

MINISTRY OF FINANCE AND ECONOMIC PLANNING



RWANDA FISCAL RISK STATEMENT FY 2024/25

April 2024

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I. INTRODUCTION

The Government of Rwanda is publishing its 5th Fiscal Risk Statement (FRS) produced by the Ministry of Finance and Economic Planning (MINECOFIN). This publication is in line with global best practice as well as a fulfilment of Rwanda's commitment with IMF and World Bank and a continuous East African Community Monetary Union requirement.

The publication of the annual Fiscal Risk Statement outlines risks with a fiscal impact stemming from various sources and the Government's mitigating measures to reduce the impact. This demonstrates the Government's commitment to sustain its main policy objectives of promoting economic development and social cohesion whilst maintaining macro-economic stability.

For the purpose of this document, **fiscal risks refer to the possibility of deviations in fiscal variables from what was expected at the time of the budget or other forecasts**. Specifically stated, fiscal risks are events that can cause public finance outcomes to deviate from what was expected at the time of the budget, or in other macroeconomic forecasts.

Such risks include but are not limited to ***climate change, unforeseen spending pressures, revenue shortfalls, terms of trade shocks, exchange rate volatility, natural disasters, and calls on Government guarantees.***

Table 1: Fiscal Risk Framework

Macroeconomic risks	▪ Internal and External risks ▪ Macroeconomic shock simulation ▪ Fiscal analysis: forecast performance
Climate change risks	▪ Climate change fiscal risks ▪ Including on SoEs and PPPs
Specific risks and contingent liabilities	▪ Public Corporations ▪ Public debt related risks ▪ Government guarantees ▪ Public Private Partnerships ▪ Pension liabilities ▪ Local Government ▪ Financial sector ▪ Natural disasters

The overarching objective of this statement is to identify the fiscal risks facing Rwanda, and outline steps to mitigate such risks where appropriate, as sound management of fiscal risks contributes to the macroeconomic stability.

This FRS has been prepared at time when geopolitical tensions persist; including the war in Ukraine, the new conflicts in the Middle East (Gaza, etc) among others, which are exerting pressure on global economic activity, disrupting trade and slowing recovery from the COVID-19 pandemic. It is still observable that Ukraine-Russia's conflict affects the Rwanda's Economic activity in one way or another.

However, in view of the uncertainty related to the evolution of the war in Ukraine which continues to impact global commodity prices; the Government views the combined level of fiscal risks as moderate. It judges necessary to utilize fiscal and other economic policies to respond to identified risks.

The Statement groups fiscal risks into three categories: **Macroeconomic, Climate change and specific risks**. These risks are discussed in the rest of the document. Government has started to publish the Fiscal Risks Statement annually and particularly; **this Fiscal Risk Statement expanded its quantitative climate risk analysis to include SOEs and PPPs that are vulnerable to climate-related risks** as well as mitigation measures to reduce negative climate impacts.

II. MACROECONOMIC RISKS

1. Primary external and domestic risks

The main macroeconomic risks for Rwandan economic performance are largely external¹ (ongoing and arising geopolitical tensions—i.e., Ukraine Russia War and red sea conflict) and some domestic shocks, arising from global commodity prices volatility, climate irregularities, and uncertainty about committed external support disbursements.

Global commodity prices volatility creates significant uncertainty. Many raw materials and finished products used in Rwanda are imported from the region or further afield. As Rwanda is landlocked, transport costs are generally high. Coffee, tea, and some minerals are important sources of foreign exchange, but these are also susceptible to global commodity fluctuation.

The main risk on the domestic front is linked to the increasing frequency and intensity of weather and climate irregularities and shocks (e.g., drought and floods), which could harm agricultural output and thereby impact many firms and households in Rwanda. Decreased production could also lead to higher food prices to the detriment of poor households. Materialization of all domestic weather shocks would not only expose economy to higher inflation through food prices (affect household consumption and saving) but also government budget in terms of spending² and savings (from fiscal response with extra resources (external) to more borrowing and debt accumulation³). Unexpected foreign resources (grants or loan) shortfalls would have a significant impact on budget implementation and economic growth through short-term funding gaps and slow economic development activity triggered by delays in disbursements.

¹ The IMF WEO report for March 2024 entirely discussed the risks to the outlook which in turn concerns the individual countries outlook or projection.

² The April–May 2023 flood disaster increased spending related to the reconstruction efforts. The total reconstruction spending is anticipated to be around 3 percent of GDP over the next five years, of which two thirds will be executed in FY2023/24 and FY2024/25. See Rwanda Economic Update for February 2024, <https://www.worldbank.org/en/news/press-release/2024/02/28/rwanda-afe-economic-performance-strengthened-in-2023-despite-continued-challenges#:~:text=Rwanda's%20Economic%20Performance%20Strengthened%20in%202023%20Despite%20Continued%20Challenges,Share%20more&text=Kigali%2C%20February%2028%2C%202024%20%2D,infrastructure%20in%20April%2DMay%202023.>

³ On the domestic front, frequent weather-related shocks could result in a decrease in food production, and higher food prices, negatively impacting poor households—which translate into a more widening external and fiscal deficits and the depreciation of the Rwandan franc.

Ukraine-Russia and other global geopolitical tensions with macroeconomic shocks⁴

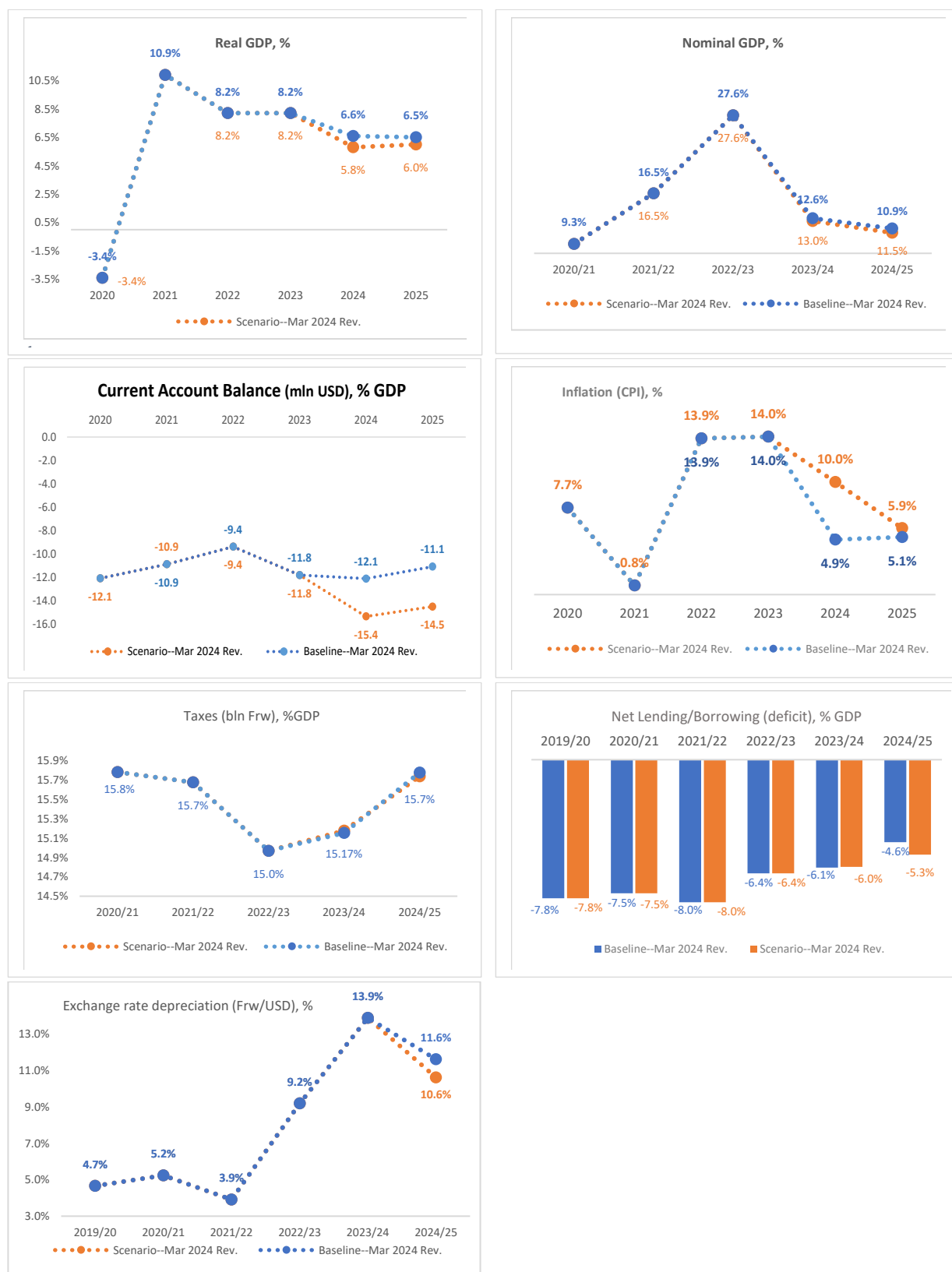
Rwanda's macroeconomic projections as of April 2024 Review Projections (baseline) took partially into account the combined effect including geopolitical Ukraine Russia War, and remaining scars from COVID-19 pandemic. A scenario was build based on April 2024 (baseline) that incorporates new identified external and domestic shocks not fully covered in the baseline (identified shocks are considered the anticipated risks to the outlook or the April 2024 Review Projections). Those risks (quantified and may lead to shocks if materialized) includes external (Ukraine Russian war and red sea conflict) and domestic (weather-climate related shocks).

In the charts below, the scenario projections (forecast) (which has additional risks/shocks not fully covered in baseline) was compared to baseline review projections (outcome) to quantitatively illustrate the main transmission channels of the effect of the risks/shocks to the domestic economy. The risks highlighted including rise of geopolitical tensions and external commodity prices, higher domestic prices from whether shocks induce, among other effects, exacerbated inflationary pressures through rise in food and energy prices (i.e., due to a lower agriculture food production and higher prices for imported petroleum products), lower real GDP through lower revenues/taxes, more deteriorated current account balance (due to higher imports bill & exchange rate depreciation) and fiscal deficit (net lending/borrowing) through higher spending & less revenues.

The resulting combined effect of the mentioned shocks, include more required extra fiscal response in terms of spending on social protection programs, government goods and services bill, interest payments and grants to local government.

⁴ The Russia-Ukraine crisis assumes a prolonged period of instability and uncertainties, plus red sea and probable East Asia tensions, drought in the South African region, all may affect the medium-term macroeconomic projections through higher inflation (higher energy, food and other commodity prices), an increase in the cost of doing business and making investment, pressures on the exchange rate as well as moderate GDP growths than previously projected.

Figure 1. Overall geopolitical tensions and domestic shocks macroeconomic effects



Source: MINECOFIN

2. Forecast performance

Forecast errors (deviations between the forecast and outcome/realizations) can also be a source of fiscal risk which due to possible events that were not taken into consideration in the past. Revenue shortfalls against forecast, or expenditure overruns, can lead to unanticipated debt borrowing. This section reviews the performance of several key fiscal and macroeconomic indicators in terms of forecasts errors between forecast against realizations.

In general, forecast performance has been satisfactory (with minor deviations) over the past several years but with several notable exceptions (outlying deviations) which are gradually minimized toward zero mainly for the post COVID-Period. The shocks used for the forecast is related to poor performance of agriculture mainly food production due to weather related shocks like heavy rains, floods and droughts (relatively longer periods of sun).

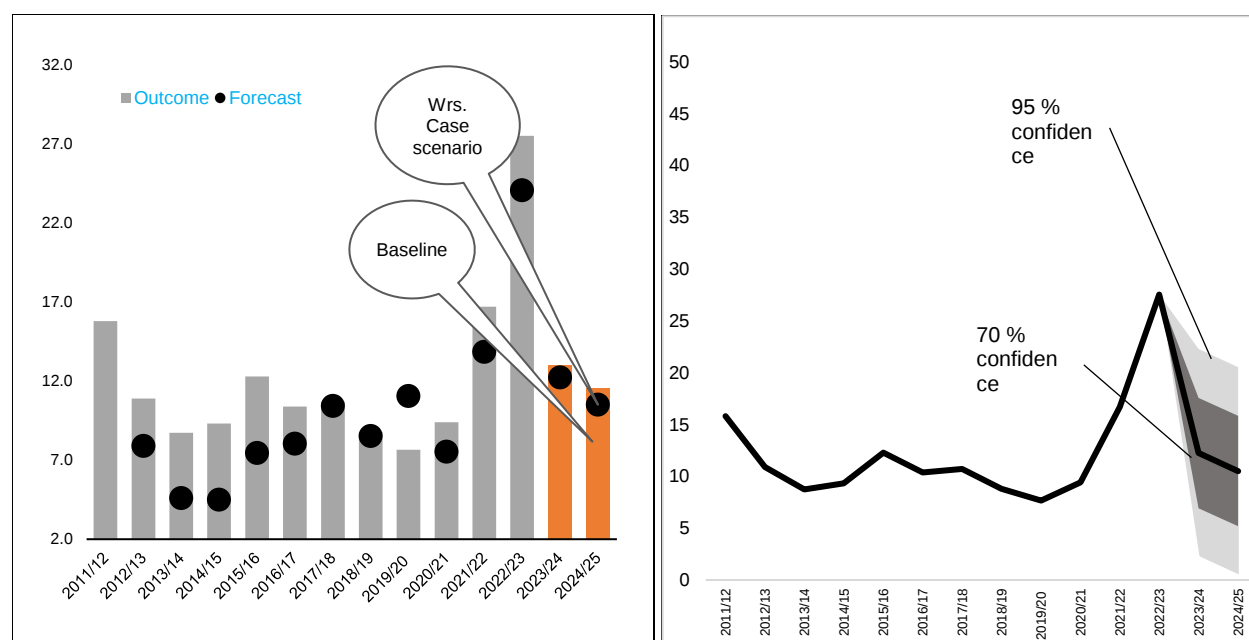
The charts below illustrate possible effects if the anticipated development takes place may lead to risk of food insecurity in the country while also exacerbating inflationary pressures. The resulting high inflation would affect spending on social protection, goods and services bill, interest payments and probably grants to local government.

