

# **SOLOMON ISLANDS**

### JOINT WORLD BANK-IMF DEBT SUSTAINABILITY ANALYSIS

#### Approved by:

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# SOLOMON ISLANDS: JOINT BANK-FUND DEBT SUSTAINABILITY ANALYSIS

| Risk of external debt distress | Moderate                           |
|--------------------------------|------------------------------------|
| Overall risk of debt distress  | Moderate                           |
| Granularity in the risk rating | Substantial space to absorb shocks |
| Application of judgment        | No                                 |

The 2023 Debt Sustainability Analysis (DSA) indicates that the risk of debt distress in Solomon Islands remains moderate with substantive space to absorb shocks; the rating is unchanged from the 2021 DSA<sup>1</sup>. Debt coverage has remained unchanged compared to the 2021 DSA (IMF Country Report No. 21/211). All external debt indicators remain below the relevant indicative thresholds under the baseline scenario but breach the threshold of the PV of external debt-to-exports ratio under an export shock scenario. The PV of public debt-to-GDP ratio remains below the indicative threshold under the baseline scenario but breaches the threshold under various alternative scenarios including a commodity price shock. A tailored natural disaster shock of similar scale to the largest historical shock would also cause a significant deterioration in the debt trajectory. While the DSA suggests that there is substantial space to absorb shocks, Solomon Islands faces significant fiscal liquidity challenges stemming from the current low level of the government cash balance and rising fiscal risks including from mismanagement of infrastructure projects. Those projects include large-scale investments to host the 2023 Pacific Games as well as a cell phone tower expansion project. A sizable shift to domestic financing projected in the medium term could bring about serious risks in debt management. With pronounced uncertainty around the economic outlook, debt sustainability needs to be anchored by

<sup>&</sup>lt;sup>1</sup> Solomon Islands Composite Index (CI) is estimated at 2.59 based on the October 2022 World Economic Outlook and the 2021 Country Policy and Institutional Assessment (CPIA), indicating that the debt-carrying capacity remains weak, as in the 2021 DSA.

a prudent fiscal policy to rebuild fiscal buffers, while creating fiscal space for meeting development spending needs through stronger revenue mobilization measures and expenditure rationalization.

## PUBLIC DEBT COVERAGE

1. The coverage of public sector debt used in this report is central government debt, central government guaranteed debt, and central bank debt borrowed on behalf of the government. Debt coverage has remained unchanged since the 2021 DSA. Because of data limitations, other elements in the general government, non-guaranteed state-owned enterprise (SOE) debt, and private external debt are not included in the analysis. The authorities are continuing their efforts to improve data coverage, in particular that of the general government, with support from the IMF. The DSA uses a residency-based definition of external debt. The central government's domestic arrears, where relevant, are included into debt coverage.

| Subsectors of the public sector                                   | Check box              |
|---|------------------------|
| 1 Central government  | Х                      |
| 2 State and local government                                      |                        |
| 3 Other elements in the general government                        |                        |
| 4 o/w: Social security fund                                       |                        |
| 5 o/w: Extra budgetary funds (EBFs)                               |                        |
| 5 Guarantees (to other entities in the public and private sector, | , including to SOEs) X |
| 7 Central bank (borrowed on behalf of the government)             | Х                      |
| 3 Non-guaranteed SOE debt   |                        |

#### 2. A stress test for the combined contingent liability shock uses the default setting for SOE

**debt.** There are no explicit contingent liabilities. The standard contingent liability stress test amounts to 7 percent of GDP, which comprises 2 percent of GDP of non-guaranteed SOE debt and 5 percent of potential liabilities stemming from the financial system. The information regarding a prospective loan by the central government for the installation of cell phone towers across the country has been incorporated into the baseline and a customized fiscal risk scenario.

| 1 The country's coverage of public debt   | The central government, central bank, government-guaranteed debt |              |  |  |  |  |  |  |  |  |
|---|--|--------------|--|--|--|--|--|--|--|--|
|   | Default  | Used for the | Reasons for deviations from th         |  |  |  |  |  |  |  |
|   |  | analysis     | default settings                       |  |  |  |  |  |  |  |
| 2 Other elements of the general government not captured in 1.                   | 0 percent of GDP   | 0            |  |  |  |  |  |  |  |  |
| 3 SoE's debt (guaranteed and not guaranteed by the government) 1/               | 2 percent of GDP   | 2            |  |  |  |  |  |  |  |  |
| 4 PPP   | 35 percent of PPP stock  | 0            | PPP capital stock data is not availabl |  |  |  |  |  |  |  |
| 5 Financial market (the default value of 5 percent of GDP is the minimum value) | 5 percent of GDP   | 5            |  |  |  |  |  |  |  |  |
| Total (2+3+4+5) (in percent of GDP)   |  | 7.0          |  |  |  |  |  |  |  |  |

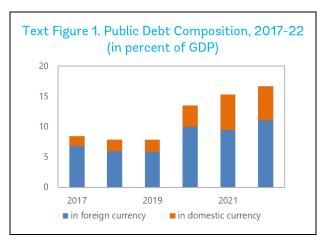
## **BACKGROUND ON DEBT**

3. Public and Publicly Guaranteed (PPG) external debt stood at US\$148.3 million (9.5 percent of GDP) as of end-2021 (latest available full year data), a decline of 0.4 percent of GDP from 2020 (Table 1). The Asian Development Bank (ADB) and the International Development Association (IDA) remained the largest creditors, accounting for 78 percent of total external debt. The increase in public external debt was mainly due to new external borrowing from Japan International Cooperation Agency (JICA) in the second quarter of 2021 that explained 15 percent of total PPG external debt at end-2021. Private sector external debt amounted to 1.1 percent of GDP at end-2021.

4. Public debt was 15.4 percent of GDP as of end-2021, an increase of 1.8 percent of GDP from 2020 (Table 2). Public domestic debt increased to SI\$747.8 million (5.9 percent of GDP) at end-2021. Negative real GDP growth, increases in primary expenditures, and declines in revenues after the COVID-19 pandemic accounted for the pick-up in debt. As part of the COVID-19 response, the government issued domestic Development Bonds in 2020-22 purchased by the Solomon Islands National Provident Fund (NPF), the Electricity Authority, and the Port Authority.<sup>2</sup> The stock of Development Bonds rose from SI\$360 million at the end of 2020 to SI\$650 million at the end of 2021, as the Central Bank of Solomon Islands (CBSI) tripled its purchase of the Development Bonds in the secondary market. The CBSI started its bond purchase to mitigate the impacts of the pandemic, with the initial purchase of SI\$60 million in December 2020, followed by additional purchases of SI\$180 million in 2021. One commercial bank also holds some of the bonds. An accumulation of domestic payment arrears (estimated at SI\$95.8 million in 2021, 0.8 percent of GDP) also contributed to the rise in domestic debt, although the government started clearing the arrears in the second half of 2022.

5. Both public domestic and external borrowings are expected to grow over the medium term. The Debt Management Act currently sets a limit for the public debt-to-GDP ratio at 35 percent in nominal terms, which provides an anchor for an annual domestic borrowing limit set in the annual budgets and

used as direct guidance for the Debt Management office operations. The limit was raised in 2022 to SI\$850 million from SI\$350 million in the previous year to accommodate the outstanding stock of the Development Bonds. It was further increased to SI\$865 million under the 2023 budget, to accommodate the increased spending on the 2023 Pacific Games and preparation for the general elections scheduled for early 2024. The preliminary outcome for 2022 suggests that domestic borrowing during the year remained under the threshold, at SI\$739 million.



<sup>&</sup>lt;sup>2</sup> Since 2017, the government has started issuing Development Bonds under negotiated private placements with SOEs and the NPF. Recently, they have had a 10-year maturity (3-year grace period) and 5 percent coupon.

|                               | 2018  | 2019  | 2020  | 2021  |
|-------------------------------|-------|-------|-------|-------|
| Multilateral Creditor         | 69.0  | 69.0  | 65.4  | 48.8  |
| ADB                           | 36.8  | 36.2  | 36.4  | 27.1  |
| IDA                           | 28.6  | 29.5  | 26.6  | 20.0  |
| Other multilayeral            | 3.7   | 3.3   | 2.5   | 1.8   |
| Bitelateral Creditor          | 6.8   | 5.6   | 3.5   | 11.5  |
| China Exim Bank               | 6.8   | 5.6   | 3.5   | 2.2   |
| JICA                          | 0.0   | 0.0   | 0.0   | 9.3   |
| Government Securities         | 23.7  | 24.9  | 30.8  | 39.4  |
| Short Term                    | 5.9   | 8.2   | 6.0   | 4.9   |
| Medium and Long Term          | 17.7  | 16.8  | 24.8  | 34.5  |
| Total Central Government Debt | 100.0 | 100.0 | 100.0 | 100.0 |

6. As part of the World Bank's Sustainable Development Finance Policy (SDFP), the country satisfactorily implemented the FY21 and FY22 Performance and Policy Actions (PPAs) and is expected to meet FY23 PPAs to improve fiscal sustainability and debt management. The Government has submitted the Tax Administration Bill to Parliament and approved the Government Bond Operational Guidelines in 2022. As FY23 PPAs, Cabinet is expected to approve a Value Added Tax (VAT) Bill while the government remains committed to adhere to a zero ceiling for non-concessional external borrowing.

# **COUNTRY CLASSIFICATION**

**7. Solomon Islands' debt-carrying capacity remains weak.** The Composite Indicator (CI) index is 2.59, indicating that the debt-carrying capacity continues to be assessed to be weak under the LIC-DSF; the classification is unchanged from the previous published DSA (2021).

