In Focus

BNA

Pakistan Economy

Exploring Potential Pathways for Debt Sustainability

- Pakistan's debt-to-GDP ratio has worsened by 10 percentage points between FY18 and FY23, generating concerns over debt sustainability.
- We look at three potential paths for economic management up to 2030. Based on approaches to the exchange rate, monetary and fiscal policy, the path of real interest rates, the current account deficit, and GDP growth, we determine the resultant Debt / GDP forecast in three distinct scenarios.
- We name these scenarios: 1) loose management, 2) tight management and, 3) super tight management. The 2030 Debt / GDP ranges from 61.1% to 70.6%, depending on the policy path adopted.
- We see the tighter scenarios as more likely to occur, given that further leveraging would be unpalatable. In the absence of significant control over exports and CAD in the medium term, we believe fiscal policy will bear the brunt of the necessary adjustments.
- Our takeaway is that roughly PKR 2.0tn (2.0% of GDP) in new tax measures are needed to address debt sustainability issues and avoid further leveraging.



Source: BMA Research, PBS

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Scenario 1 (Loose management): This scenario represents historical government policy absent IMF's oversight. We assume a very aggressive monetary easing cycle, taking the discount rate to 13% by July 2025 and real interest rates to 1.0%. Nominal GDP growth would hover around 5.0% by FY27 and 6.0% by FY28. The CAD rises to 4.5% of GDP over the forecasted period because of high growth. We forecast fiscal expenditures at 8.0% of GDP (vs. the current level of 6%; see Page 5 for rationale), and the primary deficit is at 1% of GDP without significant revenue measures.

External debt accumulation would be the sum of the current account deficit (I) and net reserve Increase. Under this scenario, external public debt doubles from 23.7% to 40.6%, although domestic public debt falls because of the high growth rate. This scenario is similar to FY18 - 23, during which the debt-to-GDP rose because of high external borrowing. Note that in all scenarios, restoration of FX reserves to the ideal USD 18-20bn level results in a 2pps increase in the debt-to-GDP ratio.

| Loose Management | FY 22 | FY 23 | FY 24 | FY 25 | FY 26 | FY 27 | FY 28 | FY 29 | FY 30 |
|------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Discount Rate | 10.9% | 19.3% | 21.8% | 15.5% | 13.0% | 11.0% | 11.0% | 11.0% | 11.0% |
| GDP Deflator | 13.8% | 26.5% | 22.9% | 12.3% | 12.1% | 10.0% | 10.0% | 10.0% | 10.0% |
| Real Interest Rate (A) | -2.8% | -7.3% | -1.2% | 3.2% | 0.9% | 1.0% | 1.0% | 1.0% | 1.0% |
| | | | | | | | | | |
| Nominal GDP Growth | 19.9% | 26.3% | 24.9% | 15.3% | 16.1% | 15.0% | 16.0% | 16.0% | 16.0% |
| Real GDP Growth (B) | 6.2% | -0.2% | 2.0% | 3.0% | 4.0% | 5.0% | 6.0% | 6.0% | 6.0% |
| C = A - B | 9.0% | 7.1% | 3.2% | -0.2% | 3.1% | 4.0% | 5.0% | 5.0% | 5.0% |
| | | | | | | | | | |
| USD/PKR | 205 | 280 | 280 | 308 | 339 | 373 | 410 | 451 | 496 |
| Depreciation % | 30% | 37% | 0% | 10% | 10% | 10% | 10% | 10% | 10% |
| | | | | | | | | | |
| Net Federal Revenue % of GDP (D) | 5.6% | 5.5% | 6.3% | 5.8% | 7.0% | 7.1% | 7.1% | 7.1% | 7.0% |
| Expenditure Ex-Debt % of GDP (E) | 9.2% | 6.5% | 6.1% | 6.5% | 8.0% | 8.0% | 8.0% | 8.0% | 8.0% |
| Debt Servicing % of GDP (F) | 4.8% | 6.9% | 8.6% | 6.4% | 5.3% | 4.2% | 3.8% | 3.6% | 3.4% |
| Fiscal Balance G = (D - E - F) | -8.4% | -7.9% | -8.5% | -6.6% | -5.8% | -4.6% | -4.2% | -4.0% | -3.9% |
| Primary Fiscal Balance H = (D - E) | -3.6% | -1.0% | 0.2% | -0.7% | -1.0% | -0.9% | -0.9% | -0.9% | -1.0% |
| | | | | | | | | | |
| Current Account Deficit (I) | 17 | 4 | 2 | 12 | 17 | 17 | 21 | 22 | 23 |
| CAD % of GDP J = (I / K) | 5.2% | 1.2% | 0.4% | 3.0% | 4.0% | 4.0% | 4.5% | 4.5% | 4.5% |
| | | | | | | | | | |
| GDP (USD BN) (K) | 327 | 302 | 377 | 395 | 417 | 436 | 460 | 485 | 511 |
| | | | | | | | | | |
| Total FX Reserves | 15 | 9 | 8 | 12 | 14 | 15 | 16 | 17 | 18 |
| Net Reserve Increase | | | (1) | 4 | 2 | 1 | 1 | 1 | 1 |
| | | | | | | | | | |
| Debt USD BN: | | | | | | | | | |
| Domestic Public Debt (L) | 152 | 139 | 166 | 171 | 176 | 178 | 181 | 183 | 185 |
| Domestic Public Assets (M) | 24 | 18 | 21 | 22 | 24 | 26 | 28 | 30 | 32 |
| External Public Debt (N) | 89 | 86 | 89 | 105 | 123 | 141 | 162 | 184 | 208 |
| Net Public Debt O = (L - M + N) | 217 | 206 | 235 | 254 | 275 | 293 | 315 | 337 | 361 |
| | | | | | | | | | |
| Debt to GDP: | | | | | | | | | |
| Domestic Public Debt (L/K) | 46.4% | 45.9% | 43.9% | 43.3% | 42.3% | 40.9% | 39.3% | 37.7% | 36.2% |
| Domestic Public Assets (M/K) | 7.2% | 6.0% | 5.5% | 5.7% | 5.8% | 5.9% | 6.0% | 6.1% | 6.2% |
| External Public Debt (M/K) | 27.1% | 28.5% | 23.7% | 26.5% | 29.4% | 32.3% | 35.2% | 38.0% | 40.6% |
| Net Public Debt (O/K) | 66.3% | 68.3% | 62.2% | 64.1% | 65.9% | 67.2% | 68.4% | 69.5% | 70.6% |