Nominal GDP

Based on historical forecast errors (i.e. the difference between forecast and actual outcome), the nominal GDP growth outcome was mostly higher than projected, and forecasting performance has been improving however become a relatively lower higher for FY 2019/20 when uncertainty was high due to COVID-19 pandemic actual nominal GDP was lower than forecasted level. The forecast performance become fair normal since 2020/21 until 2023/24. For the FY 2023/24 and FY 2024/25 (starting in July 2024), for baseline, the nominal GDP growth forecasts are 44.1% and 10.1% while 43.2% and 10.2% for worst-case scenario respectively.

The worst-case forecasted nominal GDP is slightly lower than baseline (outcome) for FY upcoming 2024/25 which indicate the combined downside effects of external (Ukraine-Russian war & geological conflicts including red-sea conflicts) and domestic weather shocks through lower agricultural production). For the worst-case scenario, FY2024/25 for which agricultural production expected to worsen from rain fall condition, continued global and domestic economic and financial tightening condition suggest that the nominal GDP will grow around 10.5% within a 70% probability (Figure 1 RHS) confidence interval bands.

Figure 2: Nominal GDP growth, forecast and outcome (% change)

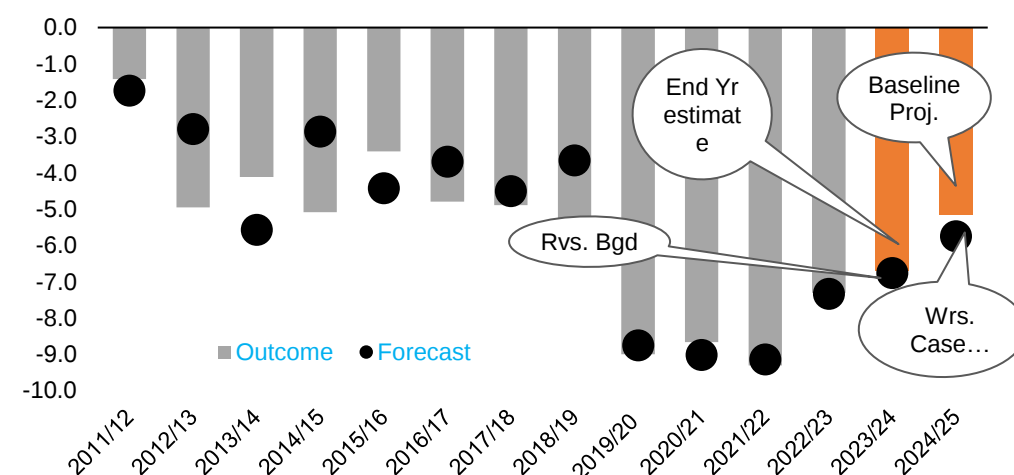


Source: MINECOFIN

Overall fiscal balance

The overall fiscal deficit (cash basis) compared between actuals (end year estimates) and forecasts (revised budget projections). In 2016/17 to 2019/20, the budget deficit was slightly larger than forecast due to increased expenditure on new recruitment in the public service and advance payment for peacekeeping operations in the pre-pandemic period and unexpected COVID-19 pandemic related costs for the government. From 2012/13 to 2014/15, volatility in foreign aid disbursements led to major deviations from the budget forecast (revised budget projections).

Figure 3: Overall balance (cash basis) forecast and outcome (% of GDP)



Source: MINECOFIN

The continued economic recovery from the pandemic is being challenged by uncertain global economic conditions and a tight financial situation. In principle, tax revenue collection would be expected to co-move with the pace of nominal GDP induced by inflation but that is breached if inflation pressures are driven by the agriculture sector which is exempted from taxes. Therefore, the end year estimate of the fiscal deficit for the FY 2023/24 was revised slightly down (6.7 Vs 6.8 percent of GDP) as a result of the changes in the external support commitments and increase in other revenues.

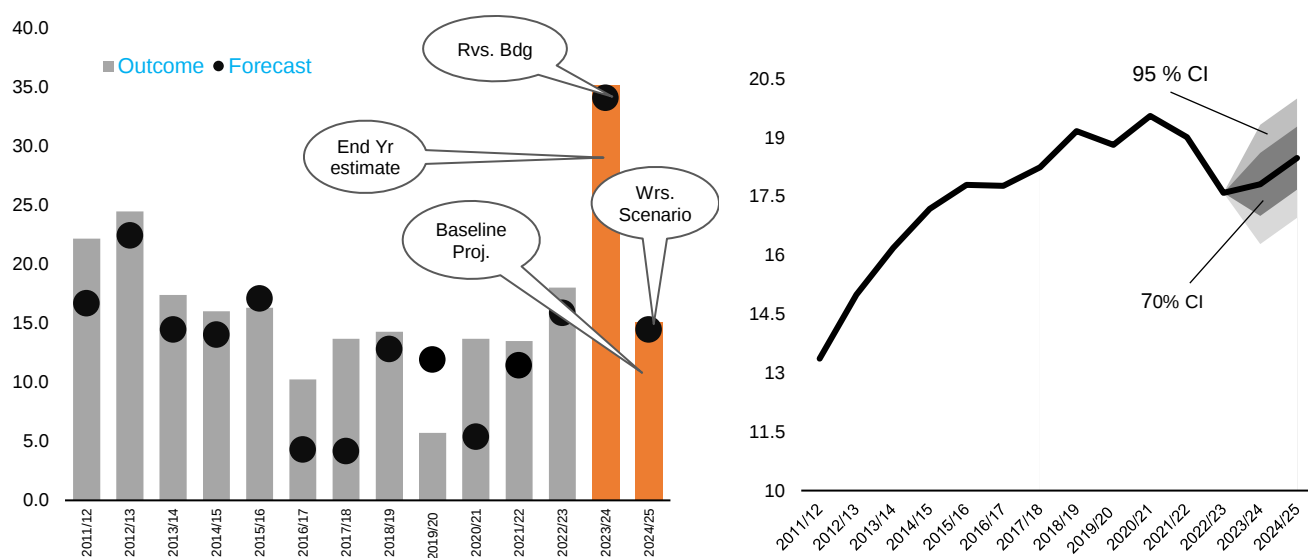
The fiscal deficit (% GDP) for FY 2024/25 (worst-case scenario) estimated 5.8 percent from 5.2 percent of baseline scenario reflecting first, the pass-through of the impact of inflation to revenues collection as tax revenues not significantly changed since increase in nominal tax base due to inflation does not proportionally benefit tax revenue collection and second, the increased government spending as simulated fiscal response to risks and climate/weather induced shocks, and third a lower nominal GDP than baseline as deficit measured as ratio to GDP.

Revenue

The total domestic revenue is a combination of tax and non-tax revenue excluding grants. Tax revenues are highly sensitive to macroeconomic changes and effective revenue administration measures by the Rwanda Revenue Authority. The MINECOFIN estimations of elasticity show that for every percentage point increase in nominal GDP growth, tax revenue increases by 1.1 percent which emphasize the importance of accurate macroeconomic forecasting in the budget process estimates.

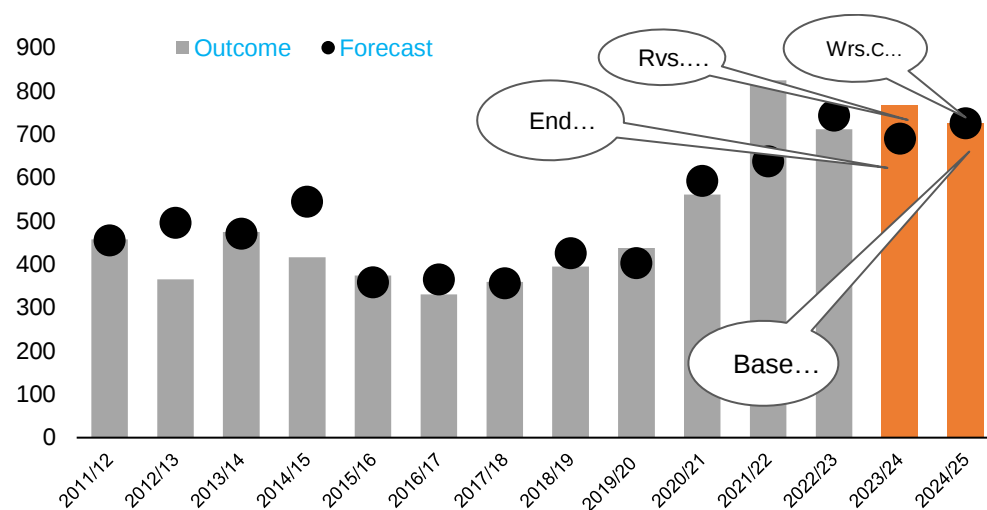
The better-than-expected revenue performance over the three years to FY 2016/17 to FY 2018/19 (before contraction during Covid-19 and regained the normal performance post-Covid-19) is largely explained by an association of continued structural administrative measures implemented by Rwanda Revenue Authority and with structural tax policy changes that generated additional revenue. For FY 2019/20 revenue forecasts were conservatively pessimistic following the uncertainty associated with COVID-19 pandemic, which became a little optimistic as the pandemic fades and recovery takes over. Reimbursements from Rwanda's participation in United Nations peacekeeping operations have been significantly contributing to the performance of the non-tax revenue.

Figure 4: Revenue growth (% change) forecast and outcome



Source: MINECOFIN

Figure 5: Grants forecast and outcome (FRW billions)



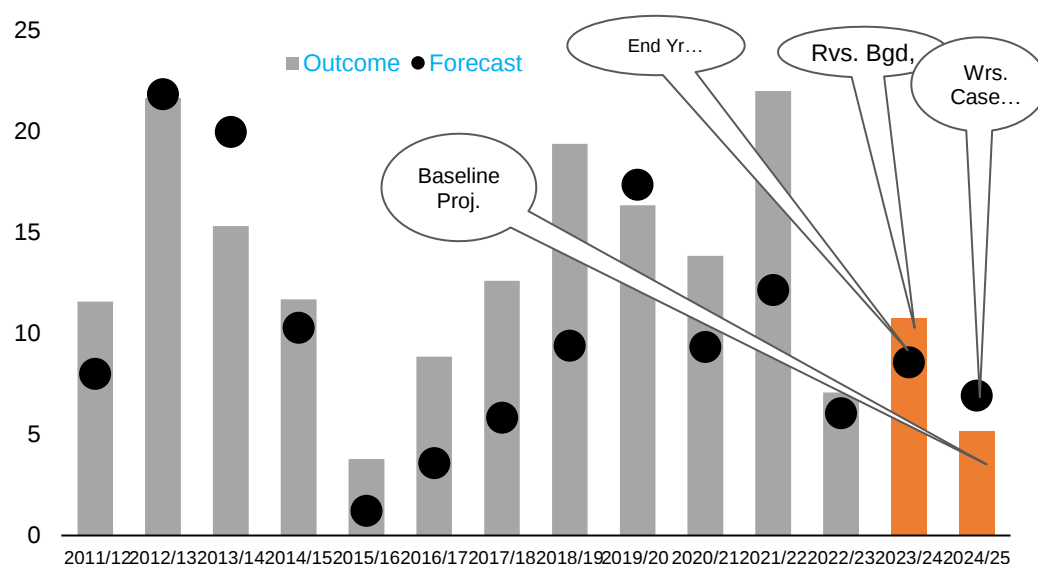
Source: MINECOFIN

The above projection revenue growth for end FY 2023/24 to FY 2024/25 estimate is a result of the expected continuing economic recovery from the pandemic, different government revenue reforms and revenue policies and administration measures. Figure 3 shows a confidence interval with 70 percent probability that the revenue-to-GDP ratio will be between 17 and 18.6 percent in FY 2023/24 and 17.6 and 19.2 percent in FY 2024/25 impacted by high inflation not benefiting tax revenues. Grants revenues forecasting has kept its improved performance in recent years (Figure 5), following sharp deviations in 2012/13 and 2014/15.