8. Based on the CI rating, Solomon Islands' debt is assessed against the following thresholds: the benchmark of 35 percent for the PV of public debt-to-GDP ratio and the thresholds of 30 percent for the PV of PPG external debt-to-GDP ratio, 140 percent for the PV of PPG external debt-to-exports ratio, 10 percent for the PPG external debt service-to-exports ratio, and 14 percent for the PPG external debt service-to-revenue ratio.

| Components   | Coefficients (A) | 10-year average<br>values (B) | Cl Score components<br>(A*B) = (C)                               | Contribution of<br>components |
|--|------------------|-------------------------------|--|-------------------------------|
| CPIA   | 0.385            | 2.933                         | 1.13   | 449                           |
| Real growth rate (in percent)<br>Import coverage of reserves (in   | 2.719            | 1.039                         | 0.03   | 19                            |
| percent)<br>mport coverage of reserves^2 (in   | 4.052            | 57.963                        | 2.35   | 919                           |
| percent)   | -3.990           | 33.597                        | -1.34  | -529                          |
| Remittances (in percent)<br>Vorld economic growth (in percent)   | 2.022            | 1.433                         | 0.03   | 19                            |
| vond economic growin (in percent)  | 13.520           | 2.898                         | 0.39   | 159                           |
| CI Score   |                  |                               | 2.59   | 100%                          |
|  |                  |                               |  | _                             |
| CI rating Applicable threshold   | ls               |                               | Weak   |                               |
|  | ls               | - 4                           | APPLICABLE   |                               |
| Applicable threshold   | ls               |                               |  |                               |
| Applicable threshold   |                  |                               | APPLICABLE<br>FOTAL public debt ben                              | chmark                        |
| Applicable threshold   |                  |                               | APPLICABLE   | chmark<br>35                  |
| Applicable threshold   |                  |                               | APPLICABLE<br>TOTAL public debt ben<br>V of total public debt in |                               |
| Applicable threshold<br>APPLICABLE<br>EXTERNAL debt burden thres<br>PV of debt in % of                   | sholds           |                               | APPLICABLE<br>TOTAL public debt ben<br>V of total public debt in |                               |
| Applicable threshold   | sholds<br>140    |                               | APPLICABLE<br>TOTAL public debt ben<br>V of total public debt in |                               |
| Applicable threshold<br>APPLICABLE<br>EXTERNAL debt burden thres<br>PV of debt in % of<br>Exports<br>GDP | sholds<br>140    |                               | APPLICABLE<br>TOTAL public debt ben<br>V of total public debt in |                               |

# **METHODOLOGY AND ASSUMPTIONS**

#### THE BASELINE

9. An economic recovery in Solomon Islands is currently under way after a combination of adverse shocks. The economy was hit by multiple shocks including civil unrest in the capital in November 2021, a local outbreak of COVID-19 in early 2022, and the ongoing spike in food and fuel prices caused by Russia's invasion of Ukraine. Solomon Islands reopened its border in July 2022 after over two years of isolation and has two important events coming up—the Pacific Games in November 2023 and the general elections in early 2024.

10. Solomon Islands is now at a critical juncture, as its large pipeline of externally financed infrastructure projects provides a valuable opportunity for growth, but at the same time poses significant macroeconomic costs and risks. Annual inflation accelerated sharply, from a negative level in March 2022 to 9.9 percent in September, initially driven by higher import prices, followed by passthrough to domestic prices. Higher import prices are expected to have significantly widened the current account deficit to 13.3 percent of GDP in 2022, reducing reserve coverage to 9.5 months of imports. The delayed passing of the 2022 Budget and a late disbursement of budget support grant from a development partner appear to have resulted in an under-implementation of the 2022 budget, with the overall deficit estimated at 4.1 percent of GDP. A draw-down of government deposits (by an estimated SI\$300 million) helped finance the deficit and kept public debt from further rising.

**11.** The assumptions in the baseline scenario are consistent with the macroeconomic framework. The discount rate used to calculate the net present value of external debt remains at 5 percent. The main assumptions are:

• **Real GDP** is expected to have declined by 4.1 percent in 2022, owing to a series of negative shocks including the end-2021 social unrest, COVID-19-related mobility restrictions, and Russia's invasion of Ukraine. The growth rate is projected to recover to 2.5 percent in 2023 driven by the Pacific Games and other ongoing large infrastructure projects and remain positive but somewhat below its pre-pandemic level over the medium-term, averaging 2.3 percent during 2022–32. This outlook is premised on large infrastructure projects coming to fruition, expansion of the mining and tourism sectors, some productivity gains in agriculture and fisheries, and increasing young population entering the labor force including in foreign markets.

• **Inflation** (measured by the GDP deflator) is expected to rise to 7.7 percent in 2022 driven by higher global commodity prices and average 3.8 percent during 2022–32.

• **Non-interest current account deficit** is projected to widen to 13.2 percent of GDP in 2022 from 4.9 percent of GDP in 2021 and remain large averaging 8.4 percent of GDP over 2022–32, driven by higher import prices coupled with projected trend declines in logging exports as well as high imports for infrastructure projects. Increasing tourism receipts are forecast to partially offset the deficit. Official grants are projected to decline to 5.5 percent of GDP in 2022 from 6.7 percent of GDP in 2021 and average 2.4 percent of GDP over 2022-32, while FDI inflows, some of which are associated with the current infrastructure investments, are projected to remain steady averaging 2.4 percent of GDP over 2022-32.

• **Fiscal outlook**: A fall in revenue and an increase in pandemic-related spending further widened the primary deficit to 3.8 percent of GDP in 2022, financed by grants, concessional loans, and the issuance of Development Bonds. The government also accumulated payment arrears of around 0.8 percent of GDP in 2020-21, but made progress in 2022 to clear about a quarter of them and set out a path to clear the remaining ones, including by delaying a capital spending project. Fiscal deficits are expected to persist going forward, reflecting large spending needs to achieve Sustainable Development Goals, sizeable costs to maintain the newly built infrastructure, and continued weak revenue trends including from declining revenue from logging exports. The primary deficits are projected to remain elevated at a ten-year average of 2.9 percent of GDP as compared to its historical ten-year average of 0.3 percent of GDP surplus. Efforts to strengthen domestic resource mobilization, such as a planned VAT introduction, improved tax administration through the implementation of the recent Tax Administration Act, and further tax reforms including on mineral taxes would contribute to reducing primary deficits and improving debt dynamics.

• **External and domestic financing**: New on-budget<sup>3</sup> external loan disbursements for projects in the pipeline are expected to remain around 2 percent of GDP over the next five years (2022–27), gradually declining to average 1.1 percent of GDP in the following five-year period (2028-32), under the annual borrowing limits set in the annual budgets. All external financing provided by multilateral institutions (e.g.,

<sup>&</sup>lt;sup>3</sup> A large amount of externally funded investment projects are conducted off budget. See the World Bank's 2022 Public Expenditure Review for Solomon Islands, Chapter 7.

IDA and ADB) and development partners (e.g., JICA and China ExIm Bank) is assumed to be concessional with the average grant element of new borrowing of at least 36.6 percent. It is assumed that the government will increase its annual T-bill issuance, while gradually shifting the domestic debt profile to Development Bonds in line with the Medium-term Debt Management Strategy<sup>4</sup>, to finance the persistent primary deficits as donor support declines. The redemption profile of domestic debt reflects the rollover of medium- and long-term debt as well as T-bills every year. A shift from external concessional borrowing to domestic financing is expected to significantly increase the debt service costs. It will also bring about serious risks stemming from the low absorptive capacity of the domestic bond market, such as crowding out of private investment and destabilized economic and financial environments, in addition to elevated risks for government financing.

|                                      | Previou | us DSA  | Curren  | nt DSA  | Current vs. Previous |         |  |  |  |
|--------------------------------------|---------|---------|---------|---------|----------------------|---------|--|--|--|
|                                      | 2021-26 | 2021-31 | 2021-26 | 2021-31 | 2021-26              | 2021-31 |  |  |  |
| Real GDP growth, percent             | 2.5     | 2.8     | 1.1     | 2.0     | -1.4                 | -0.8    |  |  |  |
| Inflation (GDP deflator), percent    | 4.3     | 4.1     | 3.8     | 3.6     | -0.5                 | -0.5    |  |  |  |
| (In percent of GDP)                  |         |         |         |         |                      |         |  |  |  |
| Revenue and grants                   | 29.8    | 29.3    | 26.6    | 26.5    | -3.2                 | -2.8    |  |  |  |
| Primary expenditure                  | 32.9    | 32.6    | 30.3    | 29.5    | -2.6                 | -3.1    |  |  |  |
| Primary balance                      | -3.1    | -3.3    | -3.7    | -3.0    | -0.6                 | 0.3     |  |  |  |
| Exports of goods and services        | 25.6    | 23.3    | 26.4    | 24.8    | 0.8                  | 1.5     |  |  |  |
| Imports of goods and services        | 40.1    | 37.9    | 43.3    | 40.4    | 3.2                  | 2.5     |  |  |  |
| Non-interest current account balance | -9.5    | -9.8    | -9.6    | -8.2    | -0.1                 | 1.6     |  |  |  |

12. The realism tools<sup>5</sup> suggest that the macroeconomic and fiscal assumptions are reasonable.

The external and public PPG debt trajectory in the current DSA is largely in line with the previous DSA (Figure 3) but shows a faster transition to a larger share of domestic debt, reflecting projected declines in external grants for budget support and concessional loans for infrastructure projects. The projected 5-year increases in external and public debt stocks are in line with the respective historical ones: public debt is forecast to significantly increase driven by persistent primary deficits, while increases in external debt would be mostly offset by the drawdown of foreign reserves<sup>6</sup> (middle charts). The projected fiscal adjustment over 2022-24 lies in the middle of the distribution of LIC's past adjustment episodes (Figure 4, left). Staff's real GDP growth projection during the years 2022–24 has a more pronounced downturn and recovery due to temporary COVID19-related restrictions and border closures than would have been suggested by fiscal multiplier-based analysis alone (Figure 4, right).

<sup>&</sup>lt;sup>4</sup> The authorities are working to develop a domestic bond market including through the introduction of auctions for bonds and the expansion of investor base.

<sup>&</sup>lt;sup>5</sup> The lack of reliable public investment data precludes the team from using the Public Investment-Growth realism tool.

<sup>&</sup>lt;sup>6</sup> The drawdown of foreign reserves is included in the negative residual in the upper middle chart of Figure 3 that shows contributions to external debt as a percent of GDP.

### TAILORED STRESS TEST<sup>7</sup>

**13. Given the severity and frequency of natural disasters in Solomon Islands, the natural disaster shock is tailored to better reflect country-specific factors.** Solomon Islands, which is defined as small developing natural disaster-prone state, is automatically subject to the standard natural disaster shock.<sup>8</sup>, <sup>9</sup> The default parameter setting was modified to reflect Solomon Islands-specific factors based on the findings of staff's research on the impact of natural disasters.<sup>10</sup> The study is based on EM-DAT, an international disaster database, which shows that historically the largest damage from natural disasters during 1980–2016 was estimated at 14 percent of GDP. A tailored stress test captures a one-off shock to public debt-to-GDP ratio in a similar scale to the largest historical shock, associated with reductions in real GDP growth and exports by 2.7 and 8.1 percentage points, respectively.

