

DEBT SUSTAINABILITY ANALYSIS

A. Overview

1. The latest debt sustainability analysis (DSA), which was prepared by the International Monetary Fund and International Development Association in May 2020, confirmed that Bangladesh remains at a low risk of external and a low overall risk of debt distress despite the economic shock caused by coronavirus disease (COVID-19). It states that “External debt indicators are below their thresholds and the public debt level is below the benchmark under the baseline and stress test scenarios.”¹ The public debt in Bangladesh stood at \$109 billion in fiscal year (FY) 2019, around 36% of gross domestic product (GDP), and public and publicly guaranteed (PPG) external debt stood at \$45 billion, around 15% of GDP. In FY2020, the public debt is estimated at \$125 billion, around 39% of GDP, and the PPG external debt is estimated at \$51 billion, around 16% of GDP.

2. The Bangladesh economy is recovering from the negative impact of the COVID-19 with the timely announcement and implementation of the stimulus packages. Since the reopening of the economy in June 2020, international trade, and remittances, which experienced a sharp decline during April to May 2020, are on recovery path. Unemployment rate once surged up to 22.4% during April 2020–July 2020 from 2.1% in March 2020, sharply decreased to 3.8% in September 2020, reflecting the revival of the domestic economic activities.² However, the COVID-19 widened the fiscal deficit and revealed the areas for further improvement for the recovery process to be more sustainable and inclusive. To fill the widened fiscal deficit and financing economic and social development needs, additional development financing is required. In addition, to protect the people from the COVID-19 and bring the end to the pandemic, COVID-19 vaccination is introduced, which requires additional financing. To cope with such financing needs, the Government of Bangladesh requested the Asian Development Bank (ADB) to provide budget support of \$1 billion and vaccine procurement support of \$940 million.

3. This DSA is conducted to confirm the debt sustainability of Bangladesh, including potential impacts of the prospective budget support and vaccine procurement support.³ The medium-term macroeconomic framework underlying the DSA is based on the projections of the key economic indicators. A baseline scenario assumes that the real GDP growth rate will recover gradually in FY2021 (6.8%) and quicker in FY2022 (7.2%), from 5.2% in FY2020. The fiscal deficit is assumed to be widened to 6.0% in FY2021 from 5.5% in FY2020 but narrowed to 5.7% in FY2022. Under this scenario, in FY2021, the public debt in Bangladesh is expected to increase to \$140 billion, 39.7% of GDP, and the PPG external debt is expected to increase to \$54 billion, 15.4% of GDP. In order to assess the impact of budget support and vaccine procurement support on the country’s debt sustainability, the DSA uses a scenario to reflect about \$4.22 billion additional external debt disbursements during FY2021–FY2023 and \$150 million of additional domestic debt.⁴

¹ International Monetary Fund and International Development Association. 2020. *Request for Disbursement under the Rapid Credit Facility and Purchase under the Rapid Financing Instrument—Debt Sustainability Analysis*. Washington, D.C.

² Bangladesh Bureau of Statistics. 2020. *Report on Perception Survey on Livelihood (PSL) 2020*. Dhaka.

³ Key economic indicators, including gross domestic product (GDP) growth rate and fiscal/ primary balances, from the Debt Sustainability Analysis by International Monetary Fund and IDA, conducted in May 2020, have been updated based on the latest information and projection.

⁴ Additional external debt includes \$1 billion budget support from ADB, \$940 million vaccine procurement support from ADB, \$500 million vaccine procurement support from World Bank, and \$1,775 million vaccine procurement support from other development partners. The additional domestic debt is for vaccine procurement, which is different from the estimated cost in the National Deployment and Vaccination Plan for COVID-19 Vaccines in Bangladesh and external financing as described above.

B. External Debt and Public Debt Sustainability Analysis

4. The additional \$4.22 billion external debt and \$150 million domestic debt disbursement raises the PPG external debt to GDP ratio to 16.5% and public debt to GDP ratio to 40.8% in FY2021, compared with 15.4% for external debt to GDP ratio and 39.7% for debt to GDP ratio under the baseline scenario. However, both external debt ratio and public debt ratio remain stable over the medium-term. All external debts and public debt indicators remain well below the threshold levels for debt burden indicators. The PPG external debt and public debt burden indicators—present value of PPG external debt to GDP ratio, present value of PPG external debt to exports ratio, PPG debt service to exports ratio, PPG debt service to revenue ratio, and present value of public debt to GDP ratio are below the threshold levels during FY2021–2025 (Table 1).⁵

Table 1: External Debt and Public Debt Sustainability Framework 2021–2025

Sustainability Indicator	Actual	Estimation		Projection				Threshold
	2019	2020	2021	2022	2023	2024	2025	
PV of PPG external debt to GDP ratio	10.7	11.5	12.4	12.1	11.8	11.5	11.3	55.0
PV of PPG external debt to exports ratio	69.5	94.2	97.8	96.0	94.8	94.0	93.9	240.0
PPG debt service to exports ratio	5.3	7.8	7.2	7.0	7.0	7.1	6.8	21.0
PPG debt service to revenue ratio	8.4	10.2	9.2	8.3	8.1	8.3	8.0	23.0
PV of public debt to GDP ratio	31.9	34.5	36.9	37.8	38.0	37.6	37.3	70.0

