DEBT SUSTAINABILITY ANALYSIS REPORT
FY 2022-23

Economic Adviser's Wing
Finance Division
Government of Pakistan

FOREWORD

This report presents an analysis of Pakistan's debt sustainability. Pakistan's economy continues to face significant challenges, including the global economic slowdown, as well as domestic factors such as high inflation and low foreign exchange reserves. Against this backdrop, the report aims to assess Pakistan's debt sustainability in the current economic environment and identify key areas of concern. The analysis considers Pakistan's external debt, domestic debt, and contingent liabilities, as well as the country's economic and financial outlook for the years FY2022-23 to FY2025-26.

The DSA report provides debt dynamics to enhance debt transparency, fiscal sustainability, and evidence for strengthening of debt management in upcoming three years. It assesses the country's capacity to manage its debt in the face of ongoing economic challenges. The report concludes with a series of recommendations aimed at improving Pakistan's debt sustainability in the short and medium term, including measures to enhance debt management, reduce borrowing costs, and improve the country's fiscal position.

I would like to express my gratitude to the World Bank for providing support in the entire process of preparation of this report. The efforts of the officers of the Economic Advisor's Wing, Finance Division, have been critical in preparing this document. At the same time, the support of the Debt Management Office and Budget Wing of the Finance Division must be commended. In Particular, I would loud the hard work done by Mr. Awais Manzur Sumra, Special Secretary Finance, Dr. Imtiaz Ahmad, Economic Advisor, Dr. Khurram Ejaz, Director (MTFF), Dr. S. M. Naeem Nawaz, Director (Fiscal), Dr. Naseem Faraz, Deputy Economic Advisor and Dr. Nazia Gul, Deputy Economic Advisor in the preparation of this comprehensive document. The efforts of all stakeholders have been instrumental in ensuring the success of this important initiative. Overall, this report provides a timely and comprehensive analysis of Pakistan's debt sustainability, and offers valuable insights for policymakers, investors, and other stakeholders with an interest in Pakistan's economic future.

Hamed Yaqoob Sheikh

Secretary Finance

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1. INTRODUCTION

1. The Debt Sustainability Analysis (DSA) provides the dynamics of debt projections under various assumptions in context of fiscal policy decisions. The Finance Division has initiated the annual publication of the DSA report for Pakistan. It aims to enhance debt transparency, fiscal sustainability and strengthen debt management. The analysis presented in the report has been performed using Market Access Countries (MAC) DSA tool of the International Monetary Fund (IMF).

2. The DSA debt perimeter includes government guarantees in addition to the total public debt definition of the 'Fiscal Responsibility and Debt Limitation (FRDL) Act 2005'. The FRDL Act defines Total Public Debt as the debt of the government (including Federal Government and Provincial Governments) serviced out of the Consolidated Fund and debts owed to the IMF. Therefore, for the purpose of this DSA, public and publicly guaranteed debt (PPG) has been used.

3. Total public and publicly guaranteed debt stood at PKR 55,801 billion in December 2022, 7 percent higher compared to end-FY 2022. The rise is attributed to the increase in the interest burden due to the high-interest rate environment and the 11 percent depreciation of Pakistan's Rupee against the US dollar experienced in the first six months of FY 2023. The primary surplus realized during first half of FY 2023 partially offsets this increase.[1]

4. Domestic debt accounted for 62.8 percent of total public debt, with the remaining being external debt. Domestic debt comprises permanent debt (medium - and long-term), floating debt (short-term), and unfunded debt (primarily made up of various instruments available under the National Savings Schemes). On the other hand, 37.2 percent of total public debt is external debt, which is owned by multilateral development partners, bilateral creditors, and commercial sources.[2]

5. The government authorities are exerting all possible efforts to secure external financing. During the first half of FY 2023, successful completion of 7th and 8th review under the IMF Extended Fund Facility (EFF) led to the disbursement of USD 1,166 million. The government also successfully rolled over (China SAFE deposit of USD 1,000 million and Saudi Time deposit of USD 3,000 million). Furthermore, the government received USD 3,298 million from multilateral agencies. On the other hand, the government repaid USD 2,722 million and USD 1,000 million on international commercial loans and international Sukuk maturity, respectively. The government used medium- and long-term instruments to finance the fiscal deficit, specifically utilizing floating-rate

[1] An extensive analysis is detailed in Public Debt Bulletin July-December 2022.
[2] An extensive analysis of the public debt composition is detailed in Annual Debt Review & Public Debt Bulletin FY 2021-22.

Pakistan Investment Bonds. Additionally, the government reduced the stock of T-Bills by approximately PKR 661 billion. There has been no borrowing from the State Bank of Pakistan since June 2019.