Expenditure

Expenditure growth outcomes have been higher than forecasted for the past 5 years of pre-COVID-19 period FY 2019/20. This reflects unexpected expenditure on wages and salaries of some ministries and agencies due to the restructuring and establishment of new institutions. For the FY 2019/20 due to COVID, government operations were lower due to not operating at full capacity of all economic activities.

Figure 6: *Expenditure growth forecast and outcome (Percentage)*



Source: MINECOFIN

In FY 2020/21, the government expenditure was higher due to higher COVID-19-related spending including vaccines and building other health facilities which continued in the FY 2021/22 as well. In FY 2022/23, government expenditure was higher due to response to weather shocks including floods which took place in May 2023 in terms of provision of relief items to victims such as foods, temporary accommodations and medical items.

In FY 2023/24, expenditures (actual realizations or end year estimates higher than October 2023 forecast (revised budget) are expected to continue to grow higher than previous fiscal year. However, the government realization expenditure for FY 2024/25 5.2 less than that 10.8 for FY 2023/24 following first the COVID-related spending was fading and second the fiscal government measures regarding fiscal consolidation in terms of cutting on spending and spending reallocation or reprioritization. The government expenditure growth forecast (worst-case scenario) for FY 2024/25 shows 6.9 percent from just 5.2 percent of baseline (which is the baseline projection before the simulation of the shocks) following the increased government spending for 2024/25 as a result of simulated responses to shocks (in terms of spending in grants to local government, use of goods and services, social benefits and capital expenditure need to cop up with shocks). The increased government spending on goods and services and capital investment is associated to external risks (i.e., higher commodity prices imports)

in terms of imports bill (consumer, energy and capital goods) and exchange rate depreciation.

III. QUANTITATIVE CLIMATE CHANGE FISCAL RISK ANALYSIS

Climate change in Rwanda

Rwanda is experiencing rising temperatures, in line with global and continental patterns, and while rainfall has remained steady, its pattern through the year has become more extreme. Average temperatures are approximately 1.25 to 1.5°C higher than pre-industrial times and have accelerated since the 1990s. More detailed analysis reveals some regional variation in rainfall and an intensification of rainfall extremes, but no changes in droughts. These trends are consistent with broader regional patterns.

The main climate-related natural disasters that adversely affect the population are floods and landslides, with prolonged dry seasons more frequent and drought also possible. Floods and landslides in particular are associated with loss of peoples' lives, damages to infrastructure, crops and livestock, soil erosion, water pollution, etc.⁵ An example is the May 2023 disaster caused by extreme rainfall, flooding and landslides especially in the north west of the country characterised by steep topography. It is key to note that, such disasters, are a result of not only intensifying climate change phenomena but also land-use as economic development goes on.

A further rise in temperature across Rwanda is expected in coming years. The exact change will depend on the global efforts to reduce emissions. Best estimates based on plausible emission scenarios indicate a potential for additional warming of between 1 and 3°C, but higher warming cannot be ruled out.

Precipitation scenarios are very uncertain, with extremes in rainfall over short periods expected to become more frequent. Projections of droughts at national level are very uncertain, but they can increase locally, especially in the eastern part of the country. High global emission scenarios and a more accentuated warming response can lead to emerging risks from extreme temperatures and an intensification of precipitations in the second half of the century.

Long-term climate change fiscal risks

Rising temperatures associated with climate change will have increasing long-term impacts for both the economy and sustainability of the public finances, increasing fiscal risks. The impact of higher temperatures on economic growth is assessed based on empirical analysis of past temperature changes on growth, and the consequent impact of slower economic growth on fiscal projections to assess building fiscal pressures. The assessment of the impacts of climate change is undertaken through to the end of the century, given the long-term implications of climate change on the economy and public finances.

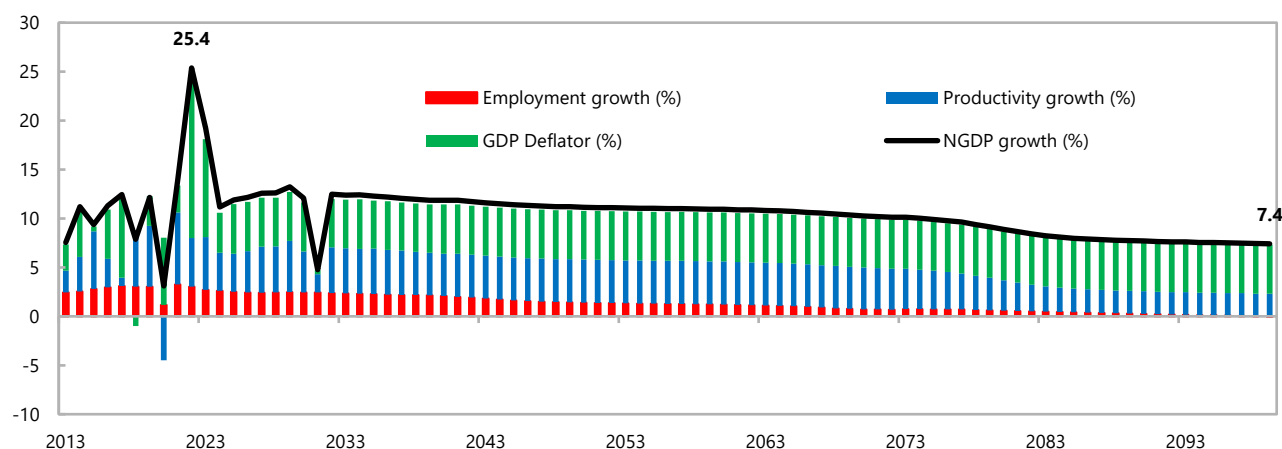
The analysis demonstrates the impact of four different scenarios of increasingly severe climate change impacts, against a baseline which reflects the continuation of the

⁵ (GoR, 2017b; REMA, 2015).

current economic and fiscal path in the absence of further climate change. The scenarios are:

- **Baseline scenario:** the continuation of unchanged current economic and fiscal policies (business as usual) and observed climate trends. The key drivers of long-term economic growth are the economic fundamentals of growth in working-age population and participation (the level of employment) and productivity (output per person). The decomposition of long-term growth is given in Chart 1.
- **Paris:** based on the SSP1-2.6 IPCC scenario and keeps global temperature increase above its pre-industrial level below 2°C at the end of the century.⁶
- **Moderate:** based on the SSP2-4.5 IPCC scenario. Global emissions continue increasing in line with the continuation of present trends and stabilize at the end of the century. This scenario assumes that climate mitigation policies continue along the observed trend but countries do not take more aggressive actions to fulfill their Paris commitments.
- **High:** based on the SSP3-7.0 IPCC scenario. Rather than intensifying climate mitigation efforts, countries start scaling back their implemented policies in a world with limited energy efficiency improvements and continued use of fossil fuels.
- **Hot:** global emissions are as in the *high* scenario, but it uses the 90th percentile of temperature increases among all climate models that used SSP3-7.0 emissions, instead of the average temperature projection.

Figure 7: *Decomposition of Nominal GDP Growth and Drivers*



⁶ The IPCC calculates warming at the end of the century by comparing 2081-2020 average temperature to average temperature in the pre-industrial period. The increase in temperature for each scenario in this section is the IPCC “Best Estimate”, which is the average of the projected temperature increase over all climate models for a specific emission scenario.

The impact of climate change reduces GDP growth through several transmission channels, with more severe climate impacts associated with larger reductions in GDP. Key transmission mechanisms include:

- **Higher depreciation of the public and private capital stock.** Higher and more volatile temperatures and changing precipitation will degrade roads, power transmission lines, machinery and equipment, while floods and landslides can damage or destroy assets (as was the case in 2023's devastating flooding), all of which degrade the capital stock.
- **More frequent and severe climate induced natural disasters.** Rwanda experiences floods, droughts and landslides. Increases in the frequency and severity of these events would be expected to lead to more adverse economic outcomes.
- **Reduced hours worked and effort.** Hotter days can reduce productivity, by reducing the number of days or hours employees are able to work effectively and may also result in worsening health outcomes (including through increased spread of diseases such as malaria), although the impact would be expected to be relatively subdued given Rwanda's temperate climate.
- **Other longer-term effects on economic structure and productivity.** For example, in a relatively worse climate scenario, particular sectors can be adversely affected such as high value-added agriculture (reduction in yields) or tourism. As a country highly dependent on both sectors, this could have a significant impact in Rwanda.

Macroeconomic impacts of climate change⁷

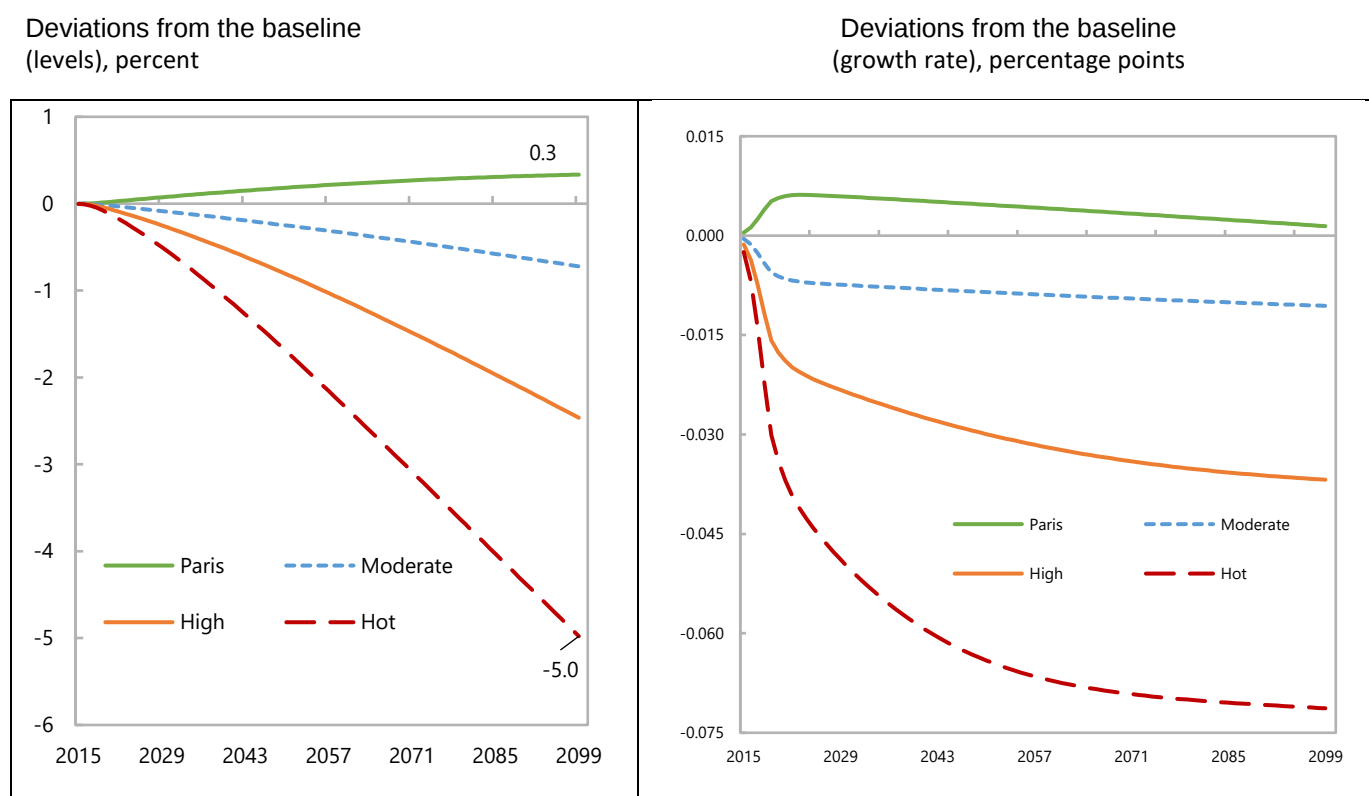
The **Quantitative Climate Change Risk Assessment Fiscal Tool (Q-Craft)** has been refined since the previous version used in producing Fiscal Risk Statement (FRS) of the FY 2023/24. The main improvements are:

- The **Primary expenditure** is **dynamic** while before it was **constant**. Its growth is now determined by inflation, productivity, and total population;
- There is an option to impose a debt ceiling in the baseline scenario;
- Slight changes in the way **productivity, interest rate** and **inflation** projections are simulated.