#### CUSTOMIZED FISCAL AND FINANCIAL RISK SCENARIO

14. A separate customized fiscal and financing risk scenario (Table 5) is added to flag potential risks from mismanagement of externally financed infrastructure projects and possible declines in concessional financing. This risk scenario assumes a materialization of a contingent liability in 2024 from some of the recent infrastructure loans. The size of the shock is presumed to be 7 percent of GDP as under the built-in contingent liability shock. The scenario further assumes an increase in public spending over 2023-28, including driven by cost overruns and surges in maintenance costs of infrastructure projects<sup>11</sup>. It is assumed that additional financing needs be covered through a shift to a combination of non-concessional external and domestic financing, which implies a further shortening of maturities, increases in borrowing costs, and some decumulation of government cash reserves.

### DEBT SUSTAINABILITY

### EXTERNAL DEBT SUSTAINABILITY ANALYSIS

**15.** Under the baseline scenario, all external PPG debt indicators remain below the policy relevant thresholds for the next ten years (Figure 1). The PV of PPG external debt-to-GDP ratio is expected to peak at 13.0 percent in 2025, before trending down to 10.5 percent in 2032. As Figure 3 shows, the main driver of debt dynamics is a deterioration of the current account balance and an increase in foreign direct investment (FDI), which is largely offset by declining foreign reserves.

<sup>&</sup>lt;sup>7</sup> Six standardized stress tests in the DSF are applied to both external and public DSA. They capture shocks to real GDP growth, the primary fiscal balance, exports, other flows (including official and private transfers and FDI), exchange rate depreciation, and a combination of these shocks.

<sup>&</sup>lt;sup>8</sup> The IMF board paper, "Small States' Resilience to Natural Disasters and Climate Change – Role for the IMF", 2016.

<sup>&</sup>lt;sup>9</sup> One-off shock of 10 percentage points of GDP to debt-GDP ratio in the second year of the projection period (2023 in this case). Real GDP growth and exports are lowered by 1.5 and 3.5 percentage points, respectively, in the year of the shock.

<sup>&</sup>lt;sup>10</sup> Please see the details in the IMF Working paper 18/108, "The Economic Impact of Natural Disaster in Pacific Island Countries."

<sup>&</sup>lt;sup>11</sup> The World Bank's 2022 Public Expenditure Review for Solomon Islands estimates the potential maintenance costs of the newly built infrastructure at some 2.4 percent of GDP per year.

16. The standardized stress test shows that an export shock has the largest negative impact on the external debt trajectory.<sup>12</sup> With the export shock, the PV of PPG external debt-to-exports ratio is expected to breach the indicative threshold in 2024 (Table 3). This emphasizes the need to expand the export base, as logging activity is expected to substantially decline in the medium term. Other shocks, including to real GDP growth, primary balance, other flows, and commodity prices, do not lead to breaches.

**17.** A tailored natural disaster shock causes all the debt trajectories for each debt indicator to move upward. Though the DSA assumes a one-off shock that takes place in 2023, there is a possibility that multiple severe natural disasters could occur within a 10-year timeframe. Staff's work shows that there is a probability of around 13.5 percent of a disaster each year of a magnitude of more that 3 percent of GDP or impacting 5 percent of the population. Multiple natural disasters would have a larger cumulative effect on debt sustainability through lower long-term growth and higher borrowing needs for post-disaster reconstruction efforts.

### PUBLIC SECTOR DEBT SUSTAINABILITY ANALYSIS

18. Under the baseline scenario, the PV of public debt-to-GDP ratio is forecast to get close to the 35 percent benchmark towards the end of the 10-year projection horizon (Figure 2). The ratio is projected to rise from 16.3 percent in 2022 to 34.0 percent in 2032. In nominal terms, the ratio of public debt-to-GDP is projected to breach the authorities' policy threshold of 35 percent in 2031, reflecting persistent primary deficits despite the sizeable projected nominal GDP growth. Both the PV of public debt-to-revenue and grants ratio and debt service-to-revenue and grants ratio are forecast to more than double in the coming decade. The major driver of the rising debt ratios is the projected decline in external budget support grants coupled with shifts from highly concessional external debt to more expensive domestic borrowing.

**19.** The sensitivity analysis highlights vulnerabilities of Solomon Islands' public debt. The 35 percent benchmark for the PV of public debt as percent of GDP would be breached under various shock scenarios (Figure 2, Table 4). The PV of debt-to-revenue ratio is most affected by the commodity price shock. As a small exporter of multiple commodities that now include gold, the country is highly exposed to international price fluctuations and Chinese market demand for logs which is expected to slowdown in line with the downward revision of China's potential growth. The country's high vulnerabilities to shocks highlight the need for economic diversification and fostering growth of the non-commodity private sector over the medium term.

**20.** The natural disaster shock scenario flags major risks to debt sustainability. In the natural disaster shock scenario, the PV of public debt-to-GDP ratio would breach the 35 percent benchmark in 2026. This result highlights the importance of rebuilding fiscal buffers against external shocks including natural disasters.

21. The fiscal and financing risk scenario highlights the critical importance of prudent public investment management and Solomon Islands' vulnerability to financing terms. Under the scenario,

<sup>&</sup>lt;sup>12</sup> The export shock sets nominal export growth (in USD) to its historical average minus one standard deviation (SD), or the baseline projection minus one SD, whichever is lower in the second and third years of the projection period.

the PV of public debt-to-GDP ratio is projected to breach the 35 percent benchmark immediately in 2024. Public investment projects need to be phased in line with the economy's absorptive capacity and accompanying financing arrangements should be carefully negotiated, to mitigate fiscal risks and ensure debt sustainability.

### **RISK RATING AND VULNERABILITIES**

22. The 2022 debt sustainability analysis suggests that Solomon Islands' risk of external debt distress is moderate. All debt indicators remain below the relevant thresholds in 2022-32 under the baseline scenario. Several shocks would result in a significant deterioration in debt sustainability. Even though debt service indicators are below their thresholds, maximizing concessional loans would help keep the debt burden contained. Bringing more of the off-budget donor financing on budget could help increase fiscal space and improve debt sustainability indicators.

23. The moderate risk tool for external debt (Figure 5) suggests that there is a substantial space to absorb shocks. It reflects a current low level of external debt.<sup>13</sup> However, the decline in government cash balance and constraints to absorptive capacity call for caution in debt accumulation.

24. Stress tests highlight vulnerabilities of Solomon Islands. Various scenarios including commodity price and natural disaster shocks would significantly worsen public debt sustainability, on the back of the projected widening of fiscal deficits. And so will the alternative fiscal and financing risk scenario. These vulnerabilities call for measures to rebuild fiscal buffers, boost medium-term potential growth, and prioritize investment projects that build resilience to natural disasters. Prudent public investment management including its financing terms is also critically important.

**25.** The public debt portfolio faces limited refinancing and interest rate risks.<sup>14</sup> About 76 percent of public debt is external loans that are contracted at highly concessional terms.<sup>15</sup> There is rollover risk associated with T-bills (which account for about 17 percent of domestic debt) but the risk is limited given excess market liquidity and high market demand for government securities. Given high liquidity in the banking system, yields of government securities have remained broadly constant over the past years. This is the case for both T-bill auctions (e.g. yields for one-year T-bills have amounted to around 1.1 percent) and the negotiated coupon rate on the Development Bonds, thereby limiting interest rate risk.

### **AUTHORITIES' VIEWS**

26. The authorities broadly agreed with staff's analysis of Solomon Islands' debt sustainability. They underscored their firm commitment to the Medium-term Debt Management Strategy, including increasing the share of financing from the domestic debt market, as well as their intention to manage public

<sup>&</sup>lt;sup>13</sup> The space is measured by the distance between the baseline debt burden indicators and their thresholds.

<sup>&</sup>lt;sup>14</sup> More details are presented in the World Bank and the IMF TA report "Solomon Islands: Medium-term Debt Management Strategy Mission", July 2021.

<sup>&</sup>lt;sup>15</sup> The Average Time To Maturity (ATM) for external (domestic) debt is 13.6 (6.2) years. The weighted average interest rate is 1 percent for external loans and borrowing costs for domestic debt is relatively low and stable at 4.9 percent.

debt within the 35 percent of GDP threshold in the medium-term. They aim to gradually rebuild the cash balance and lower fiscal deficits while addressing huge investment needs for infrastructure and human capital development, through improving the efficiency of spending and advancing domestic revenue mobilization. The authorities are committed to prudent management of infrastructure projects and assessment of the terms of external borrowing to ensure macroeconomic stability and debt sustainability.