Table 1: Public Debt Composition

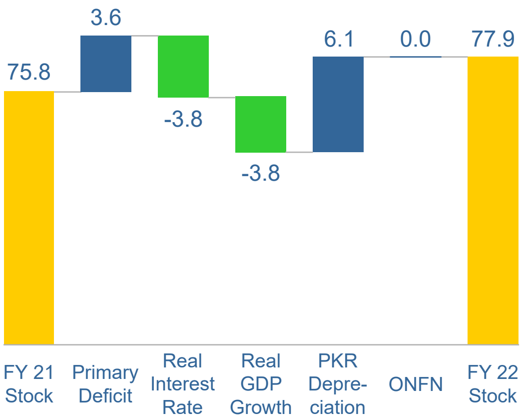
	FY2022				Dec-2022		
	PKR bn	**US$ bn**	**% of GDP**	**Share %***	**PKR bn**	**US$ bn**	**Share %***
Pakistan Investment Bonds (PIBs)	17,687	86.5	26.4	33.9	20,301	89.6	36.4
GOP Ijara Sukuk	2,280	11.2	3.4	4.4	2,655	11.7	4.8
Market Treasury Bills	6,752	33.0	10.1	12.9	6,627	29.3	11.9
Saving Schemes	3,336	16.3	5.0	6.4	2,948	13.0	5.3
Others	982	4.8	1.5	1.9	585	2.6	1.0
Domestic Debt (Excluding Guarantees)	**31,037**	**151.8**	**46.4**	**59.5**	**33,116**	**146.2**	**59.3**
Guarantees (Domestic Currency)	1,533	7.5	2.3	2.9	1,520	6.7	2.7
Domestic Debt (Including Guarantees)	**32,570**	**159.3**	**48.6**	**62.4**	**34,636**	**152.9**	**62.1**
Multilateral	8,635	42.2	12.9	16.5	10,120	44.7	18.1
o.w IMF	1,410	6.9	2.1	2.7	1,725	7.6	3.1
Bilateral	5,577	27.3	8.3	10.7	6,001	26.5	10.8
Commercial	3,946	19.3	5.9	7.6	3,484	15.4	6.2
o.w Eurobond	1,799	8.8	2.7	3.4	1,767	7.8	3.2
External Debt (Excluding Guarantees)	**18,158**	**88.8**	**27.1**	**34.8**	**19,605**	**86.6**	**35.1**
Guarantees (Foreign Currency)	1,451	7.1	2.2	2.8	1,560	6.9	2.8
External Debt (Including Guarantees)	**19,609**	**95.9**	**29.3**	**37.6**	**21,165**	**93.5**	**37.9**
Total Public Debt	**49,196**		**73.5**		**52,721**	**233**	
Total Public Debt (Including Guarantees)	**52,179**		**78.0**		**55,801**	**246**	
**Share with respect to PPG*							

Source: Debt Management Office, Finance Division

6. The government aims to carry out balanced financing of federal fiscal deficit from medium-to-long-term domestic and external sources during second half of FY 2023. Furthermore, to diversify the borrowing basket and broaden the investment avenues during prevailing interest rate environment, government has introduced multiple tenor shariah compliant instruments which has been received positively in the domestic debt capital market.

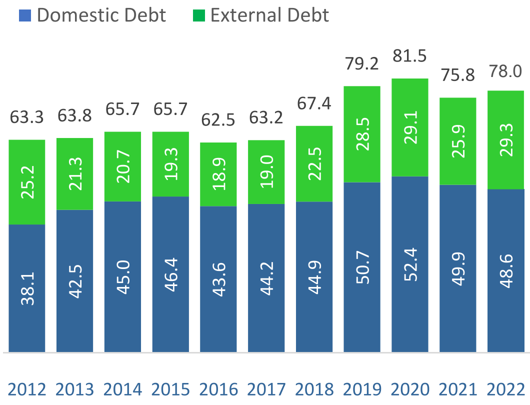
7. In FY 2022, the total public and publicly guaranteed debt-to-GDP ratio increased from 75.8 to 78.0. This increase is attributed to the depreciation of Pakistan's Rupee and the primary deficit, with domestic debt being the main source of financing the fiscal deficit. The increase was partially compensated by the combined effect of negative real interest rates and GDP growth. The domestic debt-to-GDP ratio fell from 47.1 to 46.4 percent in FY 2022. The external debt-to-GDP ratio grew from 34.1 to 36.9 percent, driven by the depreciation of Pakistan's Rupee.

Figure 1: Public Debt Dynamics (Share of GDP, %)



Source: Debt Management Office, Finance Division

Figure 2: Public and Publicly Guaranteed Debt (In % share of GDP)



Source: Debt Management Office, Finance Division

2. DSA ASSUMPTIONS

8. The main baseline macroeconomic assumptions underpinning the 2023 DSA are as follows:

Table 2: Key Assumptions

	Historical	Projection			
	FY2022	FY2023	FY2024	FY2025	FY2026
Real GDP Growth (in percent)	6.0	0.8	3.5	5.0	5.5
Inflation (CPI - in percent change)	12.2	28.5	21.0	7.5	6.5
Primary Fiscal Balance (% of GDP)	-3.6	-1.2	-0.2	0.1	0.2

9. Real GDP growth is projected at 0.8 percent in FY 2023 on account of catastrophic floods, tight monetary stance, fiscal consolidation, and non-conducive global economic environment. Over the medium term, growth rate recovery is expected, achieving 5.5 percent in FY 2026. The government is committed to laying a strong foundation for the economy over the medium term through growth in exports, with a focus on increasing agriculture, IT, and industrial exports, increasing exports' competitiveness, improving agricultural productivity, improving the ease of doing business to attract both domestic and foreign investors, strengthening resource mobilization, creating better job opportunities, strengthening social safety nets and human capital development. The overall goal is to build a structure of highly inclusive and sustainable growth.

