within reach. In the medium term, fiscal deficits are projected to decline with limited recourse to domestic financing. Strengthening the domestic revenue base is an important objective, including for reducing aid dependency, and the authorities should vigorously pursue improvements in revenue administration and tax policy improvements in agriculture, mining, and property.

[1] The PSI is an instrument of the IMF designed for low-income countries that do not need or may not want balance of payments financial support. The PSI helps countries design effective economic programs that once approved by the IMF's Executive Board, signal to donors, multilateral development banks, and markets the Fund's endorsement of a member's policies (see http://www.imf.org/external/np/exr/facts/psi.htm). Details on Rwanda's current PSI are available at www.imf.org/rwanda.

[2] 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.

“The central bank’s current monetary policy stance is appropriate in view of rising inflationary pressures and the more flexible monetary policy framework will serve to make monetary policy implementation more effective. However, stepped-up efforts are needed to better promote financial deepening and inclusion, including through implementation of the Financial Sector Development Plan, and to enhance domestic and cross-border financial supervisory and regulatory frameworks.

“The government has taken important steps to strengthen Rwanda’s debt management capacity and project implementation, including establishment of a Debt Management Unit. The available room to fund new infrastructure projects and maintain a low risk of debt distress is limited, and sensitive to changing economic circumstances. This requires consistent and prudent debt management, through exploring all available concessional financing options, private sector involvement and judicious use of non-concessional borrowing.

“Removal of remaining structural impediments to private sector investment will help foster greater regional integration and export diversification. Efforts are needed to strengthen the business environment, including by lowering business costs and reducing remaining trade barriers”.

The Executive Board also completed the 2014 Article IV Consultation with Rwanda.

Rwanda’s economic performance since the turn of the century has been remarkable. Strong policies have played a key role in maintaining Real Gross Domestic Product (GDP) growth at 7.8 percent on average since 2000, with significant poverty reduction. The economy is recovering from the disruptions induced by aid suspension through mid-2013, with growth bouncing back in the first half of 2014 and inflation well contained.

The fiscal deficit for the fiscal year 2014/15 continues to be in line with available resources. Tax revenue is expected to increase by 1 percent of GDP this fiscal year, bringing it to almost 16 percent of GDP. Continued efforts to mobilize more domestic revenue should allow Rwanda to reduce its reliance on donor resources and finance its ambitious development agenda.

The monetary stance has remained unchanged since mid-2014 and is consistent with the projected pick-up in inflation and improved growth outlook. The National Bank of Rwanda (NBR) has implemented a series of measures aimed at improving the transmission mechanism of monetary policy and allowed greater exchange rate flexibility to maintain reserves at adequate levels.

Growth in 2014 is expected to be about 6 percent, rising to the longer-term growth rate of 7.5 percent in the medium term. This reflects improved implementation of government projects and a rebound in agriculture because of favorable climatic conditions early in the year. Prospects in construction and real estate are also favorable. Inflation is projected at about 3 percent by end year, converging to the authorities' target of 5 percent in the medium term.

In terms of risks, weather conditions and delayed project implementation would hinder growth prospects, and a protracted period of slower growth in advanced economies or a decline in commodity prices - minerals and traditional exports - would adversely affect exports.

Executive Board Assessment[3]

Executive Directors agreed with the thrust of the staff appraisal. They welcomed Rwanda's continued strong performance under the PSI-supported program, which has led to progress towards macroeconomic stability; robust, sustained and inclusive growth; improved gender equity; and poverty reduction. Despite strong program performance and the favorable economic outlook, Directors noted the country's vulnerability to external shocks and high aid dependency, and encouraged the authorities to sustain the reform momentum. They supported the creation of an enabling environment for successful economic transformation to a more diversified, private-sector-led growth strategy, through macroeconomic prudence and productivity and competitiveness-enhancing structural reforms.

Directors called for continued efforts to strengthen fiscal sustainability through enhanced revenue mobilization and reduced foreign aid dependency. They recommended improvements in tax administration and broadening the tax base with Fund technical assistance, including through tax policy measures in agriculture, mining and property. On the expenditure side, Directors welcomed the identification of specific contingent cuts for FY2014/15, which safeguard priority social spending, in the event of revenue shortfalls. They also encouraged ongoing efforts to strengthen public financial management.

Directors considered the current monetary policy stance appropriate in view of rising inflationary pressures. However, they encouraged the authorities to improve the effectiveness of the monetary transmission mechanism, through the development of deeper financial markets and new monetary instruments. Directors called for the implementation of the Financial Sector Development Plan, to further promote financial deepening and inclusion. They advised strengthening both domestic and cross-border financial supervisory and regulatory frameworks, and improving the AML/CFT regime.