#### SOLOMON ISLANDS | DEBT SUSTAINABILITY ANALYSIS

|  |               |               |               | 1.1           |              |              |              |              |              |              |               |            |             |   |
|--|---------------|---------------|---------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|------------|-------------|---|
|  | A             | tual          |               |               |              |              | Proje        | ections      |              |              |               | Ave        | rage 8/     | _   |
|  | 2019          | 2020          | 2021          | 2022          | 2023         | 2024         | 2025         | 2026         | 2027         | 2032         | 2042          | Historical | Projections | _   |
| xternal debt (nominal) 1/  | 8.7           | 13.1          | 12.7          | 16.6          | 20.7         | 23.5         | 25.9         | 26.6         | 26.4         | 21.6         | 12.9          | 11.1       | 23.4        | Definition of external/domestic debt Residency-b          |
| of which: public and publicly guaranteed (PPG)   | 5.8           | 9.9           | 9.5           | 11.2          | 13.7         | 15.0         | 15.9         | 15.4         | 14.8         | 13.3         | 8.8           | 8.3        | 14.2        | Is there a material difference between the Yes            |
| hange in external debt   | 1.9           | 4.4           | -0.4          | 3.9           | 4.0          | 2.8          | 2.4          | 0.7          | -0.1         | -1.0         | -1.0          |            |             | two criteria?   |
| dentified net debt-creating flows  | 7.7           | 1.7           | 3.5           | 11.3          | 9.8          | 7.3          | 6.7          | 4.8          | 4.1          | 4.2          | 2.4           | 1.1        | 5.7         |   |
| Non-interest current account deficit   | 9.4           | 1.5           | 4.9           | 13.2          | 12.5         | 10.0         | 9.6          | 7.6          | 6.9          | 6.9          | 4.4           | 3.3        | 8.4         |   |
| Deficit in balance of goods and services   | 10.0          | 8.3           | 13.3          | 21.0          | 18.4         | 17.2         | 16.6         | 14.7         | 14.0         | 14.8         | 12.0          | 7.5        | 15.7        |   |
| Exports  | 36.5          | 27.9          | 26.8          | 24.4          | 29.3         | 27.3         | 25.8         | 25.0         | 24.6         | 20.0         | 13.4          |            |             | Debt Accumulation   |
| Imports  | 46.5          | 36.2          | 40.1          | 45.4          | 47.8         | 44.5         | 42.5         | 39.6         | 38.6         | 34.8         | 25.3          |            |             | 7.0   |
| Net current transfers (negative = inflow)  | -1.5          | -4.3          | -7.1          | -5.8          | -4.2         | -5.5         | -5.3         | -5.5         | -5.5         | -6.0         | -6.2          | -5.7       | -5.5        | 7.5   |
| of which: official   | -3.6          | -4.7          | -6.7          | -5.5          | -2.5         | -2.6         | -2.1         | -2.2         | -1.9         | -1.9         | 0.0           |            |             | 6.0   |
| Other current account flows (negative = net inflow)  | 0.9           | -2.5          | -1.3          | -2.1          | -1.7         | -1.7         | -1.8         | -1.6         | -1.7         | -1.9         | -1.3          | 1.5        | -1.8        |   |
| Net FDI (negative = inflow)  | -1.8          | -0.4          | -1.5          | -2.5          | -2.5         | -2.4         | -2.4         | -2.4         | -2.4         | -2.3         | -1.8          | -1.9       | -2.4        | 5.0   |
| Endogenous debt dynamics 2/  | 0.1           | 0.6           | 0.1           | 0.6           | -0.2         | -0.3         | -0.4         | -0.5         | -0.4         | -0.4         | -0.2          |            |             |   |
| Contribution from nominal interest rate  | 0.1           | 0.1           | 0.1           | 0.1           | 0.2          | 0.2          | 0.2          | 0.3          | 0.3          | 0.3          | 0.2           |            |             | 4.0   |
| Contribution from real GDP growth  | -0.1          | 0.3           | 0.1           | 0.5           | -0.4         | -0.5         | -0.7         | -0.7         | -0.8         | -0.7         | -0.4          |            |             |   |
| Contribution from price and exchange rate changes  | 0.1           | 0.2           | -0.1          |               |              |              |              |              |              |              |               |            |             | 3.0   |
| Residual 3/  | -5.8          | 2.7           | -3.9          | -7.4          | -5.7         | -4.5         | -4.3         | -4.1         | -4.2         | -5.3         | -3.4          | -1.9       | -4.9        | · · · · · · · · · · · · · · · · · · ·                     |
| of which: exceptional financing  | 0.0           | 0.0           | 0.0           | 0.0           | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0           |            |             | 2.0   |
| ustainability indicators   |               |               |               |               |              |              |              |              |              |              |               |            |             | 1.0   |
| V of PPG external debt-to-GDP ratio  |               |               | 10.0          | 10.6          | 11.8         | 12.5         | 13.0         | 12.7         | 12.3         | 10.5         | 6.3           |            |             |   |
| V of PPG external debt-to-exports ratio  |               |               | 37.2          | 43.4          | 40.0         | 45.6         | 50.5         | 51.0         | 50.3         | 52.5         | 47.4          |            |             |   |
| PG debt service-to-exports ratio   | 1.4           | 1.6           | 1.6           | 1.7           | 1.4          | 1.8          | 2.4          | 2.4          | 2.5          | 3.9          | 3.9           |            |             | 2022 2024 2026 2028 2030 2032                             |
| PG debt service-to-revenue ratio   | 2.0           | 1.8           | 1.9           | 1.8           | 1.8          | 2.0          | 2.5          | 2.4          | 2.5          | 3.2          | 2.3           |            |             |   |
| cross external financing need (Million of U.S. dollars)  | 132.8         | 25.5          | 60.5          | 177.8         | 178.4        | 146.0        | 149.9        | 120.0        | 112.5        | 163.0        | 188.5         |            |             | Debt Accumulation   |
|  |               |               |               |               |              |              |              |              |              |              |               |            |             | <ul> <li>Grant-equivalent financing (% of GDP)</li> </ul> |
| ey macroeconomic assumptions   |               |               |               |               |              |              |              |              |              |              |               |            |             | Grant element of new borrowing (% right scale)            |
| eal GDP growth (in percent)  | 1.7           | -3.4          | -0.6          | -4.1          | 2.5          | 2.4          | 3.0          | 3.0          | 3.0          | 3.1          | 3.3           | 1.9        | 2.3         |   |
| DP deflator in US dollar terms (change in percent)   | -1.5          | -1.8          | 1.1           | 7.7           | 4.0          | 3.4          | 3.4          | 3.2          | 3.2          | 3.6          | 5.1           | 2.2        | 3.8         |   |
| fective interest rate (percent) 4/   | 1.8           | 1.3           | 1.0           | 1.1           | 1.0          | 1.0          | 1.1          | 1.1          | 1.3          | 1.4          | 1.8           | 1.8        | 1.2         | External debt (nominal) 1/                                |
| rowth of exports of G&S (US dollar terms, in percent)  | -13.1         | -27.5         | -3.5          | -5.9          | 28.2         | -1.4         | 0.7          | 2.7          | 4.6          | 1.7          | 3.6           | -1.8       | 3.7         | of which: Private   |
| rowth of imports of G&S (US dollar terms, in percent)  | 0.6           | -26.1         | 11.3          | 17.0          | 12.2         | -1.3         | 1.6          | -0.8         | 3.5          | 4.9          | 5.6           | 0.8        | 5.0         | 30  |
| irant element of new public sector borrowing (in percent)  |               | 24.6          | 22.0          | 59.7          | 52.0         | 44.8         | 40.2         | 43.6         | 44.7         | 50.5         | 50.5          |            | 48.1        |   |
| overnment revenues (excluding grants, in percent of GDP)<br>id flows (in Million of US dollars) 5/ | 25.8<br>119.9 | 24.6<br>213.0 | 22.6<br>213.2 | 23.0<br>109.2 | 23.0<br>92.2 | 24.3<br>79.4 | 25.0<br>71.8 | 24.8<br>47.5 | 24.7<br>50.0 | 24.1<br>78.2 | 23.1<br>127.5 | 27.9       | 24.2        | 25  |
| irant-equivalent financing (in percent of GDP) 6/  | 110.0         | 210.0         | 213.2         | 6.0           | 3.7          | 3.1          | 2.8          | 2.2          | 2.2          | 2.4          | 2.1           |            | 2.9         |   |
| rant-equivalent financing (in percent of external financing) 6/                                    |               |               |               | 87.4          | 68.0         | 70.2         | 67.3         | 83.2         | 85.1         | 82.6         | 88.8          |            | 78.9        | 20  |
| ominal GDP (Million of US dollars)   | 1,619         | 1,536         | 1,545         | 1,596         | 1,701        | 1,801        | 1,919        | 2,039        | 2,169        | 2,989        | 5,914         |            | 70.5        |   |
| lominal dollar GDP growth  | 0.2           | -5.1          | 0.6           | 3.3           | 6.6          | 5.9          | 6.5          | 6.3          | 6.4          | 6.8          | 8.6           | 4.1        | 6.2         | 15  |
|  |               |               |               |               |              |              |              |              |              |              |               |            |             |   |
| Iemorandum items:  |               |               |               |               |              |              |              |              |              |              |               |            |             | 10  |
| V of external debt 7/  |               |               | 13.2          | 16.0          | 18.7         | 21.0         | 23.0         | 23.9         | 24.0         | 18.8         | 10.4          |            |             |   |
| In percent of exports  |               |               | 49.4          | 65.7          | 63.7         | 76.7         | 89.0         | 95.9         | 97.8         | 93.8         | 77.9          |            |             | 5   |
| otal external debt service-to-exports ratio  | 1.6           | 1.9           | 1.8           | 1.9           | 1.6          | 2.0          | 2.7          | 2.7          | 2.8          | 4.3          | 4.5           |            |             |   |
| / of PPG external debt (in Million of US dollars)  |               |               | 154.0         | 169.0         | 199.9        | 224.8        | 250.2        | 259.6        | 267.6        | 313.9        | 375.0         |            |             | 0   |
| Vt-PVt-1)/GDPt-1 (in percent)<br>on-interest current account deficit that stabilizes debt ratio    |               |               |               | 1.0           | 1.9          | 1.5<br>7.2   | 1.4          | 0.5          | 0.4          | 0.3          | 0.1           |            |             | 2022 2024 2026 2028 2030 20                               |

1/ Includes both public and private sector external debt.

2) Derived as [r-g-p(1+g)] + Ex (1+η)/(1+g-p-gp) times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate ρ = growth rate of GDP deflator in U.S. dollar terms, E=nominal appreciation of the local currency, and α= share

of local currency-denominated external debt in total external debt.

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

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

6/ 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).

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

8/ Historical averages are generally derived over the past 10 years, subject to data availability, whereas projections averages are over the first year of projection and the next 10 years.