10. For this purpose, the federal and provincial governments are working together to put the economy on a higher and sustainable growth trajectory by focusing on different sectors of the economy, such as agriculture, industries, and services. Coordinated efforts between the federal and provincial governments would be crucial in achieving the medium-term growth targets and ensuring sustainable economic development for the country in the long run. In the medium term, the growth projection is set at 3.5 - 5.5 percent with price stability and fiscal and external sector sustainability.

11. A gradual improvement in the primary balance is projected in line with the fiscal consolidation objectives of the government. In the short term, a strong reduction in the primary deficit is estimated from 3.6 percent in FY 2022 to 1.2 in FY 2023. Continuing the fiscal consolidation path is assumed in the medium term, with a primary surplus of 0.2 percent in FY 2026.

12. Inflation, measured as CPI, is expected to rise in FY 2023 to 28.5 percent on average due to uncertain political and economic environment, pass-through of currency depreciation, and the rise in energy prices. Over the medium term, inflation is projected to trend down from 7.5 to 6.5 percent. The stabilization of exchange rate is also projected. In FY 2024, better crop outlook due to several measures taken in the agriculture sector especially the Kissan Package, political stability, and the stable exchange rate would help to achieve price stability. The inflation rate will be normalized in the medium term due to the high base effect as well as improvement in the commodity producing sector and favourable global factors. Given the global situation, the government admits that reducing the current inflationary pressures will take some time and should not be done at the expense of recession. However, the actions implemented should steadily lower the inflation rate's future course to 6.5 percent by FY 2026, which is more in accordance with steady and sustainable economic growth.

13. Financing assumptions align with the objectives and targets of the medium-term debt management strategy (FY 2020 – FY 2023), aiming to lengthen the maturity profile, develop the domestic debt market, transparency in borrowing operations, diversification of investors base, increased issuance of shariah compliant instruments, accessing concessional external financing, and ensuring presence in international capital markets.

3. DEBT SUSTAINABILITY ASSESSMENT

14. The FRDL Act establishes a target of 55.25 percent of the total public debt-to-GDP ratio (for FY 2026) and a ceiling of 10 percent for government guarantees. Under the baseline scenario, the PPG-to-GDP ratio is estimated at 63 percent in FY 2026, of which guarantees represent 3.1 percent of GDP. Fiscal consolidation and favorable growth-interest rate differential lead to a declining path.

15. Debt dynamics remain subject to global and domestic challenges. Despite improvement in the debt dynamics over the medium term, public debt risks remain high. Heatmap depicts a high risk since the debt- and GFN-to-GDP ratios exceed the MAC DSA thresholds in FY 2023, both in baseline and shock scenarios.[3] The stress-test analysis shows that negative shocks of exchange rate, the most extreme scenario, would increase the public debt ratio to levels persistently above

[3] The MAC DSA contemplates thresholds for two indicators: the public debt-to-GDP ratio and the gross financing needs-to- GDP ratio. The emerging market thresholds are 70 percent and 15 percent, respectively.

the 70 percent threshold of GDP until FY 2026.[4] The combined macro-fiscal and standardized contingent liability shocks results in debt-to-GDP ratio above 70 percent.

16. Gross financing needs remain high, posing several liquidity risks mainly due to high interest rates and pressures on external account. However, it is on a downward trajectory and is expected to decline in the medium to long term.

17. Within domestic debt, the roll-over of T-bills is an important component while considering the debt risks especially during a high interest rate environment. Within external debt, government is striving to refinance its short-term bank loans with longer term maturities. The government also aims to tap international capital markets as and when conducive conditions return. Furthermore, any unexpected shortfall in external financing may burden the domestic debt market.

18. The government is committed to ensure the financing of federal fiscal deficit through diversified sources of borrowing basket via introduction of new instruments in domestic market and availing maximum external concessional financing.

[4] As the analysis was performed during FY23, the shocks were calibrated starting in FY24. Standardize shocks are: primary balance shock (50 percent of planned adjustment); real GDP growth (standard deviation); interest rate shock (permanent increase of 300 basis points) and; real exchange rate shock (real depreciation of 20 percent).