Apart from the Paris scenario, which sees a marginal improvement in GDP growth and level, under each of the climate change scenarios there is a compounding reduction in annual GDP growth and the level of GDP. Under the hot scenario, GDP growth would be 0.04 percentage points lower than baseline by 2024, and continue to decline by 0.07 percentage points a year lower than baseline by 2073, which would compound to a level of GDP that is 3.3 percent lower than baseline by 2073 and 5 percent lower by 2100 (Figure 1).

⁷ Based on updated Macro data as of March 2024, Climate estimate by UN as of 2023.

Figure 8: Macroeconomic Effects of Climate Change



Effects of climate change on fiscal projections

Based on an assumption of dynamic expenditure against baseline, and declining revenue in line with the lower levels of GDP, the primary deficit increases under each scenario except Paris, leading to an increase in net borrowing and the debt to GDP ratio. In line with the relatively modest impact on GDP, these adverse fiscal consequences remain relatively moderate (Figure 8), but would still require some fiscal adjustment to ensure finances remain on a sustainable path.

Figure 8: Effects of Climate Change on Fiscal Projections (2013-2099)



Under the hot scenario, the primary deficit in 2073 increases to 2.9 percent of GDP from 2.2 percent of GDP under the baseline. The increase in the primary deficit leads to an increase in borrowing under all scenarios, and the debt to GDP ratio begins rising from 2042 and would rise above the current anchor of 65 percent by 2070. Under the hot scenario, the debt to GDP ratio reaches 66.8 percent of GDP by 2073, 10.1 percent of GDP higher than baseline. The fiscal effects of climate change become more visible by the end of the century, where under the hot scenario the primary deficit is 3.9 percent of GDP and the debt-to-GDP ratio would reach 83.4 percent.

The baseline scenario requires a modest fiscal consolidation of around 0.1 percentage points of GDP to ensure a stabilization of the debt to GDP ratio. Climate change would add to this burden but appears manageable. Under the hot scenario, fiscal consolidation

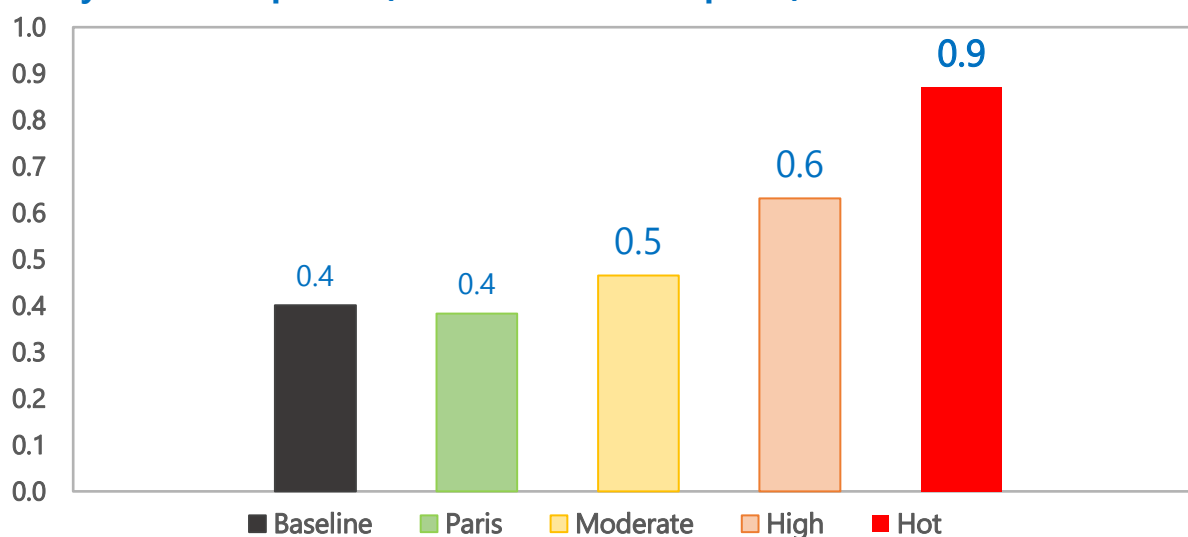
required would be 0.5 percent of GDP by 2073, rising to 0.9 percent of GDP by 2099 (Table 1). Adjustment of either expenditure or revenue through the projection period would reduce the end level of consolidation required.

Table 2: Recalibration requirements to stabilize the debt to GDP ratio

Scenario	2050			2073			2099		
	PB	PB*	Task	PB	PB*	Task	PB	PB*	Task
Baseline	-2.1	-2.0	0.1	-2.2	-2.1	0.1	-2.7	-2.3	0.4
Paris	-2.1	-2.0	0.1	-2.1	-2.0	0.1	-2.6	-2.3	0.4
Moderate	-2.1	-2.0	0.1	-2.3	-2.1	0.2	-2.9	-2.4	0.5
High	-2.2	-2.0	0.2	-2.5	-2.2	0.3	-3.3	-2.6	0.6
Hot	-2.4	-2.0	0.3	-2.9	-2.4	0.5	-3.9	-3.0	0.9

All in percent of GDP. PB = primary balance. PB* = debt-stabilizing primary balance.
Task = fiscal consolidation needed to stabilize the debt-GDP ratio.

Primary balance Gap 2099 (i.e. Consolidation required), %NGDP



Specific Fiscal Risks

Specific fiscal risks arise from the exposure of the government budget to natural hazards and climate change risks. A specific risk relates to a situation that may or may not occur but if it did could adversely affect the government's assets and liabilities and its spending and revenues.

There are two key types of fiscal risks of concern:

- **Direct physical risks**, for example landslides causing damage to key public infrastructure. These risks can be acute because of extreme weather events, or chronic because of gradual changes to the environment that could result in an increase in the number or severity of natural hazards.
- **Transition risks** that may arise when transitioning to a carbon-neutral economy, which could affect the value of government assets, and the potential need for support to adjust operations to climate-neutral production, outside of current transition plans.

While the overall fiscal risks from the macroeconomic effects of climate change are expected to be relatively modest, at least over the next 30 years, the impact from specific fiscal risks could be significant. These risks are already being felt with unprecedented amounts of rain falling on 2-3 May 2023, causing devastating flooding and landslides that cost lives, and damaged homes, infrastructure, and livelihoods.

Rwanda is particularly subject to floods and landslides (in the Western and Northern regions), and to a lesser extent prolonged dry spells and drought in Eastern region. Other climate related hazards such as wildfires and extreme temperatures are considered a lesser risk in Rwanda. These events can have a severe impact on government-owned assets and finances, for example through the destruction or impairment of those assets (either those that are directly owned, like the roads network, or that are owned through SOEs and PPPs, like the power and water/sanitation sectors), and through a requirement for government to support affected communities. These channels of fiscal risk have all been experienced over the past year as a consequence of the severe flooding and landslides in May 2023.

Direct Risks

Transport infrastructure is probably the most significant source of climate-related fiscal risk in Rwanda. The roads network is particularly vulnerable to landslides during periods of heavy rainfall and flooding. In the May 2023 floods, damaged infrastructure included 20 national roads, 21 district roads and 47 bridges, with transport infrastructure accounting for 60 percent of the overall estimated loss and damages. The cost of reconstruction and improving climate resilience falls to the government, with financial and other support from development partners.

Agriculture accounts for almost 43.5%⁸ of employment in Rwanda. Agricultural production and assets are at risk from flooding and landslides, prolonged dry seasons, and drought. The May 2023 flooding and landslides caused tremendous damages to both crop and livestock farming. Support for those affected included foodstuffs, seeds and fertilizers, livestock restocking, and rehabilitation of damaged infrastructure. Material costs have fallen to the government, with support from development partners.

SOEs & PPPs

All public investments are financed through the government development budget, with a portion allocated to fund Public Corporations' capital stock. These corporations play a crucial role in delivering and operating critical infrastructure and services, despite many of them exhibiting poor financial performance. Climate change can be expected to exacerbate the fiscal risk posed to the government. This is especially the case for the energy and water sectors, where SOEs dominate production and supply. Weak financial performance of an SOE (as noted in section III) is likely to increase the fiscal risk to government as the SOE is less likely to be able to absorb climate-related shocks.

Seven key sectors have been identified as being subject to climate change risk. These are energy, water and sanitation, transport, agriculture, tourism, construction and health. Measured by the size of SOEs' balance sheets, the SOE sector is dominated by three sectors: transport (RwandAir and airports); energy (Rwanda Energy Group); and tourism (Prime Holdings and Ultimate Concepts). The water and sanitation sector (WASAC) are comparatively relatively small, but remains a significant fiscal risk given its role as a critical utility and poor financial performance. As described in section III,

⁸ Labour Force Survey, Annual report 2023

PPPs are dominated by power purchase agreements in the energy sector, which account for 54 out of 59 PPPs and \$2.1bn out of \$2.3bn of project value associated with PPPs. Table 2 provides details of the main SOEs operating in each sector, key climate change risks, financial exposure and climate and fiscal risk mitigation measure.

Overall, among the 10 State-Owned Enterprises (SOEs) analyzed, REG and WASAC are the most exposed to climate-related risks. Their operations would be significantly disrupted by common climate shocks, such as floods, landslides, and droughts.

The other SOEs listed in Table 3 are less vulnerable to climate events. This is either because they have mitigation systems in place (e.g., Bella Flower, Gabiro Agri Holding) or because their direct exposure to climate events can be relatively contained through the implementation of specific resilience and adaptive measures (e.g., ATL & RwandAir, Prime Holdings, RITCO, and King Faisal Hospital).

Regarding Public-Private Partnerships (PPPs), they are mainly concentrated in the energy sector. The climate-related fiscal risks associated with PPPs are equally high due to the high climate risk exposure observed in the energy sector.

Table 3: Specific Climate Change Fiscal Risks from SOEs and PPPs

Sector	SOEs / PPPs	Climate impact	Exposure	Risk management measures	Rank
Energy	REG (Electricity generation, distribution and sales)	<i>Flood, landslides and drought:</i> Hydro dominated power generation is at risk of both floods and drought which impair the ability to produce energy due to siltation or loss of reservoir storage capacity. Alternative energy sources such as peat are unable to be harvested during flooding. Structural damage to dams, hydro plants and transmission and distribution assets can occur during flooding and landslides.	SOE fixed assets: FRW bn 836.40 (5.47% of GDP) Total borrowings: RWF bn 265.28 (1.74% of GDP), of which guaranteed debt RWFbn15.3 (0.1% of GDP).	<i>Climate risk reduction:</i> Expansion of the hydro network through IPPs (which will double existing hydro generation capacity) will reduce risks by raising the share of renewables generation and reducing the average unit cost across all generation capacity. <i>Fiscal risk reduction:</i> The ability to access electricity from the East Africa interconnector reduces the need to use high-cost alternative power sources	High
	Energy PPPs	<i>Flood, landslides and drought</i> The vast majority of PPPs in Rwanda are in the energy sector through Independent Power Producers (IPPs) and Power Purchasing Agreements (PPAs), most of which are involved in hydropower production. These are subject to the same risks as own-source generation above.	Total PPA project values: FRW 2251.37 bn (14.7% of GDP)	<i>Climate risk reduction:</i> Development of dams and infrastructure design to increase resilience to drought and mitigate flood risks. Tree planting in key areas to mitigate risk of landslide and siltation. <i>Fiscal risk reduction:</i> PPAs only require payment for power produced, which limits fiscal exposure to PPAs where domestic generation is unavailable.	Medium
Water	WASAC (Water and sanitation generation, distribution and sales)	<i>Flood, landslides and drought</i> Floods and landslides result in damage to operations through reducing available water or requiring additional purification at higher cost. Both can also cause damage to infrastructure, including treatment plants and distribution assets.	SOE fixed assets: FRW bn 220.42 (1.44% of GDP) Long-term liability: RWF bn 116.24 (0.76% of GDP)	<i>Climate risk reduction:</i> The newly created Directorate of R&D is drafting a climate resilience and action plan. Climate resilience is being mainstreamed in all projects. Development of new dams to increase resilience to drought and mitigate flood risks. Tree planting in key areas to mitigate risk of landslide and siltation. <i>Fiscal risk reduction:</i> Improving profitability through improving the distribution network to reduce non-revenue water losses, which would reduce overall fiscal risk.	High
	WASAC – Kigali Bulk Water PPP	Flooding means Kigali Bulk Water cannot produce water.	Total PPP project valued at RWF 75.5 bn	<i>Fiscal risk reduction:</i> Purchase agreement already structured to minimize risk from variable output.	Medium