|   |             | Actual      |             |              |              |              | Proje        | ections      |              |              |             | Aver        | age 6/       | -   |                    |
|---|-------------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|-------------|--------------|---|--------------------|
|   | 2019        | 2020        | 2021        | 2022         | 2023         | 2024         | 2025         | 2026         | 2027         | 2032         | 2042        | Historical  | Projections  | _   |                    |
| Public sector debt 1/<br>of which: external debt  | 7.9<br>5.8  | 13.5<br>9.9 | 15.4<br>9.5 | 16.9<br>11.2 | 22.2<br>13.7 | 25.7<br>15.0 | 27.8<br>15.9 | 29.3<br>15.4 | 30.8<br>14.8 | 36.8<br>13.3 | 42.1<br>8.9 | 10.8<br>8.3 | 29.6<br>14.2 | Definition of external/domestic debt                      | Residency<br>based |
| hange in public sector debt   | 0.0         | 5.6         | 1.8         | 1.5          | 5.3          | 3.6          | 2.0          | 1.6          | 1.5          | 1.0          | 0.0         |             |              | Is there a material difference                            |                    |
| lentified debt-creating flows   | 1.3         | 2.7         | 3.6         | 3.7          | 5.0          | 3.4          | 2.0          | 1.9          | 1.8          | 1.3          | 0.3         | -0.6        | 2.3          | between the two criteria?                                 | Yes                |
| Primary deficit   | 1.4         | 2.2         | 3.4         | 3.8          | 5.8          | 4.0          | 2.7          | 2.6          | 2.4          | 1.9          | 1.0         | -0.3        | 2.9          |   |                    |
| Revenue and grants  | 27.4        | 30.1        | 27.1        | 27.7         | 24.8         | 26.4         | 26.9         | 26.7         | 26.6         | 26.0         | 24.9        | 31.8        | 26.4         | 5 LK  |                    |
| of which: grants  | 1.6         | 5.5         | 4.5         | 4.7          | 1.8          | 2.0          | 1.9          | 1.9          | 1.9          | 1.9          | 1.8         |             |              | Public sector debt 1/                                     |                    |
| Primary (noninterest) expenditure   | 28.8        | 32.4        | 30.5        | 31.5         | 30.7         | 30.4         | 29.6         | 29.3         | 29.0         | 27.9         | 25.8        | 31.4        | 29.3         | of which: local-currency denomination                     |                    |
| utomatic debt dynamics  | -0.1        | 0.5         | 0.2         | -0.2         | -0.8         | -0.6         | -0.7         | -0.7         | -0.6         | -0.6         | -0.6        |             |              | <ul> <li>of which, local-currency denomination</li> </ul> | nateo              |
| Contribution from interest rate/growth differential   | -0.2        | 0.4         | -0.1        | -0.2         | -0.8         | -0.6         | -0.7         | -0.7         | -0.6         | -0.6         | -0.6        |             |              | of which: foreign-currency deno                           | minated            |
| of which: contribution from average real interest rate<br>of which: contribution from real GDP growth | 0.0<br>-0.1 | 0.1<br>0.3  | -0.2<br>0.1 | -0.8<br>0.7  | -0.4<br>-0.4 | -0.1<br>-0.5 | 0.0<br>-0.8  | 0.1<br>-0.8  | 0.3<br>-0.9  | 0.5<br>-1.1  | 0.7<br>-1.3 |             |              | 40  |                    |
| Contribution from real exchange rate depreciation   | -0.1        | 0.5         | 0.1         | 0.7          | -0.4         | -0.5         | -0.0         | -0.0         | -0.9         | -1.1         | -1.5        |             |              |   |                    |
| Other identified debt-creating flows  | 0.0         | 0.0         | 0.4         | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0         | 0.0         | 0.0          | 35  |                    |
| Privatization receipts (negative)   | 0.0         | 0.0         | 0.0         | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0         | 0.0         | 0.0          | 30  |                    |
| Recognition of contingent liabilities (e.g., bank recapitalization)                                   | 0.0         | 0.0         | 0.0         | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0         |             |              | 25  |                    |
| 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         |             |              | 20  |                    |
| Other debt creating or reducing flow (e.g. IMF loan)  | 0.0         | 0.0         | 0.0         | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0         |             |              | 15  |                    |
| Residual  | -1.3        | 2.9         | -1.8        | -2.2         | 0.3          | 0.2          | 0.0          | -0.3         | -0.3         | -0.3         | -0.3        | 0.3         | -0.3         | 10  |                    |
| Sustainability indicators   |             |             |             |              |              |              |              |              |              |              |             |             |              | 5   |                    |
| V of public debt-to-GDP ratio 2/  |             |             | 15.7        | 16.3         | 20.2         | 23.2         | 24.9         | 26.7         | 28.3         | 34.0         | 39.6        |             |              | 2022 2024 2026 2028                                       | 2030 20            |
| V of public debt-to-revenue and grants ratio  |             |             | 58.1        | 59.0         | 81.5         | 88.1         | 92.6         | 99.9         | 106.5        | 130.9        | 158.9       |             |              |   |                    |
| Debt service-to-revenue and grants ratio 3/   | 3.1         | 3.6         | 4.9         | 4.6          | 3.1          | 4.7          | 6.0          | 6.1          | 7.9          | 10.9         | 17.2        |             |              |   |                    |
| Bross financing need 4/   | 2.2         | 3.3         | 4.7         | 5.1          | 6.6          | 5.2          | 4.3          | 4.1          | 4.4          | 4.7          | 5.2         |             |              | of which: held by residents                               | 5                  |
| ey macroeconomic and fiscal assumptions   |             |             |             |              |              |              |              |              |              |              |             |             |              | of which: held by non-resi                                | dents              |
| leal GDP growth (in percent)  | 1.7         | -3.4        | -0.6        | -4.1         | 2.5          | 2.4          | 3.0          | 3.0          | 3.0          | 3.1          | 3.3         | 1.9         | 2.3          | 40  |                    |
| verage nominal interest rate on external debt (in percent)  | 1.5         | 1.2         | 0.8         | 0.9          | 1.0          | 1.1          | 1.2          | 1.3          | 1.8          | 1.8          | 1.7         | 1.1         | 1.5          | 35  |                    |
| verage real interest rate on domestic debt (in percent)   | -1.0        | 7.0         | 3.5         | -4.0         | -1.6         | 0.5          | 1.1          | 1.7          | 2.0          | 2.2          | 2.4         | -1.3        | 1.0          | 30  |                    |
| eal exchange rate depreciation (in percent, + indicates depreciation)                                 | 1.4         | 0.8         | 4.0         |              |              |              |              |              |              |              |             | 0.2         |              | 25  |                    |
| nflation rate (GDP deflator, in percent)  | 1.2         | -1.3        | 1.1         | 7.0          | 4.7          | 3.4          | 3.4          | 3.2          | 3.2          | 3.6          | 3.5         | 2.8         | 3.8          | 20  |                    |
| rowth of real primary spending (deflated by GDP deflator, in percent)                                 | -2.6        | 8.5         | -6.4        | -0.8         | -0.3         | 1.6          | 0.3          | 1.8          | 2.0          | 2.3          | 2.6         | 3.4         | 1.5          | 15  |                    |
| Primary deficit that stabilizes the debt-to-GDP ratio 5/  | 1.4         | -3.4        | 1.6         | 2.3          | 0.5          | 0.5          | 0.7          | 1.0          | 0.9          | 0.9          | 0.9         | -0.2        | 0.9          | 10  |                    |
| PV of contingent liabilities (not included in public sector debt)                                     | 0.0         | 0.0         | 0.6         | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0         |             |              | 5   |                    |

1/ Coverage of debt: The central government, central bank, government-guaranteed debt . Definition of external debt is Residency-based.

2/ The underlying PV of external debt-to-GDP ratio under the public DSA differs from the external DSA with the size of differences depending on exchange rates projections.

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

4/ 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 and other debt creating/reducing flows.

5/ Defined as a primary deficit minus a change in the public debt-to-GDP ratio ((-): a primary surplus), which would stabilizes the debt ratio only in the year in question.

6/ Historical averages are generally derived over the past 10 years, subject to data availability, whereas projections averages are over the first year of projection and the next 10 years.