4. RISK ASSESSMENT

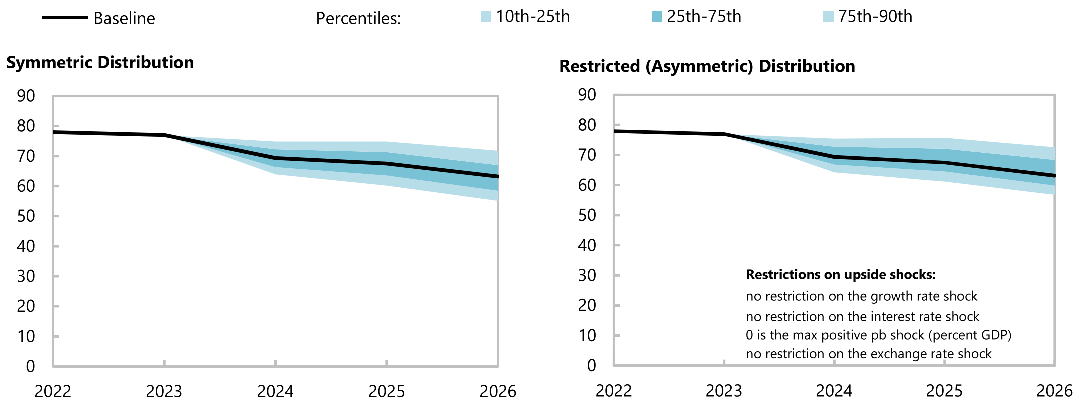
Pakistan Public DSA Risk Assessment

Heat Map

Debt Level 1/	Real GDP Growth Shock	Primary Balance Shock	Real Interest Rate Shock	Exchange Rate Shock	Contingent Liability Shock
Gross Financing Needs 2/	Real GDP Growth Shock	Primary Balance Shock	Real Interest Rate Shock	Exchange Rate Shock	Contingent Liability Shock
Debt Profile 3/	Market Perception	External Financing Requirements	Change in the Share of Short-Term Debt	Public Debt Held by Non-Residents	Foreign Currency Debt

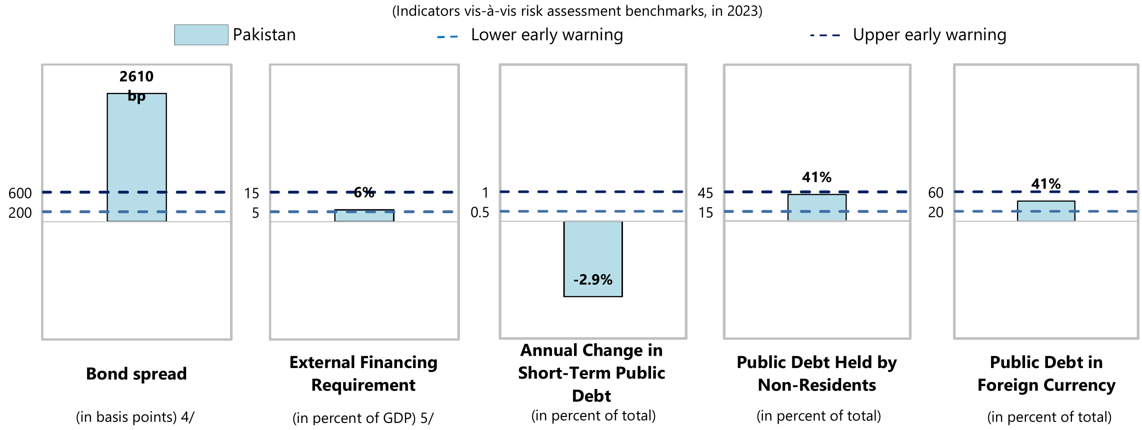
Evolution of Predictive Densities of Gross Nominal Public Debt

(in percent of GDP)



Debt Profile Vulnerabilities

(Indicators vis-à-vis risk assessment benchmarks, in 2023)



Source: IMF staff.

1/ The cell is highlighted in green if debt burden benchmark of 70% is not exceeded under the specific shock or baseline, yellow if exceeded under specific shock but not baseline, red if benchmark is exceeded under baseline, white if stress test is not relevant.

2/ The cell is highlighted in green if gross financing needs benchmark of 15% is not exceeded under the specific shock or baseline, yellow if exceeded under specific shock but not baseline, red if benchmark is exceeded under baseline, white if stress test is not relevant.

3/ The cell is highlighted in green if country value is less than the lower risk-assessment benchmark, red if country value exceeds the upper risk-assessment benchmark, yellow if country value is between the lower and upper risk-assessment benchmarks. If data are unavailable or indicator is not relevant, cell is white.
Lower and upper risk-assessment benchmarks are:

200 and 600 basis points for bond spreads; 5 and 15 percent of GDP for external financing requirement; 0.5 and 1 percent for change in the share of short-term debt; 15 and 45 percent for the public debt held by non-residents; and 20 and 60 percent for the share of foreign-currency denominated debt.

4/ EMBIG (bp), an average over the last 3 months, 17-Nov-22 through 15-Feb-23.

5/ External financing requirement is defined as the sum of current account deficit, amortization of medium and long-term total external debt, and short-term total external debt at the end of previous period.