Scenario 2 (Tight Management): We modify Scenario 1 by assuming a gradual monetary easing path but with the same end result of a 1.0% RIR. **GDP growth tops at 5.0%** instead of 6.0%, and the CAD settles at 3.0% of GDP (requiring unofficial import controls). The FX reserves rise from USD 9bn to USD 18bn, and additional CAD financing takes the external-debt-to-GDP ratio to 35.7% instead of 40.6% as in Scenario 1. Meanwhile, domestic debt leverage remains unchanged.

This scenario is a highly unlikely trifecta of low real rates, high growth, and controlled CAD. In our report "<u>Higher For</u> <u>Longer Rates</u>", we explained why a 2.0 - 3.0% real interest rate differential is the norm under IMF programs. A controlled CAD amid recovering GDP growth is unlikely, given the IMF's insistence on trade liberalization. Under the current SBA, the authorities have committed to removing the 100% cash margin requirement for imports, likely adding to pressure on the import bill. In this scenario, we assume an additional 0.5% of GDP taxation measures over Scenario 1 to reduce the primary deficit to 0.5%.

| Tight Management | FY 22 | FY 23 | FY 24 | FY 25 | FY 26 | FY 27 | FY 28 | FY 29 | FY 30 |
|------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Discount Rate | 10.9% | 19.3% | 21.8% | 16.5% | 14.0% | 11.5% | 11.0% | 11.0% | 11.0% |
| GDP Deflator | 13.8% | 26.5% | 22.9% | 12.3% | 12.1% | 10.0% | 10.0% | 10.0% | 10.0% |
| Real Interest Rate (A) | -2.8% | -7.3% | -1.2% | 4.2% | 1.9% | 1.5% | 1.0% | 1.0% | 1.0% |
| | | | | | | | | | |
| Nominal GDP Growth | 19.9% | 26.3% | 24.9% | 16.3% | 16.1% | 15.0% | 16.0% | 16.0% | 16.0% |
| Real GDP Growth (B) | 6.2% | -0.2% | 2.0% | 3.0% | 4.0% | 4.0% | 5.0% | 5.0% | 5.0% |
| C = A - B | 9.0% | 7.1% | 3.2% | -1.2% | 2.1% | 2.5% | 4.0% | 4.0% | 4.0% |
| | | | | | | | | | |
| USD/PKR | 205 | 280 | 280 | 308 | 339 | 373 | 410 | 451 | 496 |
| Depreciation % | 30% | 37% | 0% | 10% | 10% | 10% | 10% | 10% | 10% |
| | | | | | | | | | |
| Net Federal Revenue % of GDP (D) | 5.6% | 5.5% | 6.3% | 6.3% | 7.5% | 7.6% | 7.6% | 7.6% | 7.6% |
| Expenditure Ex-Debt % of GDP (E) | 9.2% | 6.5% | 6.1% | 6.5% | 8.0% | 8.0% | 8.0% | 8.0% | 8.0% |
| Debt Servicing % of GDP (F) | 4.8% | 6.9% | 8.6% | 6.4% | 5.3% | 4.2% | 3.8% | 3.7% | 3.5% |
| Fiscal Balance G = (D - E - F) | -8.4% | -7.9% | -8.5% | -6.6% | -5.8% | -4.6% | -4.3% | -4.1% | -3.9% |
| Primary Fiscal Balance H = (D - E) | -3.6% | -1.0% | 0.2% | -0.2% | -0.5% | -0.4% | -0.4% | -0.4% | -0.4% |
| | | | | | | | | | |
| Current Account Deficit (I) | 17 | 4 | 2 | 12 | 13 | 13 | 14 | 14 | 15 |
| CAD % of GDP J = (I / K) | 5.2% | 1.2% | 0.4% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% |
| | | | | | | | | | |
| GDP (USD BN) (K) | 327 | 302 | 377 | 395 | 417 | 432 | 452 | 472 | 494 |
| | | | | | | | | | |
| Total FX Reserves | 15 | 9 | 8 | 12 | 14 | 15 | 16 | 17 | 18 |
| Net Reserve Increase | | | (1) | 4 | 2 | 1 | 1 | 1 | 1 |
| | | | | | | | | | |
| Debt USD BN: | | | | | | | | | |
| Domestic Public Debt (L) | 152 | 139 | 166 | 173 | 177 | 178 | 178 | 178 | 178 |
| Domestic Public Assets (M) | 24 | 18 | 21 | 23 | 24 | 25 | 26 | 28 | 29 |
| External Public Debt (N) | 89 | 86 | 89 | 105 | 119 | 132 | 146 | 161 | 176 |
| Net Public Debt O = (L - M + N) | 217 | 206 | 235 | 255 | 272 | 285 | 298 | 312 | 326 |
| | | | | | | | | | |
| Debt to GDP: | | | | | | | | | |
| Domestic Public Debt (L/K) | 46.4% | 45.9% | 43.9% | 43.7% | 42.5% | 41.2% | 39.5% | 37.7% | 36.1% |
| Domestic Public Assets (M/K) | 7.2% | 6.0% | 5.5% | 5.7% | 5.8% | 5.8% | 5.8% | 5.8% | 5.8% |
| External Public Debt (M/K) | 27.1% | 28.5% | 23.7% | 26.5% | 28.4% | 30.5% | 32.3% | 34.0% | 35.7% |
| Net Public Debt (O/K) | 66.3% | 68.3% | 62.2% | 64.5% | 65.2% | 66.0% | 66.0% | 65.9% | 65.9% |