#### Table 3. Solomon Islands: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2022-32 (In percent)

|  |                  |              |           |           |            | ections    |            |            |           |           |    |
|--|------------------|--------------|-----------|-----------|------------|------------|------------|------------|-----------|-----------|----|
|  | 2022             | 2023         | 2024      | 2025      | 2026       | 2027       | 2028       | 2029       | 2030      | 2031      | 20 |
|  | PV of debt-to    | GDP ratio    |           |           |            |            |            |            |           |           |    |
| Baseline   | 10.6             |              | 12        | 13        | 13         | 12         | 12         | 12         | 11        | 11        | 1  |
| A. Alternative Scenarios   |                  |              |           |           |            |            |            |            |           |           |    |
| <ol> <li>Key variables at their historical averages in 2022-2032 2/</li> </ol>             | 11               | 7            | 5         | 3         | 1          | -1         | -3         | -4         | -6        | -7        |    |
| A2. Fiscal and Financial Risk Scenario   | 11               | 14           | 17        | 19        | 18         | 18         | 17         | 17         | 16        | 15        |    |
| 3. Bound Tests   |                  |              |           |           |            |            |            |            |           |           |    |
| 31. Real GDP growth<br>32. Primary balance   | 11               | 12           | 14<br>15  | 14<br>16  | 14<br>15   | 14<br>15   | 13<br>15   | 13<br>14   | 13<br>14  | 12<br>14  |    |
| B. Exports   | 11               | 17           | 25        | 25        | 25         | 24         | 24         | 23         | 22        | 22        |    |
| B4. Other flows 3/   | 11               | 14           | 17        | 18        | 17         | 17         | 16         | 16         | 15        | 15        |    |
| B5. Depreciation   | 11               | 15           | 12        | 13        | 12         | 12         | 12         | 11         | 11        | 11        |    |
| B6. Combination of B1-B5   | 11               | 19           | 20        | 21        | 20         | 20         | 19         | 19         | 18        | 18        |    |
| C. Tailored Tests<br>C1. Combined contingent liabilities                                   | 11               | 15           | 16        | 16        | 16         | 16         | 15         | 15         | 14        | 14        |    |
| C2. Natural disaster   | 11               | 19           | 20        | 21        | 21         | 20         | 20         | 20         | 20        | 20        |    |
| C3. Commodity price  | 11               | 15           | 19        | 19        | 19         | 18         | 17         | 16         | 15        | 13        |    |
| C4. Market Financing   | n.a.             | n.a.         | n.a.      | na.       | n.a.       | n.a.       | n.a.       | n.a.       | na.       | na.       |    |
| Threshold  | 30               | 30           | 30        | 30        | 30         | 30         | 30         | 30         | 30        | 30        |    |
|  | PV of debt-to-e  | exports rati | 0         |           |            |            |            |            |           |           |    |
|  |                  | -            |           |           |            |            |            |            | 50        |           |    |
| Baseline   | 43               | 40           | 46        | 50        | 51         | 50         | 51         | 52         | 52        | 52        |    |
| A. Alternative Scenarios<br>A1. Key variables at their historical averages in 2022-2032 2/ | 43               | 25           | 18        | 11        | 2          | -5         | -11        | -18        | -26       | -35       |    |
| A2. Fiscal and Financial Risk Scenario   | 43               | 47           | 61        | 73        | 73         | 72         | 72         | 73         | 73        | 72        |    |
| B. Bound Tests   |                  |              |           |           |            |            |            |            |           |           |    |
| B1. Real GDP growth  | 43               | 40           | 46        | 50        | 51         | 50         | 51         | 52         | 52        | 52        |    |
| B2. Primary balance  | 43               |              | 55        | 61        | 62         | 61         | 62         | 63         | 64        | 64        |    |
| B3. Exports<br>B4. Other flows 3/  | 43               |              | 151<br>63 | 162<br>68 | 164<br>69  | 162<br>68  | 163<br>69  | 167<br>70  | 169<br>71 | 170<br>71 |    |
| B5. Depreciation   | 43               | 40           | 35        | 39        | 39         | 39         | 39         | 40         | 40        | 40        |    |
| B6. Combination of B1-B5   | 43               | 84           | 67        | 1 0 9     | 110        | 108        | 109        | 112        | 113       | 113       |    |
| C. Tailored Tests  |                  |              |           |           |            |            |            |            |           |           |    |
| C1. Combined contingent liabilities  | 43               | 51           | 58        | 63        | 64         | 63         | 64         | 65         | 66        | 66        |    |
| C2. Natural disaster<br>C3. Commodity price  | 43<br>43         |              | 76<br>84  | 84<br>88  | 86<br>84   | 87<br>78   | 89<br>73   | 92<br>72   | 95<br>69  | 97<br>66  |    |
| C4. Market Financing   | 45<br>n.a.       | na.          | na.       | na.       | 04<br>n.a. | n.a.       | n.a.       | n.a.       | na.       | na.       |    |
| Threshold  | 140              | 140          | 140       | 140       | 140        | 140        | 140        | 140        | 140       | 140       |    |
|  | 140              | 140          | 140       | 140       | 140        | 140        | 140        | 140        | 140       | 140       |    |
|  | Debt service-to- | exports rat  | tio       |           |            |            |            |            |           |           |    |
| Baseline   | 2                | 1            | 2         | 2         | 2          | 3          | 3          | 3          | 4         | 4         |    |
| A. Alternative Scenarios   |                  |              |           |           |            |            |            |            |           |           |    |
| A1. Key variables at their historical averages in 2022-2032 2/                             | 2                |              | 1         | 2         | 2          | 2          | 2          | 3          | 3         | 3         |    |
| A2. Fiscal and Financial Risk Scenario   | 2                | 1            | 2         | 3         | 4          | 4          | 4          | 5          | 5         | 6         |    |
| B. Bound Tests   |                  |              |           |           |            |            |            | ,          | ,         |           |    |
| B1. Real GDP growth<br>B2. Primary balance   | 2                |              | 2         | 2         | 2          | 3          | 3          | 3<br>4     | 4         | 4         |    |
| B3. Exports  | 2                |              | 4         | 6         | 6          | 6          | 6          | 8          | 8         | 8         |    |
| B4. Other flows 3/   | 2                |              | 2         | 3         | 3          | 3          | 3          | 4          | 4         | 4         |    |
| B5. Depreciation<br>B6. Combination of B1-B5   | 2                |              | 2         | 2         | 2          | 2          | 2          | 3<br>6     | 3<br>6    | 4         |    |
| C. Tailored Tests  | 2                | 2            | 2         | 4         | 4          | 4          | 2          | 0          | 0         | 0         |    |
| C1. Combined contingent liabilities  | 2                | 1            | 2         | 3         | 3          | 3          | 3          | 4          | 4         | 4         |    |
| C2. Natural disaster   | 2                |              | 2         | 3         | 3          | 3          | 3          | 4          | 5         | 5         |    |
| C3. Commodity price  | 2                |              | 3         | 4         | 3          | 3          | 3          | 4          | 4         | 4         |    |
| C4. Market Financing   | n.a.             | n.a.         | n.a.      | na.       | n.a.       | n.a.       | n.a.       | n.a.       | na.       | na.       |    |
| Threshold  | 10               | 10           | 10        | 10        | 10         | 10         | 10         | 10         | 10        | 10        |    |
|  | Debt service-to- |              | tio       |           |            |            |            |            |           |           |    |
| Baseline   | 2                | 2            | 2         | 2         | 2          | 2          | 2          | 3          | 3         | 3         |    |
|  | 2                | 2            | 2         | 2         | 2          | 2          | 4          | 2          | 3         | 2         |    |
| A. Alternative Scenarios<br>A1. Key variables at their historical averages in 2022-2032 2/ | 2                | 2            | 2         | 2         | 2          | 2          | 1          | 2          | 2         | 2         |    |
| A2. Fiscal and Financial Risk Scenario   | 2                |              | 2         | 3         | 4          | 4          | 4          | 4          | 4         | 5         |    |
| B. Bound Tests   | 2                | 2            | 2         | 3         | 4          | 4          | 4          | 4          | 4         | 5         |    |
| B1. Real GDP growth  | 2                | 2            | 2         | 3         | 3          | 3          | 3          | 4          | 4         | 4         |    |
| B2. Primary balance  | 2                | -            | 2         | 3         | 3          | 3          | 3          | 3          | 3         | 3         |    |
| B3. Exports<br>B4. Other flows 3/  | 2                |              | 3         | 4         | 4          | 4          | 4          | 4          | 4         | 4         |    |
| B5. Depreciation   | 2                | -            | 2         | 3         | 3          | 3          | 3          | 4          | 4         | 4         |    |
| 86. Combination of B1-B5   | 2                |              | 3         | 3         | 3          | 3          | 3          | 4          | 4         | 4         |    |
| C. Tailored Tests  |                  |              |           |           |            |            |            |            |           |           |    |
| C1. Combined contingent liabilities  | 2                |              | 2         | 3         | 3          | 3          | 3          | 4          | 3         | 4         |    |
| C2 Matural diseases  | 2                |              | 3         | 3<br>4    | 3          | 3          | 3          | 4          | 4         | 4         |    |
| C2. Natural disaster   |                  |              |           | 4         | 5          | 5          | 3          | 4          | 4         | 4         |    |
| C3. Commodity price  | 2<br>n.a.        |              | na.       | na        | n a        | n a        | n.a.       | n.a.       | na        | na.       |    |
|  | 2<br>n.a.<br>14  | n.a.         | na.<br>14 | na.<br>14 | n.a.<br>14 | n.a.<br>14 | n.a.<br>14 | n.a.<br>14 | na.<br>14 | na.<br>14 |    |

Sources, country autonties, and sear estimates and projections.
1/A bold value indicates a breach of the threshold.
2/Variables indude real GDP growth, GDP deflator (in U.S. dollar terms), non-interest current account in percent of GDP, and non-debt creating flows.
3/ Includes official and private transfers and FDI.

# Table 4. Solomon Islands: Sensitivity Analysis for Key Indicators of Public Debt, 2022–32(In percent)

|  |           |             |             |            |            | jections 1/ |            |                 |            |            |          |
|--|-----------|-------------|-------------|------------|------------|-------------|------------|-----------------|------------|------------|----------|
|  | 2022      | 2023        | 2024        | 2025       | 2026       | 2027        | 2028       | 2029            | 2030       | 2031       | 203      |
|  | P\        | of Debt-1   | to-GDP Ra   | tio        |            |             |            |                 |            |            |          |
| Baseline   | 16        | 20          | 23          | 25         | 27         | 28          | 30         | 31              | 32         | 33         | 3        |
| A. Alternative Scenarios   |           |             |             |            |            |             |            |                 |            |            |          |
| A1. Key variables at their historical averages in 2022-2032 2/   | 16        | 17          | 18          | 18         | 19         | 19          | 20         | 20              | 21         | 21         | 2        |
| A2. Fiscal and Financial Risk Scenario   | 16        | 24          | 37          | 40         | 42         | 44          | 46         | 46              | 47         | 48         | 4        |
| B. Bound Tests   |           |             |             |            |            |             |            |                 |            |            |          |
| B1. Real GDP growth  | 16        | 22          | 28          | 31         | 35         | 38          | 41         | 44              | 46         | 48         | 5        |
| B2. Primary balance  | 16<br>16  | 22<br>25    | 27<br>35    | 28<br>36   | 30<br>37   | 31<br>39    | 33<br>40   | 34<br><b>41</b> | 35<br>42   | 36<br>43   | 3        |
| B3. Exports<br>B4. Other flows 3/  | 16        | 23          | 28          | 29         | 31         | 33          | 34         | 35              | 42         | 43<br>37   | 3        |
| B5. Depreciation   | 16        | 21          | 23          | 23         | 24         | 25          | 25         | 25              | 25         | 25         |          |
| B6. Combination of B1-B5   | 16        | 21          | 25          | 25         | 27         | 28          | 30         | 31              | 32         | 33         |          |
| C. Tailored Tests  |           |             |             |            |            |             |            |                 |            |            |          |
| C1. Combined contingent liabilities  | 16        | 24          | 27          | 29         | 30         | 32          | 33         | 34              | 35         | 36         | 3        |
| C2. Natural disaster   | 16        | 30          | 33          | 34         | 36         | 38          | 40         | 41              | 43         | 44         | 2        |
| C3. Commodity price  | 16        | 23          | 29          | 34         | 39         | 43          | 46         | 49              | 51         | 53         | 5        |
| C4. Market Financing   | n.a.      | n.a.        | n.a.        | n.a.       | n.a.       | n.a.        | n.a.       | n.a.            | n.a.       | n.a.       | n        |
| TOTAL public debt benchmark  | 35        | 35          | 35          | 35         | 35         | 35          | 35         | 35              | 35         | 35         | 3        |
|  | PVo       | of Debt-to- | -Revenue F  | latio      |            |             |            |                 |            |            |          |
| Baseline   | 59        | 81          | 88          | 93         | 100        | 106         | 113        | 117             | 122        | 127        | 13       |
| A. Alternative Scenarios   |           |             |             |            |            |             |            |                 |            |            |          |
| A1. Key variables at their historical averages in 2022-2032 2/<br>A2. Fiscal and Financial Risk Scenario | 59<br>5   | 68<br>4     | 67<br>9     | 67<br>10   | 69<br>9    | 72<br>10    | 74<br>11   | 76<br>12        | 77<br>12   | 79<br>13   | 8<br>1   |
| B. Bound Tests   |           |             |             |            |            |             |            |                 |            |            |          |
| B1. Real GDP growth  | 59        | 88          | 105         | 115        | 129        | 141         | 153        | 164             | 174        | 184        | 19       |
| B2. Primary balance  | 59        | 88          | 101         | 105        | 112        | 118         | 124        | 128             | 133        | 137        | 14       |
| B3. Exports  | 59        | 103         | 131         | 134        | 140        | 146         | 151        | 156             | 159        | 163        | 16       |
| B4. Other flows 3/   | 59        | 91          | 106         | 110        | 117        | 123         | 129        | 133             | 138        | 142        | 14       |
| B5. Depreciation<br>B6. Combination of B1-B5   | 59<br>59  | 87<br>86    | 87<br>93    | 87<br>92   | 90<br>99   | 93<br>106   | 95<br>111  | 96<br>116       | 97<br>121  | 97<br>125  | 9<br>12  |
|  |           | 00          | 35          | 32         | 33         | 100         |            | 110             | 121        | 125        | 12       |
| C. Tailored Tests  | 50        | 00          | 102         | 107        | 114        | 120         | 176        | 121             | 175        | 120        | 14       |
| C1. Combined contingent liabilities<br>C2. Natural disaster  | 59<br>59  | 98<br>119   | 103<br>123  | 107<br>128 | 114<br>136 | 120<br>144  | 126<br>151 | 131<br>156      | 135<br>162 | 139<br>167 | 14<br>17 |
| C3. Commodity price  | 59        | 102         | 123         | 139        | 156        | 168         | 178        | 184             | 194        | 203        | 21       |
| C4. Market Financing   | n.a.      | n.a.        | n.a.        | n.a.       | n.a.       | n.a.        | n.a.       | n.a.            | n.a.       | n.a.       | n.a      |
| -  |           |             |             |            |            |             |            |                 |            |            |          |
| Baseline   | Debt<br>5 | Service-to  | 5 - Revenue | Ratio<br>6 | 6          | 8           | 9          | 10              | 10         | 11         | 1        |
|  | )         | 3           | 2           | 0          | 0          | ŏ           | 9          | 10              | 10         | 11         | 1        |
| A. Altemative Scenarios<br>A1. Key variables at their historical averages in 2022-2032 2/                | 5         | 3           | 3           | 5          | 5          | 7           | 8          | 9               | 10         | 10         | 1        |
| A2. Fiscal and Financial Risk Scenario   | 5         | 4           | 9           | 10         | 9          | 10          | 11         | 12              | 12         | 13         | 1        |
|  | ,         | -           | 5           | 10         | -          | 10          |            | 12              | 12         | 15         |          |
| <b>B. Bound Tests</b><br>B1. Real GDP growth   | 5         | 3           | 6           | 7          | 8          | 10          | 11         | 13              | 13         | 14         | 1        |
| B2. Primary balance  | 5         | 3           | 5           | 7          | 6          | 8           | 10         | 11              | 11         | 14         | 1        |
| B3. Exports  | 5         | 3           | 5           | 7          | 7          | 9           | 10         | 11              | 11         | 12         | 1        |
| 84. Other flows 3/   | 5         | 3           | 5           | 6          | 6          | 8           | 10         | 11              | 11         | 11         | 1        |
| 85. Depreciation   | 5         | 3           | 5           | 6          | 6          | 8           | 9          | 10              | 10         | 11         | 1        |
| B6. Combination of B1-B5   | 5         | 3           | 5           | 6          | 6          | 8           | 9          | 10              | 10         | 11         | 1        |
| C. Tailored Tests  |           |             |             |            |            |             |            |                 |            |            |          |
| C1. Combined contingent liabilities  | 5         | 3           | 7           | 7          | 7          | 8           | 10         | 11              | 11         | 11         | 1        |
| C2. Natural disaster   | 5         | 3           | 9           | 7          | 7          | 9           | 11         | 12              | 12         | 12         | 1        |
| C3. Commodity price  | 5         | 4           | 6           | 7          | 9          | 11          | 12         | 13              | 13         | 14         | 1        |
| C4. Market Financing   | n.a.      | n.a.        | n.a.        | n.a.       | n.a.       | n.a.        | n.a.       | n.a.            | n.a.       | n.a.       | n.       |