5. REALISM OF BASELINE ASSUMPTIONS

Pakistan Public DSA - Realism of Baseline Assumptions

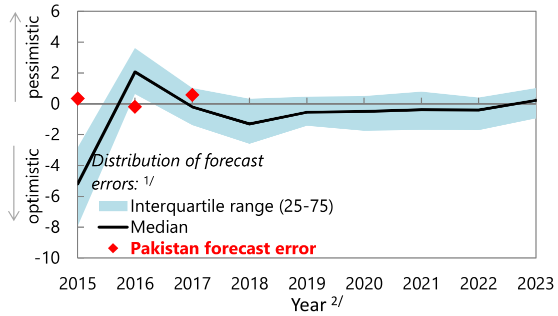
Forecast Track Record, versus all countries

Real GDP Growth

(in percent, actual-projection)

Pakistan median forecast error, 2015-2023: **0.26**

Has a percentile rank of: **80%**

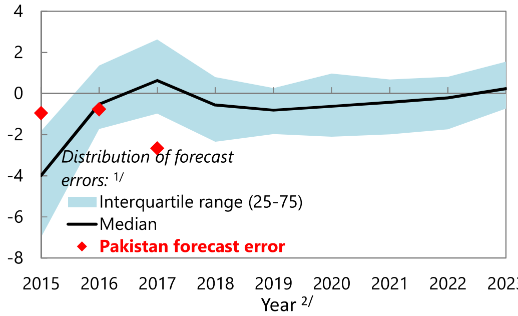


Primary Balance

(in percent of GDP, actual-projection)

Pakistan median forecast error, 2015-2023: **-2.04**

Has a percentile rank of: **17%**

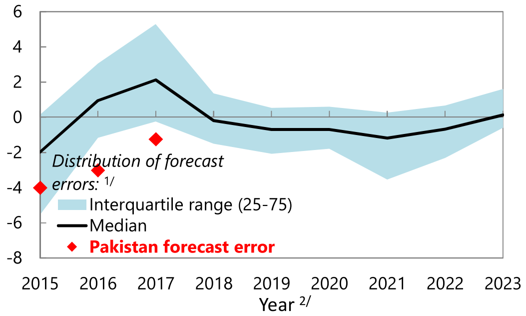


Inflation (Deflator)

(in percent, actual-projection)

Pakistan median forecast error, 2015-2023: **-1.83**

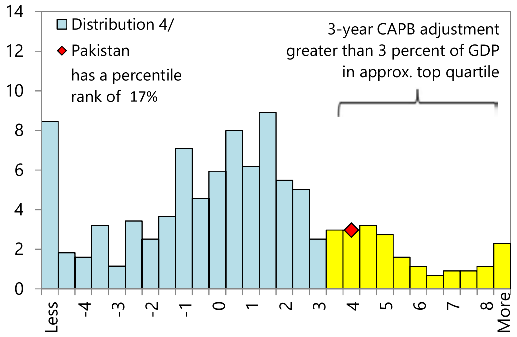
Has a percentile rank of: **8%**



Assessing the Realism of Projected Fiscal Adjustment

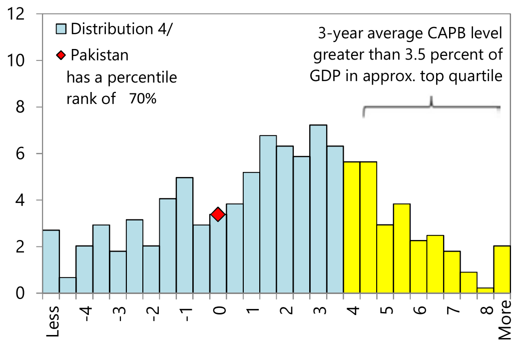
3-Year Adjustment in Cyclically-Adjusted Primary Balance (CAPB)

(Percent of GDP)



3-Year Average Level of Cyclically-Adjusted Primary Balance (CAPB)

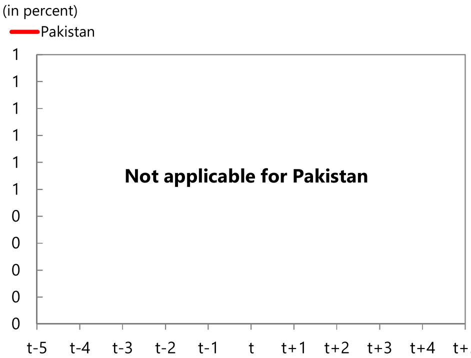
(Percent of GDP)



Boom-Bust Analysis 3/

Real GDP growth

(in percent)



Source : IMF Staff.

1/ Plotted distribution includes all countries, percentile rank refers to all countries.

2/ Projections made in the spring WEO vintage of the preceding year.

3/ Not applicable for Pakistan, as it meets neither the positive output gap criterion nor the private credit growth criterion.

4/ Data cover annual obervations from 1990 to 2011 for advanced and emerging economies with debt greater than 60 percent of GDP. Percent of sample on vertical axis.