Health	KFHR (Referral and teaching hospital)	<i>Disease</i> Exposed via vector-borne diseases that could become more prevalent due to climate change. Fiscal risk because services are provided at a loss. <i>Natural hazards</i> Drought causing water scarcity or poor water quality can affect vital hospital operations. High temperatures can cause heat stress for patients and affect patient care.	SOE fixed assets: FRW bn 32.9 (0.22% of GDP) Long-term liability: RWF bn 24.5 (0.16% of GDP)	<i>Climate risk reduction:</i> Improve operations to make it climate resilient including water conservation and green building design in construction of the expansion. <i>Fiscal risk reduction:</i> KFHR to opt for a disaster risk transfer mechanism such as insurance.	Low
Agriculture	Bella Flowers (Production and export of roses)	<i>Irregular rainfall and temperature patterns</i> Adversely affects flower production, through negative impacts on flower blooming, flowering periods, flower size, and abnormal color development (particularly in open field conditions). The increased prevalence of pests is a further risk to production.	SOE fixed assets: FRW bn 10.9 (0.07% of GDP) Long-term liability: RWF bn 3.9 (0.02% of GDP)	<i>Climate risk reduction:</i> The use of greenhouses, irrigation and pest-management systems mitigates risks associated with irregular rainfall and temperature patterns. Diversification of flower-varieties to include climate-resilient varieties is being explored. <i>Fiscal risk reduction:</i> Strengthen financial position through improving operations and profit, particularly through sourcing chemicals and fertilizers locally and negotiating long-term contracts with key suppliers.	Low
	Gabiro Agri Hub (Provision of 'ready-to-farm' land for agribusiness)	<i>Drought</i> Assets in the Eastern Province where Gabiro is situated are vulnerable to drought, which affects water availability for irrigation and hence agricultural productivity. Higher temperatures increase the deterioration of roads, buildings and other agricultural infrastructure. <i>Flooding</i> Increased frequency and intensity of heavy rainfall can lead to flooding, damaging infrastructure such as irrigation systems, roads, and storage facilities.	SOE fixed assets: FRW bn 88.9 (0.58% of GDP) Total liability (short-term liabilities): RWF bn 9.8 (0.06% of GDP)	<i>Climate risk reduction:</i> GAHL has invested in resilient infrastructures such as dams, canals, irrigation systems, roads and electricity network to mitigate the effects of climate change. <i>Fiscal risk reduction:</i> Insurance coverage has been purchased in case of extreme weather events. Access is also available to disaster risk financing such as Africa Disaster Risk Financing (ADRF) and National Agricultural Insurance Scheme.	Low
Transport	Rwandair (Air transport provider)	<i>Natural hazards</i> Climate events such as increased turbulence, higher temperatures and severe precipitation affect airline operations, damaging assets and leading to increased	SOE fixed assets: FRW bn 114.06 (0.75% of GDP) Liability: RWF bn 260.24 (1.70% of GDP) in borrowings, FRW bn	<i>Climate risk reduction:</i> Mitigate the impact of natural hazards on operations through investing in climate resilient infrastructure to reduce weather related disruptions, investing in fuel efficient technologies and diversifying routes and operations.	Medium

		costs. Increased climate events could disrupt tourism related activities. <i>Regulatory environment</i> International regulations to address climate change and greenhouse gas emissions may lead to higher costs for fuel and other operating expenses and reduce demand for air travel.	254.71 in other liabilities. FRW bn 26.6 in guaranteed loans.	<i>Fiscal risk reduction:</i> Strengthen fiscal performance through cost reduction, diversifying revenue streams, accessing insurance and consideration of fuel hedging.	
	ATL/ Airport	<i>Natural hazards</i> Climate events such as temperatures, precipitations and winds affect airport infrastructure and operations, leading to increased costs. Wider effect on natural environment could reduce demand for tourism related travel. <i>Regulatory environment</i> International regulations to address climate change and greenhouse gas emissions may lead to higher costs for fuel and other operating expenses and reduce demand for air travel.	SOE fixed assets: FRW bn 411 (2.69% of GDP) Liability: RWF bn 363 (2.38% of GDP) in guaranteed loans.	Climate risk reduction: Mitigate the impact of natural hazards on airports infrastructure and operations through investing in climate resilient infrastructure to reduce weather related risks. <i>Fiscal risk reduction:</i> Strengthen fiscal performance through cost reduction, diversifying revenue streams, accessing insurance and consideration of fuel hedging.	Medium
	RITCO (Rural bus service provider)	<i>Flooding and landslides</i> Damage to roads and bridges disrupts bus operations and revenue. Increased maintenance and repair costs for bus fleet.	SOE fixed assets: FRW bn 4.6 (0.030% of GDP) Long-term liability: RWFbn3.9 (0.026% of GDP)	<i>Climate risk reduction:</i> Explore options to upgrade vehicle fleet to reduce carbon emissions and dependency on fossil fuels. To benefit from government efforts to strengthen transport infrastructure and reduce risk of flooding and landslides (especially in north and western part of Rwanda). <i>Fiscal risk reduction:</i> Explore options to diversify revenue streams and access insurance options for climate related events.	Low
Tourism	Prime Holding (Provision of hotel and other buildings to promote tourism)	<i>Degradation of natural environment</i> Extreme weather events and environmental degradation limit the appeal of tourism destinations, which is particularly critical for Kenya natural environmental resources are a key driver for tourism. This leads to decreased visitor numbers and revenue. <i>Floods and landslides</i> Some PHL properties are at more at risk of structural damage from these events (e.g.	SOE fixed assets: FRW bn 67.23 (0.44% of GDP) Long-term liability: RWF bn 19 (0.12% of GDP)	<i>Climate risk reduction:</i> Improving building resilience to extreme weather events and investment in flood prevention mechanisms, and mitigating risk of vector borne diseases through improving ventilation and pest control. Concentration on business related events reduces risk from any climate-related tourism downturn.	Medium

		Serena Kivu due to its low-lying aspect and lake proximity). <i>Disease</i> Higher incidence of vector-borne diseases would reduce tourism demand.		<i>Fiscal risk reduction:</i> Explore options to diversify revenue streams and access insurance options for climate related events.	
Construction	Horizon Construction (Construction for infrastructure development including road, housing, energy and water resources)	<i>Flooding and landslides</i> Construction is vulnerable to these events which can disrupt construction schedules, damage infrastructure and increase project costs. Globally other climate events can disrupt supply chains. This can lead to project delays and increased costs. <i>Regulatory environment</i> Changing rules to provide for climate resilient design and work practices can increase costs. Higher cost of insurance due to increased frequency of climate related events.	SOE fixed assets: FRW bn 8.4 (0.06% of GDP) Long-term liability: RWF bn 5.03 (0.03% of GDP)	<i>Climate risk reduction:</i> Strengthen capacity to deliver climate resilient infrastructure and incorporate design and cost into contract. <i>Fiscal risk reduction:</i> Explore options to diversify revenue streams and access insurance options for climate related events.	

IV. SPECIFIC RISKS AND CONTINGENT LIABILITIES⁹

1. Public Corporations

There are currently 34 public corporations, comprising 28 non-financial corporations and 6 financial corporations, as listed in the table below. These entities play a crucial role in executing the government's socio-economic policies and strategies. Government business enterprises operate across various sectors and are exposed to diverse types of risks.

Table 4: Public Corporations Classification

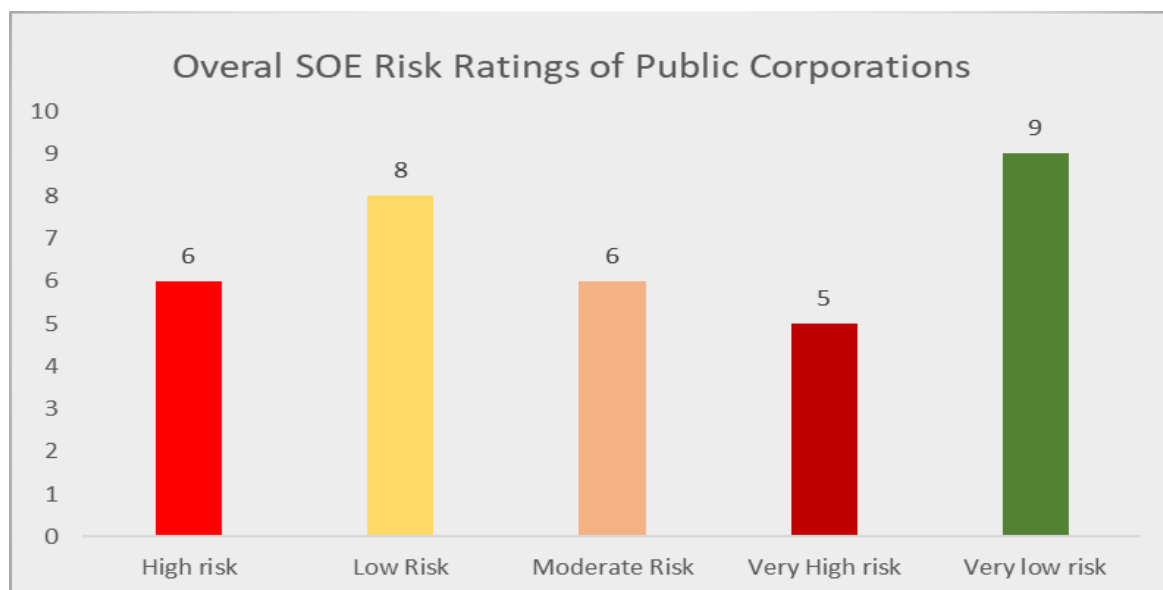
Non-Financial Public Corporations	28
Non-commercial Public Institution	4
State-Owned Companies	24
Special Organs	0
Financial Public Corporations	6
Non-commercial Public Institution	1
Commercial State-Owned Companies	2
Special Organs	3
Total	34

Source: MINECOFIN

1.1 Health Check: General overview of Public Corporations risk ratings

Conducting health checks on Public Corporations aids in evaluating the fiscal risk exposure of state-owned companies. This assessment entails examining the financial performance and position of these entities to gauge their overall financial health. Through such evaluations, a comprehensive picture of Government investment risk exposure is depicted, encompassing both collective and individual enterprise analysis.

⁹ Contingent Liabilities are obligations that arise or are triggered by discrete but uncertain future events that may or may not occur in the future. Realisation of these risks may require the Government to make substantial and unexpected payments.

Figure 9: Public Corporations risk rating¹⁰

Source: SOEs Health check

The figure above illustrates the comprehensive risk ratings. Each individual enterprise's risk exposure is evaluated across various categories, including profitability, solvency, and liquidity, resulting in an overall risk assessment. Among the companies examined, nine enterprises were classified as having very low risk, eight as low risk, six as moderate risk, six as high risk, and five as very high risk.

It is crucial to note that the health check revealed that the six enterprises rated as high risk and the five rated as very high risk often exhibit very high risk across multiple scrutinized categories, such as liquidity, solvency, and profitability. Therefore, a more thorough examination is necessary to understand the underlying causes of these risks and recommend appropriate remedial actions.

Health Check: Sectoral Analysis

At the sector level, the table below demonstrates that losses, debt accumulation, and liquidity challenges are predominantly concentrated in the transport, infrastructure, health, and agribusiness sectors.

Table 5: States Owned Enterprises Sectoral analysis

Sector	SOE	Profitability		Liquidity		Solvency	
		Return on Assets	Return on Equity	Current Ratio	Quick Ratio	Debt to Assets	Debt to Equity
Transportation	ATL	5%	19%	62%	45%	74%	285%
Infrastructure/Utility	REG	-3%		108%	83%	106%	
	WASAC	0.01%	0.03%	214%	250%	83%	480%
Health	King Faisal Hospital	-3%	-15%	42%	34%	81%	431%
Agribusiness	Bella Flowers Ltd	-16%	-31%	20%	10%	50%	99%

Source: MINECOFIN

Health Check: Quasi-fiscal activities

Table 6: Public Corporations with quasi-fiscal activities (billion Frw)

		2019	2020	2021	2022	2023
Rwanda Energy Group	Total Revenue	130.8	148.9	155.4	177.7	230.9
	Government Grants Received	34.1	39.9	36.0	42.7	53.2
	GoR Contribution (%)	26%	27%	23%	24%	23%
Water and Sanitation Corporation	Total Revenue	30.7	35.8	37.7	38	42.0
	Government Grants Received	10.4	13.9	13.6	7.9	8.6
	GoR Contribution (%)	34%	39%	36%	21%	20%
RwandAir	Total Revenue	334	300	271	341	620.6
	Government Grants Received	131	132	146	144	192.3
	GoR Contribution (%)	39%	44%	44%	42%	31%
Aggregate	Total Revenue	513.7	490.9	486.4	581.7	893.41
	Government Grants Received	181.5	182.2	201.9	210.4	254.09
	GoR Contribution (%)	35%	37%	42%	36%	28%

Source: MINECOFIN

The infrastructure sector, encompassing energy and transport, along with key state-owned companies such as Rwanda Energy Group (REG), Rwandair, and Water and Sanitation Corporation, receive significant government subsidies and grants owing to their pivotal role in the country's development.