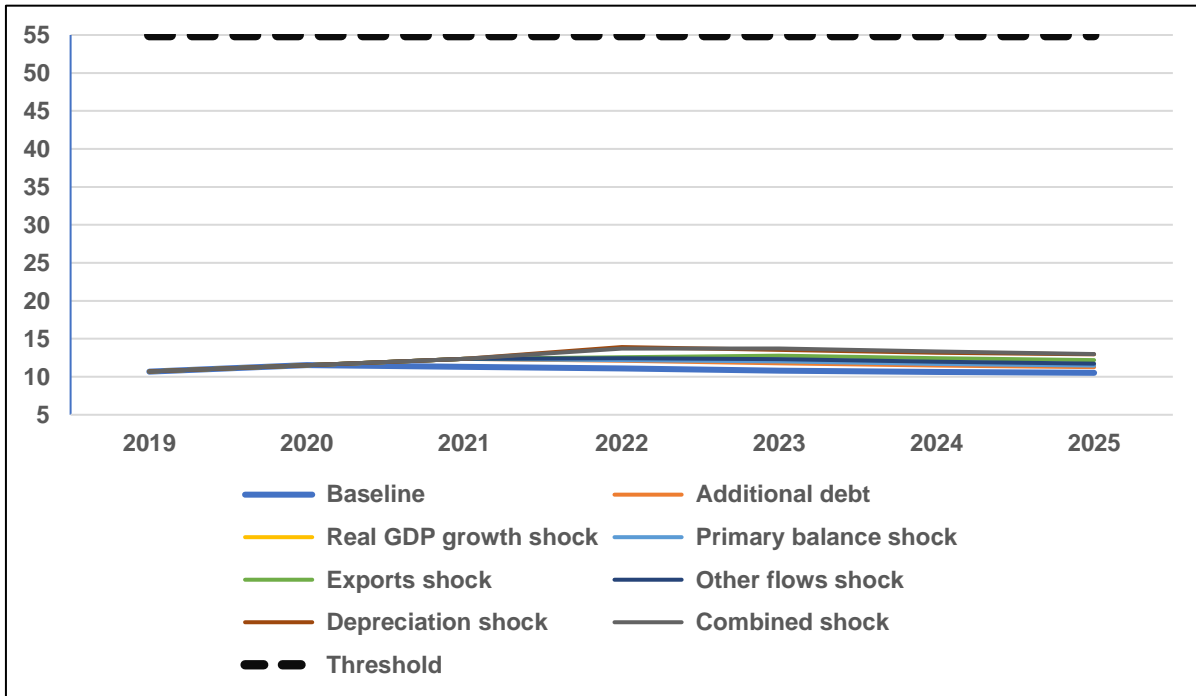
GDP = gross domestic product, PPG = public and publicly-guaranteed, PV = present value.

Source: Asian Development Bank.

5. Six standardized stress tests are conducted to both the external and the public DSA by applying various temporary shocks onto the baseline macroeconomic indicators. The shocks are simulated through changes in a small number of variables with other variables held constant. In standardized stress tests, the post-shock values of the stressed variables are set to the minimum of the baseline projection or historical average, minus one standard deviation. The six standardized stress tests are: (i) real GDP growth set to its historical average minus one standard deviation (5.8%) for the second and third years of the project period; (ii) primary balance-to-GDP ratio set to the baseline projection minus one standard deviation (–3.4%) for the second and third years of the project period; (iii) nominal export growth set to its historical average minus one standard deviation (–4.2%) for the second and third years of the project period; (iv) remittances to GDP and foreign direct investment to GDP ratios set to their baseline projection minus one standard deviation (3.2%) for the second and third years of the project period; (v) one-time 30% nominal depreciation of the domestic currency in the second year of the projection period; and (vi) apply all individual shocks above at half of the magnitude. The shocks increase the vulnerability of the debt profile of Bangladesh. The most extreme shock to the external PPG debt to GDP ratio is the depreciation shock which raises the present value of the external PPG debt to GDP ratio to 13.4% in FY2022. The most extreme shock to the public debt to GDP ratio is the combined shock, which raises the present value of the public debt to GDP ratio to 40.3% in FY2022. However, the level of increased vulnerability is considered manageable as results of all standard stress tests remain well below the threshold levels and decline in the medium term (Figures 1 and 2).