6. BASELINE SCENARIO

Pakistan Public Sector Debt Sustainability Analysis (DSA) - Baseline Scenario

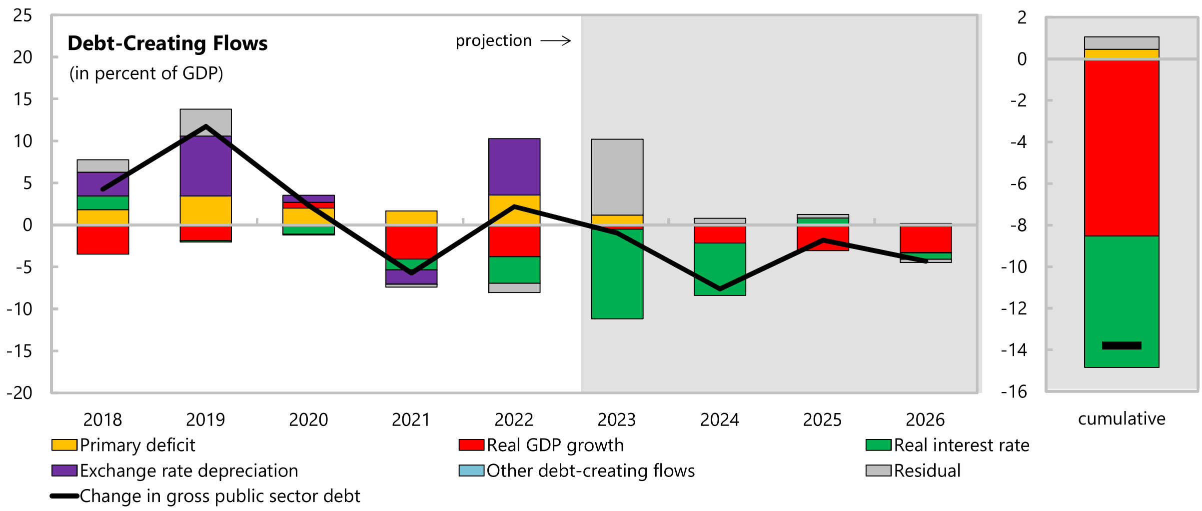
(in percent of GDP unless otherwise indicated)

Debt, Economic and Market Indicators [1/]

	Actual			Projections				As of February 15, 2023		
	2013-2020 [2/]	2021	2022	2023	2024	2025	2026			
Nominal gross public debt	68.6	75.8	77.9	77.0	69.3	67.5	63.2	Sovereign Spreads		
Of which: guarantees	2.9	4.3	4.5	4.0	4.0	3.5	3.1	EMBIG (bp) 3/		2458
Public gross financing needs	25.1	22.3	26.1	22.1	19.2	18.8	18.9	5Y CDS (bp)		4686
Real GDP growth (in percent)	3.7	5.7	6.0	0.8	3.5	5.0	5.5	Ratings	Foreign	Local
Inflation (CPI, in percent)	7.5	8.9	12.2	28.5	21.0	7.5	6.5	Moody's	Caa1	Caa1
Nominal GDP growth (in percent)	11.4	17.4	20.0	27.5	24.3	12.3	13.5	S&Ps	CCC	CCC
Effective interest rate (in percent) [4/]	7.7	7.6	8.0	11.0	11.5	9.0	5.6	Fitch	CCC	CCC

Contribution to Changes in Public Debt

	Actual			Projections					
	2013-2020	2021	2022	2023	2024	2025	2026	cumulative	debt-stabilizing primary balance [9/]
Change in gross public sector debt	2.3	-5.7	2.2	-1.0	-7.6	-1.8	-4.3	-14.8	
Identified debt-creating flows	1.6	-5.4	3.3	-10.0	-8.2	-2.2	-3.9	-24.4	
Primary deficit	2.0	1.7	3.6	1.2	0.2	0.1	0.2	1.6	-4.1
Primary (noninterest) revenue and g	7.0	6.4	5.6	5.8	6.1	6.3	6.3	24.6	
Primary (noninterest) expenditure	9.0	8.1	9.2	7.0	6.3	6.4	6.5	26.2	
Automatic debt dynamics [5/]	-0.4	-7.0	-0.3	-11.2	-8.4	-2.3	-4.1	-26.0	
Interest rate/growth differential [6/]	-2.1	-5.4	-7.0	-11.2	-8.4	-2.3	-4.1	-26.0	
Of which: real interest rate	-0.1	-1.3	-3.2	-10.7	-6.3	0.7	-0.8	-17.0	
Of which: real GDP growth	-2.1	-4.1	-3.8	-0.5	-2.1	-3.1	-3.3	-9.0	
Exchange rate depreciation [7/]	1.8	-1.7	6.7	…	…	…	…	…	
Other identified debt-creating flows	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Please specify (1) (e.g., privatizatic	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Please specify (2) (e.g., other debt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Residual, including asset changes [8/]	0.7	-0.4	-1.1	9.1	0.6	0.4	-0.4	9.7	