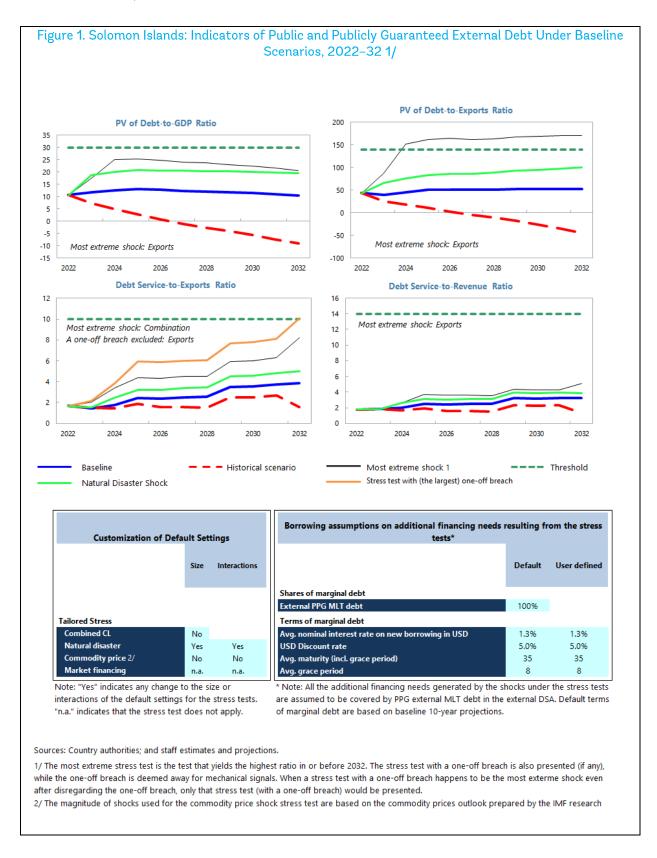
Sources: Country authorities; and staff estimates and projections.

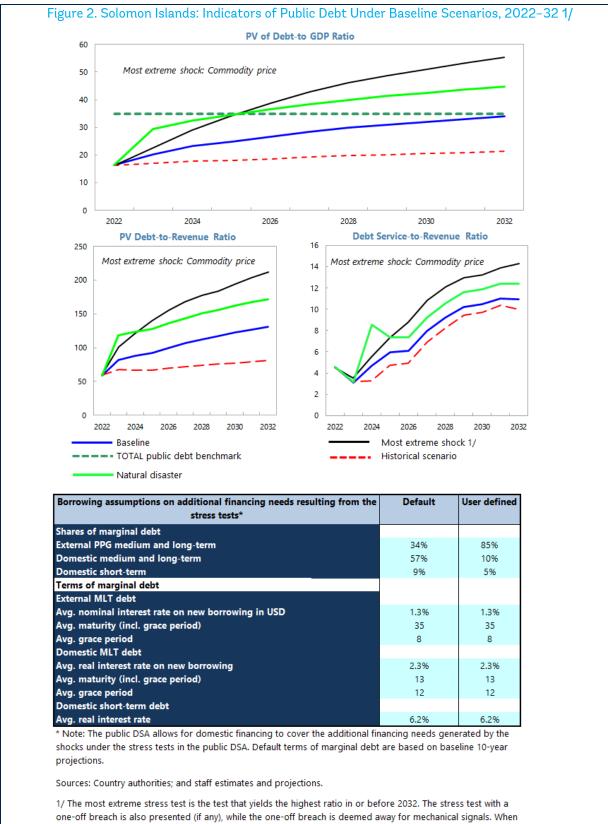
1/ A bold value indicates a breach of the benchmark.

2/ Variables include real GDP growth, GDP deflator and primary deficit in percent of GDP.

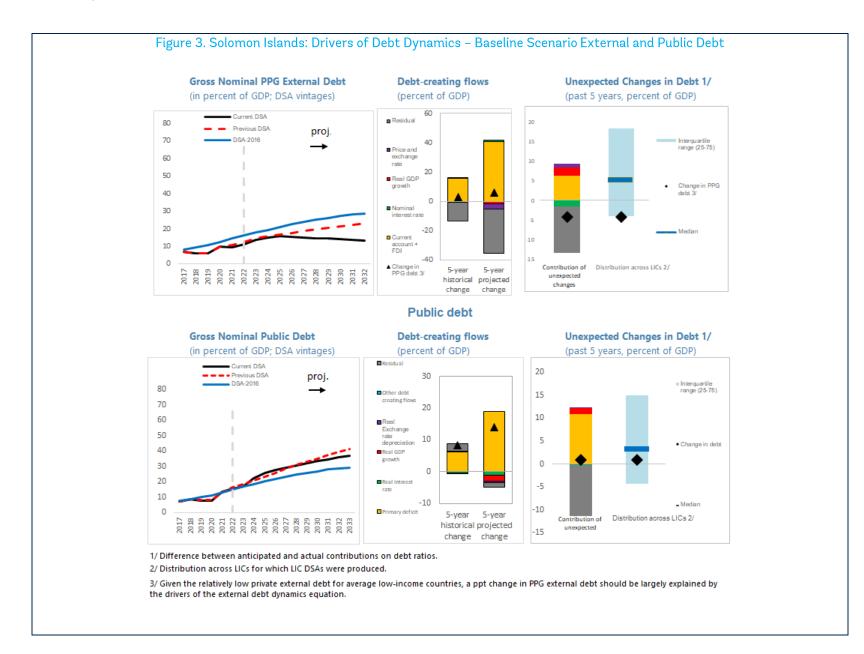
3/ Includes official and private transfers and FDI.