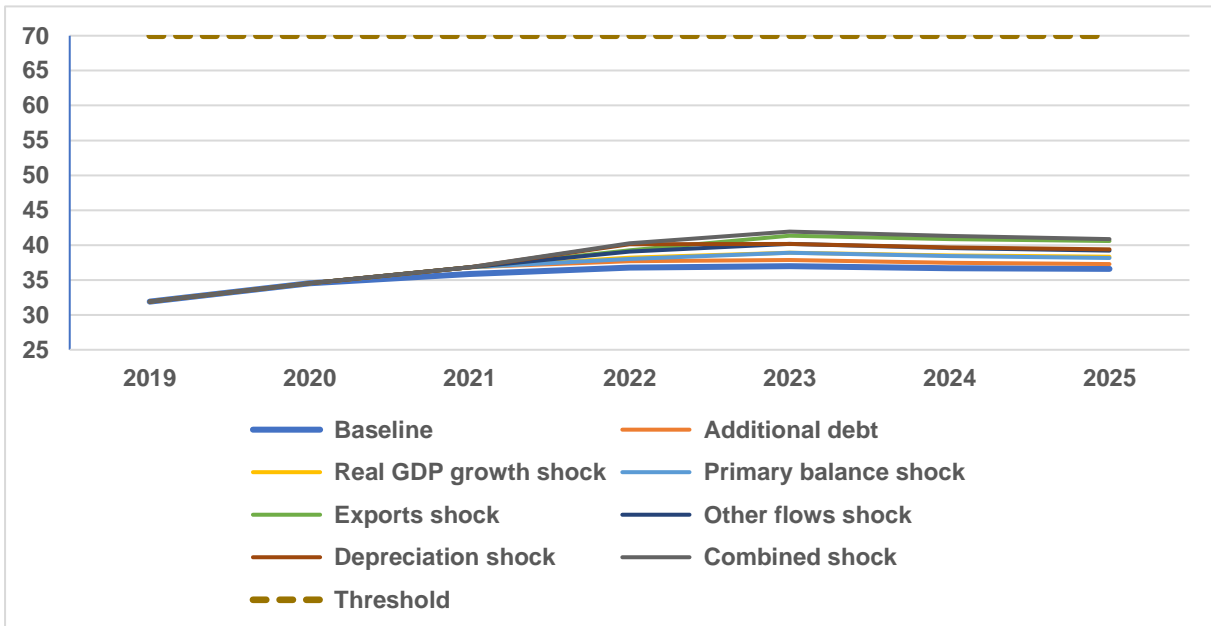
⁵ The thresholds for debt indicators are set at 55% for present value of debt in percentage of GDP, 240% for present value of debt in percentage of exports, 21% for debt service in percentage of exports, 23% for debt service in percentage of revenue, and 70% for present value of total public debt in percentage of GDP (see footnote 1).

Figure 1: Stress Test Present Value of External Public and Publicly-Guaranteed Debt to Gross Domestic Product Ratio



GDP = gross domestic product.
Source: Asian Development Bank.

Figure 2: Stress Test Present Value of Public Debt to Gross Domestic Product Ratio



GDP = gross domestic product.
Source: Asian Development Bank.

6. The additional domestic and external financing will increase the overall debt level and debt service payments in the medium-term. However, the DSA indicates that Bangladesh has a low risk of external debt distress and a low overall risk of debt distress, and the additional financing needed for social and economic recovery from the COVID-19 pandemic and vaccine procurement will not have a significant adverse impact. Foreign exchange reserves steadily increase to \$43.2 billion in December 2020, sufficient to cover close to nine months of imports from \$32.7 billion in December 2019.

Table 2: Key Economic Indicators

Indicator	Fiscal Year				
	2016	2017	2018	2019	2020 ^a
Total GDP (current prices, Tk billion)	17,329	19,758	22,505	25,425	27,964
GDP per Capita (\$, current)	1,385	1,544	1,675	1,828	1,970
Real GDP Growth ^b (% in constant prices)	7.1	7.3	7.9	8.2	5.2
Revenue (% of GDP)	10.0	10.2	9.6	9.9	9.4
Fiscal Balance (% of GDP)	(3.8)	(3.4)	(4.7)	(5.5)	(5.5)
Consumer Price Index (FY2006 base, average)	5.9	5.4	5.8	5.5	5.7
M2 Growth	16.4	10.9	9.2	9.9	12.6
Merchandise Trade Balance (% of GDP)	(2.9)	(3.8)	(6.6)	(5.1)	(5.4)
Current Account Balance (% of GDP)	1.9	(0.5)	(3.5)	(1.7)	(1.5)
Gross International Reserves (\$ million)	30,168	33,407	32,917	32,717	36,037
Reserves in months of imports	7.8	8.0	6.2	6.0	7.2
Exchange Rate (Tk/\$, average)	78.3	79.1	82.1	84.0	84.8

() = negative, GDP = gross domestic product, M2 = money supply, Tk = taka, FY = fiscal year.

^a These are provisional estimates.

^b These are based on constant 2005/2006 market prices.

Sources: Bangladesh Bureau of Statistics; Bangladesh Bank; Export Promotion Bureau; Ministry of Finance and Asian Development Bank estimates.