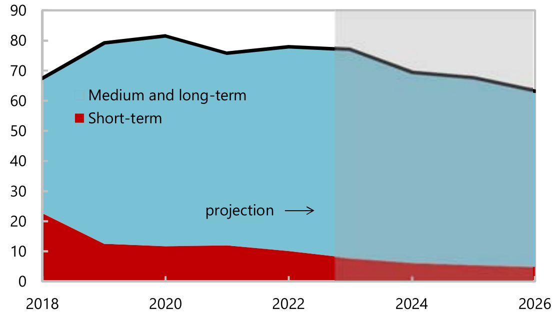
Source: IMF staff.
1/ Public sector is defined as general government and includes public guarantees, defined as .
2/ Based on available data.
3/ EMBIG (bp).
4/ Defined as interest payments divided by debt stock (excluding guarantees) at the end of previous year.
5/ Derived as [r - π(1+g) - g + ae(1+r)]/(1+g+π+gπ) times previous period debt ratio, with r = effective nominal interest rate; π = growth rate of GDP deflator; g = real GDP growt
a = share of foreign-currency denominated debt; and e = nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).
6/ The real interest rate contribution is derived from the numerator in footnote 5 as r - π (1+g) and the real growth contribution as -g.
7/ The exchange rate contribution is derived from the numerator in footnote 5 as ae(1+r).
8/ Includes changes in the stock of guarantees, asset changes, and interest revenues (if any). For projections, includes exchange rate changes during the projection period.
9/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.

7. COMPOSITION OF PUBLIC DEBT AND ALTERNATIVE SCENARIOS

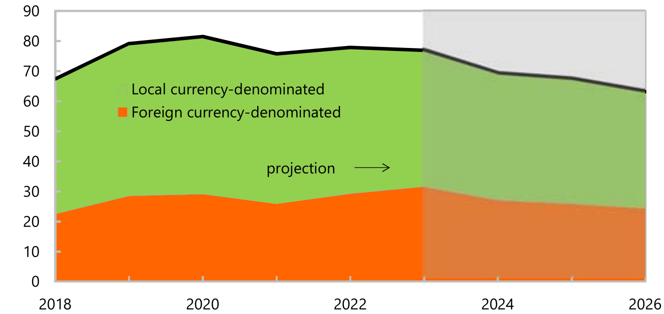
Pakistan Public DSA - Composition of Public Debt and Alternative Scenarios

Composition of Public Debt

By Maturity
(in percent of GDP)



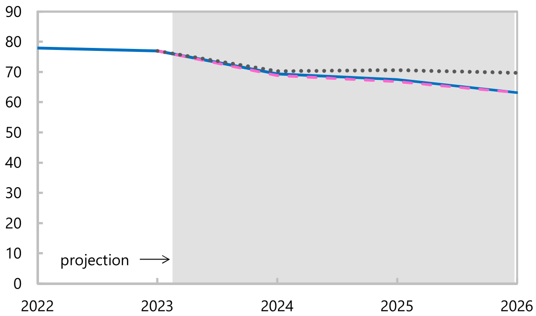
By Currency
(in percent of GDP)



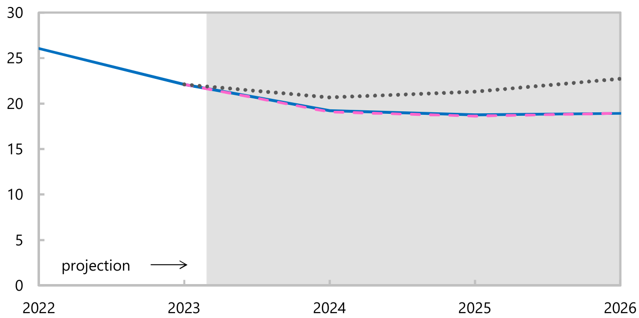
Alternative Scenarios

Baseline   Historical   Constant Primary Balance

Gross Nominal Public Debt 1/
(in percent of GDP)



Public Gross Financing Needs
(in percent of GDP)



Underlying Assumptions
(in percent)

Baseline Scenario	2023	2024	2025	2026
Real GDP growth	0.8	3.5	5.0	5.5
Inflation	28.5	21.0	7.5	6.5
Primary Balance	-1.2	-0.2	0.1	0.2
Effective interest rate	11.0	11.5	9.0	5.6
Constant Primary Balance Scenario				
Real GDP growth	0.8	3.5	5.0	5.5
Inflation	28.5	21.0	7.5	6.5
Primary Balance	-1.2	-0.2	-0.2	-0.2
Effective interest rate	11.0	11.5	9.0	5.6