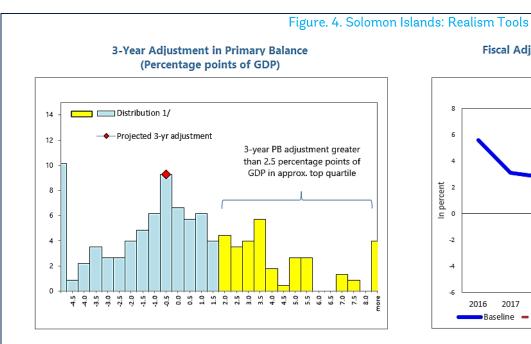
|  | First year of p | roj.          |               |               |               |               |               |             |             |             |          |
|--|-----------------|---------------|---------------|---------------|---------------|---------------|---------------|-------------|-------------|-------------|----------|
|  | 2022            | 2023          | 2024          | 2025          | 2026          | 2027          | 2028          | 2029        | 2030        | 2031        | 2032     |
| Public sector debt   | 16.9            | 25.8          | 39.3          | 42.3          | 44.2          | 45.5          | 46.4          | 47.4        | 48.1        | 48.7        | 49.      |
| of which: foreign-currency denominated   | 11.1            | 15.9          | 19.3          | 21.3          | 21.4          | 21.0          | 20.4          | 19.9        | 18.7        | 17.5        | 16       |
| PV of public debt-to-GDP ratio   | 16.5            | 23.9          | 36.8          | 39.4          | 41.7          | 43.1          | 44.4          | 45.2        | 46.2        | 47.1        | 47.      |
| Change in public sector debt   | 1.9             | 8.9           | 13.5          | 3.0           | 1.9           | 1.2           | 1.0           | 0.9         | 0.7         | 0.6         | 0        |
| Identified debt-creating flows   | 4.2             | 8.5           | 13.2          | 2.7           | 2.0           | 1.3           | 1.1           | 1.0         | 0.8         | 0.6         | 0        |
| Primary deficit  | 3.8             | 8.8           | 6.5           | 3.7           | 3.1           | 2.4           | 2.2           | 2.2         | 2.1         | 2.0         | 2        |
| Revenue and grants   | 27.7            | 23.8          | 25.4          | 26.9          | 26.7          | 26.6          | 26.5          | 26.4        | 26.2        | 26.1        | 25       |
| of which: grants   | 4.7             | 0.8           | 1.0           | 1.9           | 1.9           | 1.9           | 1.9           | 1.9         | 1.9         | 1.9         | 1        |
| Primary (noninterest) expenditure  | 31.5            | 32.7          | 31.9          | 30.6          | 29.8          | 29.0          | 28.8          | 28.6        | 28.4        | 28.1        | 27       |
| Automatic debt dynamics  | 0.4             | -0.3          | -0.4          | -1.0          | -1.0          | -1.1          | -1.2          | -1.2        | -1.3        | -1.4        | -1       |
| Contribution from interest rate/growth differential  | -0.2            | -0.6          | -0.5          | -1.1          | -1.1          | -1.1          | -1.1          | -1.1        | -1.2        | -1.2        | -1       |
| of which: contribution from average real interest rate   | -0.8            | -0.2          | 0.1           | 0.1           | 0.2           | 0.2           | 0.2           | 0.2         | 0.2         | 0.2         | C        |
| of which: contribution from real GDP growth  | 0.7             | -0.4          | -0.6          | -1.2          | -1.2          | -1.3          | -1.3          | -1.4        | -1.4        | -1.4        | -1       |
| Contribution from real exchange rate depreciation<br>Denominator = 1+g   | 0.6<br>1.0      | 0.3<br>1.0    | 0.2<br>1.0    | 0.1<br>1.0    | 0.1<br>1.0    | 0.0<br>1.0    | -0.1<br>1.0   | 0.0<br>1.0  | -0.1<br>1.0 | -0.2<br>1.0 | -C<br>1  |
| Other identified debt-creating flows   | 0.0             | 0.0           | 7.0           | 0.0           | 0.0           | 0.0           | 0.0           | 0.0         | 0.0         | 0.0         | C        |
| Privatization receipts (negative)  | 0.0             | 0.0           | 0.0           | 0.0           | 0.0           | 0.0           | 0.0           | 0.0         | 0.0         | 0.0         | 0        |
| Recognition of contingent liabilities (e.g., bank recapitalization)  | 0.0             | 0.0           | 7.0           | 0.0           | 0.0           | 0.0           | 0.0           | 0.0         | 0.0         | 0.0         | C        |
| 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         | C        |
| Other debt creating or reducing flow (e.g. IMF loan)   | 0.0             | 0.0           | 0.0           | 0.0           | 0.0           | 0.0           | 0.0           | 0.0         | 0.0         | 0.0         | c        |
| Residual   | -2.3            | 0.4           | 0.3           | 0.2           | -0.1          | -0.1          | -0.1          | -0.1        | -0.1        | -0.1        | -C       |
| Public sector debt-to-revenue-and-grants ratio (in percent)  | 60.9            | 108.4         | 154.9         | 157.4         | 165.6         | 170.7         | 175.2         | 179.5       | 183.3       | 186.5       | 191      |
| Gross financing need   | 5.1             | 9.6           | 8.5           | 6.4           | 5.7           | 5.5           | 5.9           | 6.2         | 6.2         | 6.3         | e        |
| in billions of U.S. dollars  | 81.1            | 158.7         | 145.1         | 113.6         | 106.4         | 107.9         | 120.3         | 133.8       | 141.1       | 151.7       | 163      |
| Key macroeconomic and fiscal assumptions   |                 |               |               |               |               |               |               |             |             |             |          |
| Nominal GDP (local currency)   | 13020.7         | 13569.7       | 14202.5       | 15015.7       | 15909.8       | 16961.4       | 18122.1       | 19452.1     | 20893.9     | 22495.6     | 24271    |
| Real GDP growth (in percent)   | -4.1            | 2.5           | 2.4           | 3.0           | 3.0           | 3.0           | 3.0           | 3.1         | 3.1         | 3.1         | -        |
| Average nominal interest rate on public debt (in percent)  | 1.6             | 1.7           | 2.5           | 2.5           | 2.8           | 3.2           | 3.4           | 3.7         | 3.8         | 3.9         | 4        |
| Average nominal interest rate on external debt (in percent)  | 0.9             | 1.0           | 1.5           | 1.8           | 2.0           | 2.3           | 2.2           | 2.6         | 2.3         | 2.3         | 2        |
| Average nominal interest rate on domestic debt (in percent)  | 2.7             | 3.0           | 4.3           | 3.1           | 3.5           | 4.0           | 4.3           | 4.6         | 4.8         | 5.0         | -        |
| Average real interest rate (in percent)  | -5.1            | -1.4          | 0.3           | 0.2           | 0.4           | 0.5           | 0.5           | 0.5         | 0.5         | 0.5<br>0.5  | (        |
| Average real interest rate on domestic debt (in percent)<br>Average real interest rate on external debt (in percent) | -4.0<br>-5.7    | 1.3<br>-2.7   | 2.0<br>-0.7   | 0.5<br>-0.1   | 0.6<br>0.1    | 0.5<br>0.5    | 0.6<br>0.3    | 0.4<br>0.7  | 0.6<br>0.4  | 0.5         | 0        |
| Exchange rate (LC per US dollar)   | 8.2             | 8.2           | 8.3           | 8.4           | 8.5           | 8.7           | 8.8           | 9.0         | 9.1         | 9.3         | <u>c</u> |
| Nominal depreciation of local currency (percentage change in LC per dollar)  | 0.9             | 1.0           | 1.1           | 1.2           | 1.3           | 1.7           | 1.5           | 2.0         | 1.6         | 1.6         | - 1      |
| Exchange rate (US dollar per LC)   | 0.1             | 0.1           | 0.1           | 0.1           | 0.1           | 0.1           | 0.1           | 0.1         | 0.1         | 0.1         | (        |
| Nominal appreciation (increase in US dollar value of local currency, in percent)                                     | -0.8            | -1.0          | -1.1          | -1.2          | -1.3          | -1.7          | -1.5          | -2.0        | -1.6        | -1.6        | -1       |
| Real exchange rate depreciation (in percent, + indicates depreciation)   | 6.3             | 3.1           | 1.1           | 0.5           | 0.3           | 0.1           | -0.3          | -0.2        | -0.6        | -0.9        | -        |
| Inflation rate (GDP deflator, in percent)  | 1.6             | 1.7           | 2.2           | 2.6           | 2.9           | 3.5           | 3.7           | 4.2         | 4.2         | 4.4         | 4        |
| US Inflation rate (GDP deflator, in percent)   | 7.0             | 3.8           | 2.2           | 1.9           | 1.9           | 1.8           | 1.9           | 1.9         | 1.9         | 1.9         | 1        |
| Growth of real primary spending (deflated by GDP deflator, in percent)   | 4.5             | 6.2           | 0.1           | -1.2          | 0.2           | 0.3           | 2.2           | 2.6         | 2.2         | 2.2         | 1        |
| Nominal spending   | 4102.7          | 4431.4        | 4530.9        | 4595.5        | 4737.3        | 4918.7        | 5210.5        | 5568.4      | 5927.1      | 6324.7      | 6766     |
| Increase in percent  | 6.1             | 8.0           | 2.2           | 1.4           | 3.1           | 3.8           | 5.9           | 6.9         | 6.4         | 6.7         | 3        |
| Increase in real spending in percent   | 4.5             | 6.2           | 0.1           | -1.2          | 0.2           | 0.3           | 2.2           | 2.6         | 2.2         | 2.2         | â        |
| n billions of local currency   |                 |               |               |               |               |               |               |             |             |             |          |
| Nominal debt   | 2194            | 3502          | 5584          | 6353          | 7040          | 7711          | 8415          | 9219        | 10055       | 10953       | 119      |
| Total public domestic debt   | 746             | 1344          | 2836          | 3148          | 3638          | 4146          | 4725          | 5351        | 6145        | 7021        | 79       |
| of which: Short term<br>Total public external debt   | 19<br>1448      | 120<br>2157   | 134<br>2748   | 101<br>3205   | 114<br>3401   | 120<br>3564   | 131<br>3690   | 141<br>3867 | 163<br>3910 | 180<br>3932 | 2<br>39  |
| Debt service   | 1440            | 2157          | 2140          | 5205          | 5401          | 3304          | 3050          | 3007        | 3510        | 2222        | 29       |
| Amortization (excluding ST domestic debt)  | 41.1            | 52.2          | 74.1          | 126.6         | 148.7         | 196.2         | 275.9         | 329.6       | 360.6       | 398.5       | 402      |
| nterest Expenditure  | 30.6            | 36.7          | 89.3          | 139.7         | 174.7         | 225.6         | 258.9         | 311.4       | 345.9       | 396.4       | 450      |
| Domestic debt  | 20.3            | 22.6          | 57.1          | 89.1          | 111.2         | 145.8         | 179.7         | 216.3       | 258.0       | 307.4       | 360      |
| External debt  | 10.4            | 14.0          | 32.1          | 50.6          | 63.5          | 79.7          | 79.2          | 95.1        | 87.9        | 89.0        | 89       |
| Primary deficit  | 498.2           | 1200.3        | 927.0         | 558.3         | 485.3         | 402.4         | 406.8         | 432.0       | 442.5       | 452.2       | 512      |
| Gross financing need (in local currency)   | 662.8           | 1308.6        | 1209.9        | 958.8         | 909.3         | 938.2         | 1061.5        | 1204.2      | 1290.4      | 1410.6      | 1545     |
| PV of public sector external debt (end of period)  | 1399.2          | 1902.3<br>0.0 | 2395.1<br>0.0 | 2775.2<br>0.0 | 2989.3<br>0.0 | 3166.2<br>0.0 | 3319.1<br>0.0 | 3447.5      | 3516.2      | 3563.1      | 3628     |
| Debt service-to-revenue-and-grants ratio (in percent)  | 4.6             | 3.4           | 7.8           | 9.9           | 10.0          | 11.9          | 13.6          | 15.0        | 15.5        | 16.3        | 10       |
| Debt service-to-GDP ratio (in percent)   | 1.3             | 0.8           | 2.0           | 2.7           | 2.7           | 3.2           | 3.6           | 4.0         | 4.1         | 4.3         | 4        |
| PV of public debt-to-revenue and grants ratio  | 59.5            | 100.5         | 145.2         | 146.7         | 155.9         | 161.9         | 167.4         | 171.3       | 176.1       | 180.2       | 185      |





one-off breach is also presented (if any), while the one-off breach is deemed away for mechanical signals. When a stress test with a one-off breach happens to be the most exterme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.





Fiscal Adjustment and Possible Growth Paths 1/ 6 2 ь о ь In percentage points of GDP 4 In percent 2 0 0 -2 -2 -4 -6 -3 2016 2017 2018 2019 2020 2021 2022 2023 2024 Baseline — — Multiplier = 0.2 — — Multiplier = 0.6 — Multiplier = 1

1/ Data cover Fund-supported programs for LICs (excluding emergency financing) approved since 1990. The size of 3-year adjustment from program inception is found on the horizontal axis; the percent of sample is found on the vertical axis.

1/ Bars refer to annual projected fiscal adjustment (right-hand side scale) growth paths under different fiscal multipliers (left-hand side scale).