It's noteworthy that these highlighted state-owned companies are progressively reducing their fiscal risks by augmenting their own revenues. Particularly, Rwandair and REG saw substantial increases in their revenues, with Rwandair's revenue soaring by 82% and REG's by 30%. Overall, the GoR contribution to the sector is also decreasing from 36% in 2022 to 28% in 2023

1.2. Stress test

In response to the concerning financial health outlined in the health check, a stress test was initiated. The stress test aims to comprehensively examine the root causes behind the negative performance and deteriorating financial position of King Faisal Hospital and Bella flowers ltd. This analytical process facilitates the assessment of various scenarios, illustrating the financial impacts of economic shocks in terms of nature, size, and duration.

2. Public debt related risks

This section analyses four major risks associated with Rwanda's public debt portfolio, as well as the corresponding mitigating measures. The main risks include: (1) refinancing risk, (2) interest rate risk, (3) foreign currency risk, (4) as well as risks associated with Debt Sustainability.

Sustainability Risk:

Overall, Rwanda's public debt keeps increasing with nominal debt to GDP ratio standing at 73.5 per cent as of end December 2023 (equivalent to 44.9% in Present value terms)

vs 67.5 per cent as of end December, 2022. However, Rwanda's debt policy remains Sustainable with moderate risk of debt distress largely owed to the continuous concessional nature of the portfolio (88.9% of total External debt).

The latest Debt Sustainability Analysis (DSA) conducted in March 2024 revealed that public debt will be maintained at a manageable level with all indicators remaining below the Thresholds (limits). The PV of external debt-to-GDP remains below the respective threshold (50 percent of GDP – EAC convergence criteria/55 percent as per the IMF/WB debt sustainability Analysis) with 31.2 percent of PV of external debt to GDP for the end year 2023 and 37.9 percent projected for the end year 2024.

Despite Rwanda's relatively positive outlook, there are still several risks associated with the global macroeconomic environment that could affect the country's debt sustainability like tightened global financial conditions which are pushing the cost of borrowing up, geopolitical tensions and decline in grants and concessional funding.

Refinancing Risk:

Rwanda has been managing its external and domestic debt refinancing risk prudently. The recent Medium Term Debt Strategy revealed that the external debt maturing in the next year has reduced from 10.6 percent to 6.0 percent respectively, while the domestic debt maturing in one year has decreased from 7.1 percent to 5.3 percent. This reduction in external debt maturing is due to paying off the remaining portion of the 2013 Eurobond and converting some short-term external debt into long-term domestic debt. On the domestic debt front, long-term securities are being issued instead of short-term notes, leading to a reduction in debt maturing in one year.

Rwanda, like many other sub-Saharan African countries, may have to deal with higher borrowing costs due to several key factors. Firstly, external borrowing costs have gone up because of higher interest rates on US treasury bonds and the search for safe assets in times of global uncertainty. Secondly, concessional financing, which still constitutes the largest share of borrowing, is becoming more limited and being replaced by mixed financing terms with variable interest rates. This, in turn, increases the risk and complexity of the country's debt portfolio. Thirdly, there is a significant rise in domestic interest rates (though getting normalized in the last few months), which poses a high re-fixing risk for any debt maturing in a short period.

Foreign Currency risk:

Rwanda's debt portfolio consists mainly of external debt, making it vulnerable to foreign exchange risk due to global uncertainties and increased prices, which is leading to the higher depreciation of the Rwandan Franc.

Government guarantees on loans from public corporations

To help public corporations and selected joint ventures attract private investment in infrastructure and enable them to borrow at affordable interest rates, the government issues guarantee. These guarantees commit the government to cover the debt obligations of borrowers in the event of loan default. Rwanda's total SoEs Debt stood at FRW 578.6 bn (3.5 % of GDP) as of end 2023 against FRW 465 bn as of end 2022. This increase is mainly due to the expansion of debt data coverage to include both guaranteed and non-guaranteed SoEs. A call on guarantees would result in the commitment of fiscal resources by Government.

Table 7: Government guarantees as of December 2023

STATE OWNED ENTREPRISES EXTERNAL DEBT STOCK (USD million)		
Entity	Guaranteed Amount at end December, 2023 (USD Million)	Billion FRW
RwandAir	Guaranteed	40.6
SUB-TOTAL		40.6
STATE OWNED ENTREPRISES DOMESTIC DEBT STOCK (FRW billion)		
Entity	Guaranteed Amount at end December, 2023 (FRW Billion)	Billion FRW
Ultimate Concept Ltd (UCL)	Guaranteed	139.3
Bugesera Airport Company (BAC)	Guaranteed	153.4
EUCL-Gishoma)	Guaranteed	15.1
EUCL	Non-Guaranteed	79.7
Horizon Group	Non-Guaranteed	13.6
WASAC	Non-Guaranteed	12.6
Bella Flowers	Non-Guaranteed	1.4
EAX	Non-Guaranteed	1.1
SONARWA	Guaranteed	1.7
RWANDAIR	Non-Guaranteed	62.5
KIVU MARINA	Non-Guaranteed	19.1
EPIC HOTEL	Non-Guaranteed	7.7
MARAPHONE	Non-Guaranteed	31.0
SUB-TOTAL		538.1
TOTAL		578.6
Nominal GDP		16,355.0
EOP Exchange rate		1,263.9
Guarantees % of GDP		3.5

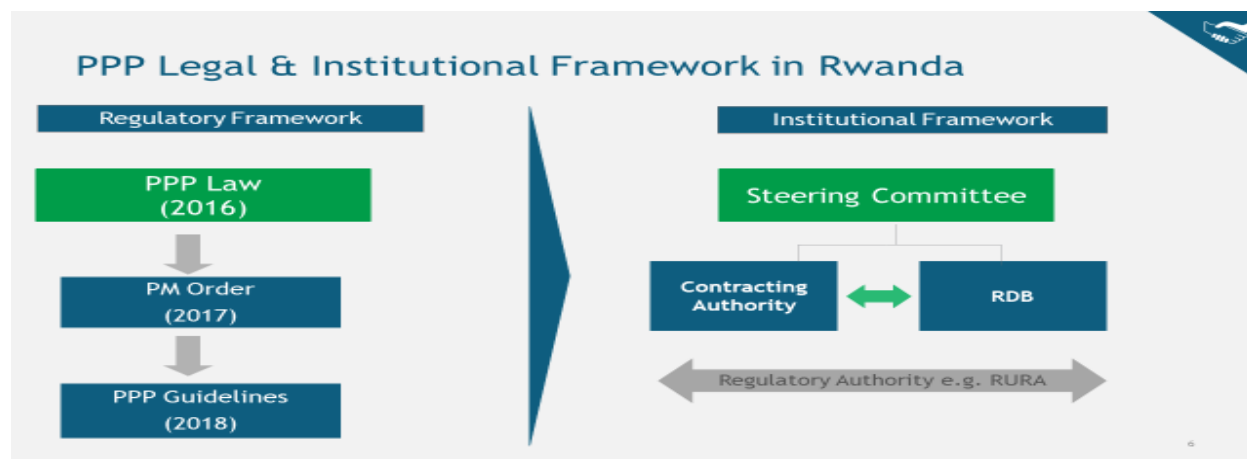
Source: MINECOFIN

3. Public Private Partnerships (PPPs)

Public-private partnerships (PPPs) are long-term contracts between a private partner and a government entity, for providing a public asset or service, where the private partner bears significant risks and management responsibility and is remunerated linked to the performance or use of the asset/service. In practice, PPPs comprise different types of contracts depending on the nature of the agreement. PPP models in Rwanda as per the legal framework include: **Build, Operate, and Transfer (BOT); Build, Operate Own (BOO), Management Contracts and Lease Operate Develop (LOD) contracts**. Power Purchase Agreements (PPA's) are the common form of PPPs in Rwanda and include design, build, finance, operate and maintain a new power plant, with power supplied in bulk by the private partner (PPP company) to a government-owned transmission company.

PPPs in Rwanda are anchored in a strong regulatory & institutional framework to ensure efficient and transparent processes. The PPP Steering Committee that oversees the functioning of PPPs is chaired and co-chaired by the Minister of Finance & the CEO of the Rwanda Development Board respectively.

Figure 10: PPP Legal and Institutional Framework in Rwanda



Source: RDB

To date, the Government has signed 59 PPP contracts with a total project value of approximately USD 2,173.0 billion. Around 90 percent by both number and project value are in the energy sector, with the rest spread across water and sanitation, culture, tourism, and logistics. Based on the total number of projects, 64.4 percent are operational (22 percent by project value), and the rest are at various stages of negotiation. Table 6 below provides further details on PPPs by sector and status.

PPP projects in the energy and water and sanitation sectors are purchase agreements, where the government-owned public corporations [Energy Utility Corporation Ltd - EUCL & Water and Sanitation Corporation - WASAC] signed contracts with private partners to design, build, finance, operate and maintain a new power plant, and supply water and power in bulk. The other PPPs are Management Contracts and Design Build Finance Transfer (DBFT) in logistics.

Table 8: Ongoing PPPs in Rwanda by sector and status

Ongoing PPPs	Number	Project Value (USD million)
Energy Sector	54	2,025.7
Operational	33	334..8
Other stages (including negotiations)	21	1,690.9
Other Sectors	5	147.3
Operational	5	147.3
Other stages (including negotiations)	0	0
Total	59	2,173.0
Operational	38	482.1
Other stages (including negotiations)	21	1,690.9

Source: RDB.

Notes: Project value is equal to the investment cost of the project, not the total value of the contract or the total public sector exposure.

Identification and analysis of the fiscal impact of PPPs

The fiscal impact of PPPs includes both “fiscal costs” and “fiscal risks” for the different government entities involved. In the case of Rwanda, where most of the projects are PPAs signed by public corporations which benefit from broad government support, the following fiscal costs and risks are identified;

Fiscal impact of PPPs and PPAs on central government budget

In Rwanda the central government (i.e., government budget) is not the main counterpart of the PPAs contract, which are signed by public corporations. However, the central government supports these contracts in different ways, as summarized in Table 7.

Table 9: Fiscal impact of PPPs and PCs for central government

Source of fiscal impact	Fiscal cost or risk	Magnitude of impact	Probability of occurrence
Explicit and implicit guarantees to public corporations.	Fiscal risk	Medium: payment guarantees are provided in case utility companies fail to fulfil their payment obligations	Medium: The financial position of WASAC and REG were both deemed high risk based on the most recent health check assessment.
Capital grants to public corporations to cover part of the payment to the private partner	Fiscal costs	Medium: This is an expense for the budget. This mechanism has been used only in the water and sanitation project	
Providing direct project guarantees	Fiscal risk		

Based on the above analysis, the central government incurs fiscal costs in the form of capital grants paid to the water utility company (WASAC) to cover for the capital cost of the PPA contract.

In addition, the main risk to central government is the payment guarantee, given that the financial health of the water utility company (WASAC) and the umbrella energy company REG were at high risk based on the 2023 health check assessment.

Fiscal impact of PPPs and PPAs on public corporations

When public corporations sign PPAs, these contracts impact their financial performance (cash flows, as well as their net worth), and depending on the contract specificities, they are also exposed to various types of fiscal risks given that:

- The water and power plants are strategic assets that have been commissioned by the public corporations (not developed by the private sector on their behalf);
- The legal ownership of the assets is expected to return to the public corporation at the end of the contract, and
- Public corporations bear a significant portion of the risks.

It is expected according to international accounting standards, that these assets (water and power plants) would be recorded in the balance sheet of the public corporations (accrual accounting). Beyond how the assets are reflected in the public corporation balance sheet, they will record the total payments to the private partner as a cash outflow (in cash accounting). At the same time, the public corporations will sell water and energy to the users and receive cash inflows, which will depend on the tariffs and the demand for services. If regulated tariffs are not adjusted to fully cover costs, the balance sheet of the public corporations will be negatively impacted. On the other hand, if demand for water or energy does not materialize as expected, it would also negatively impact the public corporations balance sheet.

Table 10: Fiscal impact of PPPs and PPAs for public corporations

Sources of fiscal impact	Fiscal cost or risk	Magnitude of impact	Probability of occurrence
Nonfinancial asset and equal liability in balance sheet on an accrual basis	Fiscal cost	Medium: Estimated by the construction value of the asset. Neutral in terms of net worth (asset=liability)	High: it is most likely that the asset should be regarded as a public asset (strategic asset)
Payments to the private partner (cash outflows)	Fiscal cost	Medium: payments to the private partner are significant for the public corporation. Yet, they are linked to performance. If the private partner does not deliver, the public corporation payments are reduced.	High: The public corporation has a firm commitment to pay
User charges for services (cash inflows)	Fiscal revenue	High: public corporations sell water and energy to users at regulated tariffs. Tariffs are subsidized in the water sector, while in the energy sector tariffs are expected to fully cover costs.	Medium: There are risks that regulated tariffs are not adjusted to fully cover costs. If they are set below cost recovery, public corporations' revenues will not materialize.
Insufficient-demand-(demand is lower than water supply and/or energy generation)	Fiscal risk	Medium: Currently demand is assumed to be equal to supply, both in water and energy sector. If demand does not materialize the impact on public corporations' revenues could be significant.	Medium: Low probability in the water sector. But in the energy sector there might be excess supply once all power projects become operational [unless old plants are decommissioned gradually]
Operational risks. (Projects are delayed and/or services interrupted)	Fiscal risk	Medium: Delays and interruptions typically generate significant cost overruns that have a negative impact on public corporations depending on the nature of the PPP contract	High: Currently some energy projects provide less than expected energy to the grid due to various issues.
Foreign exchange rate risks (payments to private partner were negotiated in foreign currency)	Fiscal risk	High: devaluation of domestic currency would have a large impact on public corporations' balance sheet by increasing payments	High: Large nominal exchange rate fluctuations since project signing (e.g. some contracts are more than 5 years old)

Source: RDB

Notes: The above table is a summary of risks based on a contract-by-contract assessment of the portfolio.