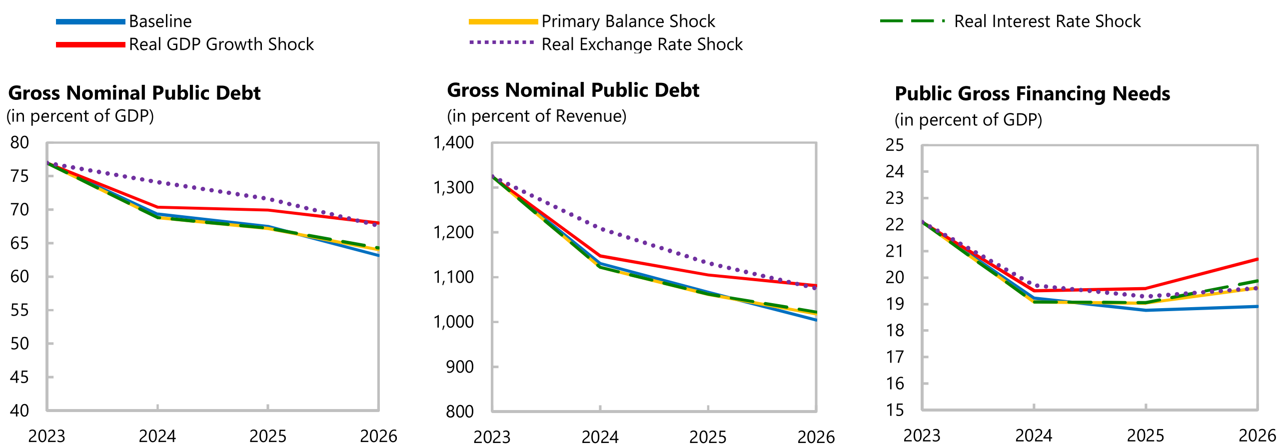
Historical Scenario	2023	2024	2025	2026
Real GDP growth	0.8	3.8	3.8	3.8
Inflation	28.5	21.0	7.5	6.5
Primary Balance	-1.2	-1.8	-1.8	-1.8
Effective interest rate	11.0	11.5	9.1	5.9

Source: IMF staff.

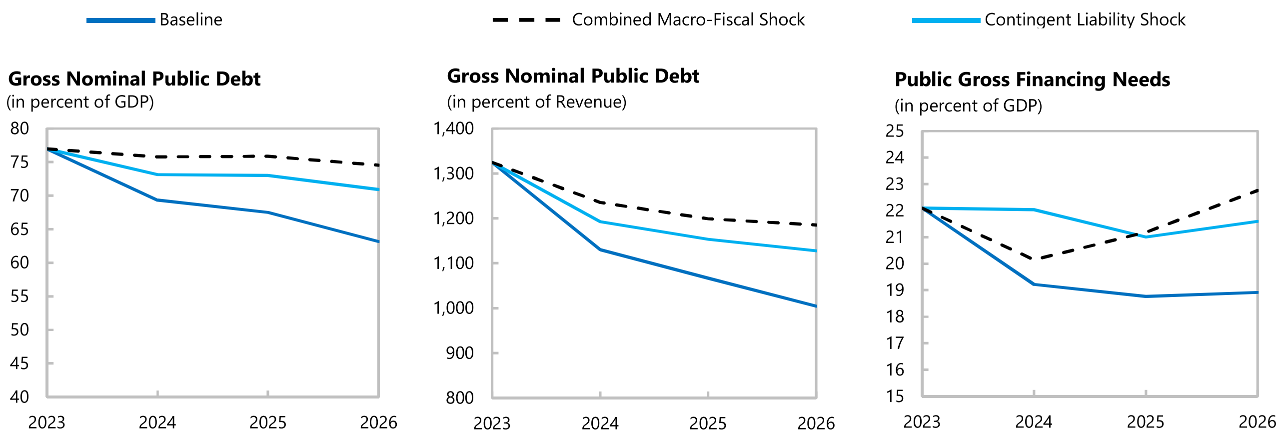
8. STRESS TESTS

Pakistan Public DSA - Stress Tests

Macro-Fiscal Stress Tests



Additional Stress Tests



Underlying Assumptions

(in percent)

	2024	2025	2026
Primary Balance Shock			
Real GDP growth	3.5	5.0	5.5
Inflation	21.0	7.5	6.5
Primary balance	-0.2	-0.6	-0.7
Effective interest rate	11.5	9.0	5.6
Real Interest Rate Shock			
Real GDP growth	3.5	5.0	5.5
Inflation	21.0	7.5	6.5
Primary balance	-0.2	-0.1	-0.2
Effective interest rate	11.5	9.9	6.9
Combined Shock			
Real GDP growth	1.2	2.7	3.2
Inflation	21.0	7.5	6.5
Primary balance	-0.2	-0.6	-0.7
Effective interest rate	11.5	9.4	6.7

	2024	2025	2026
Real GDP Growth Shock			
Real GDP growth	1.2	2.7	3.2
Inflation	21.0	7.5	6.5
Primary balance	-0.2	-0.3	-0.6
Effective interest rate	11.5	9.0	5.6
Real Exchange Rate Shock			
Real GDP growth	3.5	5.0	5.5
Inflation	21.0	7.5	6.5
Primary balance	-0.2	-0.1	-0.2
Effective interest rate	11.5	8.6	5.4
Contingent Liability Shock			
Real GDP growth	1.2	2.7	3.2
Inflation	20.4	6.9	5.9
Primary balance	-2.0	-0.1	-0.2
Effective interest rate	11.5	9.2	5.6