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

Directors agreed that Rwanda's real exchange rate remains broadly in line with economic fundamentals, and underscored the need to maintain exchange rate flexibility to reduce external imbalances and preserve foreign exchange buffers.

Directors welcomed the establishment of the new Debt Management Unit, and supported the authorities' plans to develop the country's project implementation capacity, guided by a well-prioritized and appropriately phased public investment plan. They noted the authorities' commitment to fully explore concessional financing options and private sector participation, and called for careful management of non-concessional borrowing to mitigate rollover risks.

Directors advised the removal of remaining structural impediments to private sector investment, and encouraged greater regional integration and export diversification. They recommended improving the business environment, including by lowering business costs and reducing remaining trade barriers.

Rwanda: Selected Economic Indicators, 2010-18

	2010	2011	2012	2013	2014	2015	2016	2017	2018
		Act.		Prel.			Proj.		
	(Annual percentage change, unless otherwise indicated)								
Output, prices, and exchange rate									
Real GDP	6.3	7.5	8.8	4.7	6.0	6.0	7.0	7.5	7.5
GDP deflator	3.6	7.7	6.1	4.7	3.3	5.2	5.8	5.0	5.1
CPI (period average)	0.4	5.7	6.3	4.2	2.1	4.1	5.0	5.0	5.0
CPI (end of period)	0.2	8.3	3.9	3.6	3.2	5.0	5.0	5.0	5.0
Core inflation (end of period) [1]	0.2	8.3	2.5	3.8	…	…	…	…	…
Terms of trade (deterioration, -)	16.1	0.0	-5.3	19.0	-6.5	10.2	2.9	2.0	2.3
Money and credit									
Broad money (M3)	16.9	26.7	14.0	15.5	14.3	12.7	14.2	13.9	13.9
Credit to non-government sector	9.9	27.6	35.0	11.1	16.1	17.4	22.7	15.1	11.8
Policy Rate (end of period)	6.0	7.0	7.5	7.0	6.5	…	…	…	…
M3/GDP (percent)	18.5	20.3	20.1	21.1	22.1	22.3	22.5	22.7	22.9
NPLs (percent of total loans)	10.7	8.0	6.0	6.9	6.7	…	…	…	…
	(Percent of GDP, unless otherwise indicated)								
General government budget									
Revenue and grants	26.3	24.6	24.2	25.1	27.0	24.2	23.1	22.8	22.7
of which: grants [2]	13.3	10.8	9.3	8.6	8.2	5.8	4.1	3.5	3.3
Expenditure	25.9	26.5	25.9	27.6	28.6	27.0	25.6	25.4	25.4
Current	15.1	14.3	14.1	14.5	14.7	13.8	13.2	12.9	12.8
Capital	10.7	12.2	11.8	13.1	13.9	13.1	12.4	12.5	12.6
Primary balance	0.0	-1.7	-2.6	-3.8	-2.4	-3.5	-2.7	-2.8	-3.0
Overall balance	-0.4	-2.1	-3.2	-4.5	-3.2	-4.2	-3.4	-3.6	-3.7
Excluding grants	-13.8	-12.9	-12.5	-13.1	-11.4	-10.1	-7.5	-7.1	-7.0
Public debt									
Public gross nominal debt	20.0	20.1	21.7	28.4	31.2	33.5	33.6	34.7	35.6
of which: external public debt	13.4	12.6	16.2	21.4	23.9	27.0	28.6	31.1	33.3
Investment and savings									
Investment	22.5	22.9	25.0	25.5	25.5	25.5	25.5	25.5	25.5
Savings [3]	5.7	4.0	6.3	9.5	6.8	9.0	11.9	12.6	13.7
External sector									
Exports (goods and services)	11.1	14.0	14.0	15.6	15.5	15.2	14.8	15.6	16.2
Imports (goods and services)	28.8	34.1	34.3	32.5	34.9	32.2	28.9	29.0	28.6
Current account balance (including grants)	-5.4	-7.2	-11.3	-7.1	-11.8	-11.0	-9.1	-9.2	-8.4
Current account balance (excluding grants)	-16.8	-18.8	-18.7	-16.0	-18.8	-16.5	-13.7	-13.0	-11.8
Gross international reserves									
In billions of US$	0.8	1.1	0.8	1.1	0.9	0.8	1.0	1.1	1.2
In months of next year imports	4.5	5.1	4.1	5.0	3.9	3.8	4.0	4.1	4.2
Memorandum items:									
GDP at current market prices									
Billion of Rwanda francs	3323	3846	4437	4864	5328	5940	6722	7590	8572
GDP per capita (US$)	570	628	688	696	…	…	…	…	…

Sources: IMF staff and authorities' estimates.

[1] Defined as excluding food and fuel.
[2] From 2014 onward, there is a substantial change in the mix between grants and loans associated with Rwanda's low debt distress risk rating.
[3] The savings rate excludes grants.