Estimation of fiscal impact for four selected projects

A detailed assessment of Rwanda's four largest PPAs and Water Purchase Agreement projects was conducted using a simplified version of the PPP Fiscal Risk Assessment Model (PFRAM). These projects have a total asset value of \$USD 621 million and account for approximately a third of the total PPP portfolio.¹¹

Summary of the fiscal impact of the four largest projects

Fiscal impact is calculated both in gross and net terms. The assessment is based on projects contract information, as well as feedback from public corporations.

Total gross exposure represents total payments to the private partner over the whole contract period. In practice, the payments to the private partner are done by the public corporations or the central government if public corporations were to default on their payments (explicit guarantees).

However, the funding of these projects is determined by the contract agreement and the tariff structure. The government can absorb part of the funding burden by supporting either the public corporation (i.e., grants) and/or the users (i.e., tariff subsidies). The public corporations can also partially fund the project with their work capital (i.e., use of cash, new loan). And ultimately, the users can fund part or the full project by buying the services sold by the public corporations at the market tariffs (i.e., water, electricity).

Total net exposure is calculated as total payments to the private partner (i.e., gross exposure) minus expected revenues of public corporations from selling services to users at market prices. Expected revenues are estimated assuming that all the water and energy generated by the 4 projects is demanded by the users, and that tariff are adjusted over time.

Baseline fiscal costs is calculated as the value of the firm commitment made by the central government to support public corporations to fund part of the project costs. This support will materialize as a central government expense (i.e., capital grant) that will be included in the government budget.

The estimation of total gross and net exposure, as well as baseline fiscal costs for the above 4 projects is presented in Table 9 below. Total gross exposure is estimated at USD 4.0 billion (19.3 percent of GDP) covering the whole contract period.¹² The funding composition over the PPAs period, comprises 4 percent of the costs, on average, borne by the GoR, 4 percent by the public corporations, and 92 percent borne by user tariffs. In turn, given the estimations of public corporations' revenues is based on demand and tariff projections, total net exposure is negative, meaning that public corporations would have an overall positive effect due to these contracts estimated at USD 1.2 billion (4.7 percent of GDP). Finally, the baseline fiscal cost for the central government is estimated at 1.0 percent of GDP.

¹¹ With assistance from IMF, a simplified version of the PPP Fiscal Risk Assessment Model (PFRAM) was developed to help the government in analysing and assessing the potential fiscal costs and risks arising from PPP projects.

¹² PPAs contracts assessed cover the period 2011 to 2044.

Table 11: Risk identification and analysis of the four main projects

Estimations	USD		FRW		% GDP	
	Total	NPV	Total	NPV	Total	NPV
Total gross exposure	4,021	1,793	7,404,240	2,899,362	19.3	9.7
Funding structure	4,021	1,793	7,404,240	2,899,362	19.3	9.7
Government payments	146	75	208,132	94,312	1.0	0.6
Public corporation payments	153	73	230,868	98,795	0.9	0.5
User tariffs	3,721	1,644	6,965,240	2,795,255	17.4	8.6
Total net exposure	-1,200	-505	- 2,058,277	-799,076	-4.7	-2.2
Baseline fiscal cost	146	75	208,132	94,312	1.0	0.6

Source: RDB

Notes: Net present value is discounted at 5 percent.

Summary detailed risk assessment by projects

The table below outlines the main sources of risk identified, their size and probability of occurrence

Table 12: Risk identification and analysis of the four main projects

Sources of fiscal impact	Fiscal cost or risk	Magnitude	Probability of occurrence
Water Project			
Insufficient demand	Fiscal risk	Medium: If demand does not materialize, the impact on WASAC financial health would be significant given that the project represents a significant portion of WASAC revenues	Low: Heavy demand in Kigali and population growth and This is the only water project in the City of Kigali
Default risk	Fiscal risk	Medium: Total payments for the whole contract period are estimated at 1.2 percent of GDP	Medium: On lent repayments due from 2025 and existing revenue streams are insufficient to cover current or future repayments without reform.
Forex risk	Fiscal risk	Medium: A depreciation would increase WASAC payments	Medium: The project was signed in 2015 and the exchange rate has depreciated since then
Demand risk	Fiscal risk	Medium: When all projects are completed there could be an excess supply	Medium: New investments will add two-thirds to energy capacity

Sources of fiscal impact	Fiscal cost or risk	Magnitude	Probability of occurrence
Default risk	Fiscal risk	Medium: The financial health of REG is at high risk	Medium
Forex risk (Tariffs are set in USD and payments done in FRW at the prevailing exchange rate set by the Central Bank)	Fiscal risk	Medium: Two energy projects are currently under operation	Medium: Continued depreciation of FRW likely

Source: RDB

4. Pension related risks

Table 13: Pension contribution compared to Benefits

Pension contributions compared to benefits (Frw Mln)								
	2016	2017	2018	2019	2020	2021	2022	2023
Contributions	74,695	74,897	83,344	94,371	102,178	106,821	125,758	153,240
Benefits paid	15,992	18,155	21,537	27,594	30,468	35,248	41,292	45,854
Incremental contribution compared to benefits payout (growth rates)								
	2016	2017	2018	2019	2020	2021	2022	2023
Contributions	22.20%	0.300%	11.30%	13.20%	8.30%	4.54%	17.73%	21.85%
Benefits paid	5.90%	13.50%	18.60%	28.10%	10.40%	15.69%	17.15%	11.05%

Source: RSSB

It is noticeable that benefits payout is increasing more than contributions. This implies that the pension liability is also increasing.

5. Local Government

Local Government plays a significant role in providing essential social and economic services, and Government considers local financial management capacity when assessing fiscal risk.

In recent years, financial management and reporting capacity at district Government level has improved and continues to improve. As of December 2023, 5,946 local Government entities have enrolled on Government's integrated financial management and information system (IFMIS) and Schools Data Management System (SDMS), up from 5,940 a year earlier, this represents coverage of 27 districts plus City of Kigali, 416 district sectors, 48 district hospitals, 512 health centers to use IFMIS, with 4,939 schools using SDMS as a schools specialized component that is expected to be fully integrated with IFMIS by 1st July 2024.

In addition, there has respectively been development of new models and functionalities under IFMIS and SDMS during the FY 2023-24 that are expected to be operational by 1st July 2024. these include; Integration of SDMS with IFMIS to be able to link request, payment and usage of Capitation Grant, School Feeding and TVET Consumables budget, Expenditure management of Capitation Grant, School Feeding and TVET Consumables i.e. Customization of budget allocation to spending lines so as to restrict

usage of those funds for specified expenditures, Debt Administration Data Base (DAD) Managing Public Grants and Project Management module designed to manage Public Projects. The continued systems upgrade and strengthening alongside Hands on PFM experienced human resource at decentralized entities is progressively yielding positive results as far as Public Finance Management is concerned.

The table below shows a trend of local Government budget with the central Government contribution settling at a stable state of 86% in FY 2019/20, FY 2020/21 and 2021/22 respectively. Subsequently increasing to 90 percent in FY 2022/23 and FY 2023/24. Own-revenue generation capacity in local Government is expected to continue increasing with the implementation of the new law determining the source of revenue and property of decentralized entities, and introduction of Computer Assisted Mass Appraisal (CAMA) thereby reducing dependency on central government transfers to finance local government development projects. Nevertheless, local Government funding of development projects is still inadequate and highly dependent on Central Government transfers and external grants.

Table 14: Trend of local Government budget composition¹³

Designation	2019/20	2020/21	2021/22	2022/23	2023/24
District Own revenues (Taxes & Fees)	74	87	88.5	90	90.4
Transfers from CG	450	546	559.5	774	861
External Grants	0	0	0	0	0
Total District Budget	524	633	648	864	951.4
% Of own revenues to the LG Budget	14	14	14	10	10
% of CG Transfers to the Budget	86	86	86	90	90
% of External Grants to the LG Budget	0	0	0	0	0

Source: MINECOFIN

6. Analysis of the Financial sector performance

The financial sector maintains sufficient capitalization and liquidity. As of December 2023, the banking sector's aggregate Tier 1 CAR and total CAR stood at 20.3 percent and 21.5 percent respectively, exceeding the prescribed minimum prudential requirements. Additionally, all banks maintain capital buffers exceeding the minimum requirements. Regarding the capitalization of the microfinance sector, the aggregate CAR of MFIs was at 33.8 percent, surpassing the 15 percent minimum regulatory requirement. All categories of MFIs maintain adequate capital buffers. In the insurance sector, solvency remains intact. The solvency ratio of private insurers stood at 296 percent as of December 2023, compared to 211 percent in December 2022. This increase is attributed to the enhanced quality of assets resulting from changes in the investment mix of insurers.

The Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR), which are key liquidity indicators for banks, stood at 234 percent and 114.6 percent respectively, surpassing the minimum requirement of 100 percent. Similarly, the industrywide

¹³ From FY 2019/20 external grants have been merged with Transfers from Central Government.

liquidity ratio of MFIs was at 86 percent, exceeding the minimum prudential requirement of 30 percent. Additionally, all categories of MFIs maintain liquidity buffers above the regulatory requirement. In the insurance sector, liquidity increased to 117 percent from 98 percent, attributed to a higher composition of liquid assets, resulting from adjustments in the insurers' asset mix.

Assets quality of banks slightly deteriorated but remains healthy during the year to end December 2023. Non-performing loans increased by FRW 82 billion to FRW 209 billion in December 2023 from FRW 127 billion in December 2022. Consequently, NPL ratio increased to 4.1 percent in December 2023 from 3.1 percent in December 2022. The increase of non-performing loans was largely due to the default of one large credit facility. Otherwise, credit defaults were not broad-based.

In the MFI sector, credit defaults remained at moderate levels during the review period. As of the end of December 2023, the stock of NPLs in microfinances amounted to FRW 18.6 billion, up from FRW 11.3 billion in December 2022. Consequently, the NPLs ratio increased to 4.3 percent as of the end of December 2023, compared to 3.5 percent in December 2022. This increase can be attributed to misclassification of loans resulting from an ongoing automation process, highlighting more visibility of NPLs due to automation.

Table 15: Financial Soundness Indicators (Banking Sector) - In Percentage

Indicators	Dec-19	Dec-20	Dec-21	Dec-22	Dec-23
Total CAR (min 15 %)	24.1	21.5	21.5	21.7	21.5
Core Capital Tier 1 (min 12.5%)	22.6	20.3	20.6	20.9	20.3
NPLs Ratio	4.9	4.5	4.6	3.1	4.1
Provisions / NPLs	81.5	106.3	119.8	141.9	99.1
LCR (min 100%)	215	254.7	268.9	215.9	234.0
NSFR (min 100%)	111	161.4	147.1	136.8	114.6
FX Exposure/Core Capital (± 20%)	-4.8	-4.4	-3.7	-0.6	1.0

Source: NBR

Table 16: Financial Soundness Indicators (Microfinance Sector) - In Percentage

Indicators	Dec-19	Dec-20	Dec-21	Dec-22	Dec-23
CAR (min 15 %)	36	36	36	34.5	33.8
Liquidity ratio (min 30%)	101	101	112	91	86
NPL Ratio (below 5%)	5.7	6.7	4.8	3.5	4.3
Net profit (FRW Billion)	12.0	10.3	18.1	23.0	25.3
ROA (%)	3.8	3.0	4.4	4.6	4.1
ROE (%)	10.7	8.2	12.4	13.3	12.2

Source: NBR

Table 17: Financial Soundness Indicators (Insurance Sector) - In Percentage

Description (Ratios %)	Public Insurers		Private Insurers		Insurance sector	
	Dec-22	Dec-23	Dec-22	Dec-23	Dec-22	Dec-23
Solvency margin (Min. 100%)	2379	2284	221	296	1375	1422
Claims ratio (max.60%)	51	59	62	58	56	58
Expenses ratio (max. 30%)	12	15	38	39	24	26
Combined ratio (max.90%)	63	73	100	97	80	85
ROE (Min.16%)	15	14	13		14	15
ROA (Min.4%)	14	13.7	5	7	11	11
Current Ratio (min. 120%)	3711	2057	92	97	224	229
Liquidity ratio (min. 100%)	5238	3530	98	117	286	347

Source: NBR

Despite ongoing geopolitical conflicts in regions like the Middle East and Ukraine, disruptions in the Red Sea affecting global supply chains, climate-related risks, and pressures on the exchange rate, the financial system has demonstrated resilience against these challenges. Looking ahead, in the medium term, the financial sector is expected to maintain its soundness and stability, supported by adequate capital and liquidity buffers. These buffers indicate the sector's ability to withstand various shocks. This resilience is bolstered by ample reserves of capital and liquidity, strengthened risk management practices, and favourable economic performance despite declining inflationary pressures.

7. Natural disasters

Rwanda is highly dependent on its diverse ecosystems to sustain its population and support economic development. The country is prone to a variety of natural and man-made disasters mainly storms, landslides, and floods, and 55 percent of total land area is at risk of soil erosion. These disasters cause physical, socio-economic and environmental damages and losses. The major disasters that cause huge impacts in Rwanda include mainly hydro-meteorological disasters. However, Rwanda is also prone to hazard, exposure and vulnerability to volcanic eruption and seismic activities.

On average, five Districts per year face serious natural disasters, but in 2016 and 2018 the spread and severity of floods and landslides rose well above average, with over 2 million people affected, and negative consequences for agriculture, trade, and industry.

Disasters invariably require significant emergency management and longer-term responses.

By disrupting normal business activities, they can also reduce revenue collection. Tourism is the country's largest source of foreign exchange, and disaster pose particular risks to wildlife tourism.

The number of events classified as natural disasters increased in recent years killing 298 people in 2020, 116 in 2021, 205 in 2022 and 243 in 2023 while the number of people injured was 414 in 2020, 248 in 2021, 401 in 2022 and 406 in 2023. These events destroyed 8,098 houses in 2020; 4,808 houses in 2021; 4,156 in 2022, 7454 in 2023 and damaged 4,662 Ha of crops in 2020; 3,802Ha of crops in 2021, 1,917.74 Ha of crops in 2022 and 2176.3178 ha of crops in 2023. Moreover, in 2021; 2,043 livestock were smashed by heavy rainstorms, 201 in 2022 and 1208 In 2023 whereas 381 classrooms were damaged in 2021, 323 in 2022 and 154 classrooms in 2023.

Government scaled up its response for disaster management with a budget increasing from FRW 21.4 billion in FY 2016/17 to 63.5 billion in FY 2022/23.

Table 18: Natural disasters in 2023 and 2022

Disaster type	2023 DISASTERS EFFECTS				2022 DISASTERS EFFECTS			
	Deaths	Injured	Houses Damaged	Damages in crops Ha.	Deaths	Injured	Houses Damaged	Damages in crops Ha.
EARTHQUAKE	0	3	45	0	0	0	0	0
FIRE	12	15	228	23.33	1	10	251	101.3025
FLOODS	74	72	2388	351.4778	33	1	93	445.09
HAILSTORM	0	0	274	187.21	0	0	264	652.4
HOUSE COLLAPSE	16	74	27	0	5	12	21	0
LANDSLIDES	87	47	2359	788.705	24	9	140	10.4
LIGHTNING	43	153	10	0	57	219	12	0
MINE DISASTER	6	3	2	0	71	46	0	0
RAINSTORMS	3	13	319	300.85	12	76	1572	564.95
WILDFIRE	0	0	0	254.84	0	0	0	3
WINDSTORM	2	26	1802	269.905	2	28	1803	140.6
TOTAL	243	406	7454	2176.3178	205	401	4156	1917.7425

Source: Ministry in charge of Emergency Management (MINEMA)

Table 19: Budget for Disaster management activities¹⁴

Billion Frw (Revised Budget)	2019/20	2020/21	2021/22	2022/23	2023/24
Budget for Disaster management activities	156.1	179.2	313.7	207.7	221.0

Source: MINECOFIN

V. MITIGATION MEASURES

1. Mitigation measures in case of Macroeconomic shocks

The global economic outlook remains uncertain as the global economy continues to face several challenges. The global environment was hostile to growth as the economy was still recovering from pandemic, geopolitical tensions raging such as the war in Ukraine and in the middle-east, trade fragmentation as well as climate related shocks

¹⁴ Data include all disaster related interventions ranging from emergency reliefs, prevention, preparedness and reconstruction plus early warning interventions.

Also, emergency relief, prevention and preparedness include health disaster interventions that were not previously included and this explains why the figures are higher as compared to the previously reported.

intensifying across. Inflationary pressures mounted leading to a more monetary tightening and restrictive financial conditions. But in general, with faster disinflation, risks to global growth would be moderate as it would lead to easing of financial conditions and looser fiscal policy, would lead to temporal higher growth.

The development and outlook are subject to risks discussed but also to effect of continuous existing & new efforts¹⁵ put in by government of Rwanda to maintain economic stability and response to economic shocks and positive prospects of the developments in external and domestic economic environment. Some of those efforts include budget rationalization strategy with a climate tagging¹⁶ element which also considers response to shocks as a priority for short-longer horizon.

- The Budget for FY2024/25 (next coming fiscal year starting from July 2024) indicates continued normalization of Fiscal policies for recovery from COVID-19 period and its scars, but also recovery from global geopolitical tensions as well as reconstruction efforts following Floods in May 2023. This envelope also should factor in concerned shocks in terms of increasing the cost of fertilizers (improve food production) and social protection interventions in terms of and prioritization subsidies of key interventions from the Socio-Economic Recovery Plan that have shown good results in building resilience to shocks and enabling quick recovery.
- Concerning weather shocks (floods, landslides and erosions), Rwanda has been putting efforts in investing in and operationalizing planned land management and conservation interventions which would offer meaningful benefits for inclusive and climate-resilient growth.
- Concerning external commodity prices and domestic inflation shocks, the GoR stands ready to use monetary policy instruments and complimentary (i.e., fiscal and exchange rate) measures to address inflation and exchange rate pressures.

2. Mitigation/Adaption measures for climate change fiscal risks

Overarching approach

Rwanda remains steadfastly committed to the Paris Agreement and has dedicated the resources required to achieve substantial emissions reductions. To support this, the government has committed to mitigation measures. To reduce vulnerability to the impacts of climate change, several adaptation measures are also being implemented.

¹⁵ Some of those efforts are related to public finance management in terms of continuous implementation of the budget rationalization strategy which will affect mostly recurrent spending in the medium term targeted to preserve the fiscal deficit path necessary to bring the debt level to 65 percent of GDP by 2030.

¹⁶ Climate budget tagging is the process of identifying, measuring, and monitoring climate-relevant spending across government and can help to highlight the importance of climate concerns in resource allocation and execution.

Table 19: Adaptation and Mitigation measures for climate change fiscal risks

Mitigation Measures	▪ Increased use of renewables ▪ Climate compatible mining ▪ Improved livestock husbandry ▪ Energy efficiency in Agro-processing ▪ Off-grid and rooftop solar electrification ▪ Soil and water conservation ▪ Promotion of electric vehicles and public transport infrastructure ▪ Promotion of on-farm biogas for energy.
Adaptation Measures	▪ Integrated Water Resources planning and management ▪ Diversity in local and export agricultural markets ▪ Sustainable forestry, agroforestry and biomass energy ▪ Institutional capacity development ▪ Vector-based disease prevention ▪ Climate sensitive integrated land use planning and spatial planning ▪ Disaster preparedness and emergency response ▪ Climate data and projections for Early Warning Systems (EWS)

Source: Adaptation and Mitigation measures under Rwanda's NDCs

In terms of the specific fiscal risks identified in this section, the government is committed to improve the climate resilience of transport infrastructure and the assets of REG and WASAC to reduce the risks to lives, the economy, and the public finances from events like the May 2023 floods. For example:

- **Roads and bridges** damaged by last year's floods are being repaired. Permanent improvements will follow, with road design and land-use in adjacent areas upgraded to reduce the risk that heavy rainfall results in costly landslides.
- **Energy infrastructure** is being upgraded to ensure that dams are robust to more severe flooding, and used to manage the consequences of heavy rainfall as well as generating electricity. Transmission and distribution infrastructure is also being upgraded to be resilient to landslides, while land-use in adjacent areas is being improved via collaborative efforts across government to reduce soil erosion and the risk of landslides during periods of heavy rainfall.
- **Water infrastructure** will benefit from WASAC creating a new Research and Development Department to address climate change issues, informing a forthcoming climate resilience and action plan. Climate resilience is being mainstreamed in all projects, for example through new dams to increase resilience to both drought and to mitigate the effects of flooding.

3. Management of public debt related risks

It is important for Rwanda to continue to implement sound fiscal policies and actively monitor its debt levels in order to maintain its debt sustainability over the long term.

Therefore, in order to hedge for unsustainability, Rwanda's debt management strategy will: (I) continue to be guided by the debt path driven by a strong fiscal consolidation

program designed to bring the debt level to the anchor of 65 percent of GDP by 2031 through domestic revenue mobilization strategy, spending rationalization plan and adaptation and mitigation measures for fiscal risks arising from State Owned Enterprises, Power Purchase Agreements etc.

Rwanda will take proactive steps to mitigate refinancing risk. Making longer-tenure T-bonds more widely available in the domestic market while replacing short-term debt, will help lower refinancing risk while also contributing to the development of the domestic capital market. Regarding the cost of debt, concessional loans will continue to constitute a large share of Rwanda's debt portfolio.

4. Mitigation measures of PPP Risks

Table 20: Mitigation measures of PPP risks

Description of risk	Mitigation measure
Demand risk: that the increase in supply will not be met by commensurate demand	▪ Increase demand for energy-intensive industries. The government is currently focusing in its investment attraction policy on large manufacturing industries to increase the demand for energy consumption ▪ The government is exploring options to export energy to the DRC and other neighbouring countries
Financing risk: repayment risks from the public corporations to private providers	▪ Ensure prudent corporate and governance structures for public corporations ▪ Reduce losses through targeted interventions e.g., operational losses in WASAC ▪ The government is in the process of exploring ways to refinance some of the big energy projects to reduce the fiscal costs to the public corporations and future pass-through costs to consumers that will in turn boost the demand ▪ Have mechanisms in our PPA's to ensure that cost overruns due to change in price do not affect the contract performance ▪ Compensation of Force Majeure (FM) handled through extension of time delays and in case of prolonged FM, contract handled through the termination process
Forex risk: increased repayments for energy and water produced resulting from exchange rate volatility	▪ Through the National Export Strategy, the government's major objective is to increase exports which will reduce the trade deficit and ultimately reduce local currency devaluation. ▪ Maintain a prudent monetary policy and consider setting up contingency reserve funds for forex risks arising from PPP projects.

5. Management of pension liabilities

The Rwanda Social Security Board (RSSB) is aware of the pensions liabilities that are arising and will continue to monitor the trend of the contributions and benefits paid. In this regard, the RSSB will be prepared to face the payment of any liability that may occur in due time.

6. Management of local Government risks

Government will continue strengthening PFM management systems, support local Government through capacity building initiatives and target to reduce dependency on central government transfers by increasing own source revenue generation through implementation of the new law determining the sources of revenue and property of decentralized entities and implementation of Audit generals Audit recommendations.

7. NBR mitigation measures for the financial sector

The National Bank of Rwanda (NBR) is committed to upholding the stability and resilience of the financial sector, especially amidst different challenges and emerging risks. To address evolving threats such as climate-related and cyber security risks, the NBR has implemented proactive measures aimed at aligning the regulatory framework with international standards. These ongoing initiatives demonstrate the NBR's dedication to maintaining a stable, resilient, and inclusive financial sector. Through regular oversight activities, the NBR seeks to enhance the sector's ability to withstand shocks and maintain stability amid uncertainty.

8. Mitigation measures for natural disasters

As natural disasters remain one of the major sources of fiscal risks, the Government's disaster risk financing has led to the formulation of recovery needs estimates that intends to address the four levels of disaster risk financing namely agriculture, housing, infrastructure and environment as well as strengthen disaster preparedness and management. Building on lessons learnt over the past several years, the Government has shifted to a more proactive approach. The country has strengthened the institutional, legal and coordination framework for disaster risk management.

VI. CONCLUSION

Rwanda's 5th Fiscal Risk Statement (FRS) outlines a range of risks. In the current international geopolitical tensions and inflation pressures (even though easing), the **Government assessed the general level of fiscal risk as manageable**, and has put in place mitigation measures to minimize negative impacts.

The Government is monitoring the current crises above mentioned. However, due to uncertainties, which are mostly external and beyond control, risks remain on the economy. **Government will continue to implement adequate economic policies to ensure macroeconomic stability.**

End.