Scenario 3 (Tight Management): We assume another 0.5% of GDP additional taxation measures over Scenario 2, for a total of 2% additional taxation. We also reduce fiscal expenditures by 0.5% to **attain a 0.5% primary surplus**. Consistent with a 3.0% CAD estimate and fiscal control, we estimate a lower GDP growth number. We also assume less currency devaluation to reduce the external debt-to-GDP ratio, requiring strict monitoring of the CAD. In this scenario, our **debt-to-GDP ratio falls slightly from 62.2% in FY24 to 61.1% in FY30.**

| Super Tight Management | FY 22 | FY 23 | FY 24 | FY 25 | FY 26 | FY 27 | FY 28 | FY 29 | FY 30 |
|------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Discount Rate | 10.9% | 19.3% | 21.8% | 16.5% | 14.0% | 11.5% | 11.0% | 11.0% | 11.0% |
| GDP Deflator | 13.8% | 26.5% | 22.9% | 12.3% | 12.1% | 10.0% | 10.0% | 10.0% | 10.0% |
| Real Interest Rate (A) | -2.8% | -7.3% | -1.2% | 4.2% | 1.9% | 1.5% | 1.0% | 1.0% | 1.0% |
| | | | | | | | | | |
| Nominal GDP Growth | 19.9% | 26.3% | 24.9% | 15.3% | 16.1% | 14.0% | 14.0% | 14.0% | 14.0% |
| Real GDP Growth (B) | 6.2% | -0.2% | 2.0% | 3.0% | 4.0% | 4.0% | 4.0% | 4.0% | 4.0% |
| C = A - B | 9.0% | 7.1% | 3.2% | -1.2% | 2.1% | 2.5% | 3.0% | 3.0% | 3.0% |
| | | | | | | | | | |
| USD/PKR | 205 | 280 | 280 | 308 | 333 | 359 | 388 | 419 | 453 |
| Depreciation % | 30% | 37% | 0% | 10% | 8% | 8% | 8% | 8% | 8% |
| | | | | | | | | | |
| Net Federal Revenue % of GDP (D) | 5.6% | 5.5% | 6.3% | 7.8% | 8.0% | 8.1% | 8.1% | 8.1% | 8.1% |
| Expenditure Ex-Debt % of GDP (E) | 9.2% | 6.5% | 6.1% | 7.5% | 7.5% | 7.5% | 7.5% | 7.5% | 7.5% |
| Debt Servicing % of GDP (F) | 4.8% | 6.9% | 8.6% | 6.3% | 5.1% | 4.0% | 3.5% | 3.3% | 3.1% |
| Fiscal Balance G = (D - E - F) | -8.4% | -7.9% | -8.5% | -6.0% | -4.6% | -3.4% | -3.0% | -2.7% | -2.5% |
| Primary Fiscal Balance H = (D - E) | -3.6% | -1.0% | 0.2% | 0.3% | 0.5% | 0.6% | 0.6% | 0.6% | 0.6% |
| | | | | | | | | | |
| Current Account Deficit (I) | 17 | 4 | 2 | 12 | 13 | 13 | 14 | 15 | 16 |
| CAD % of GDP J = (I / K) | 5.2% | 1.2% | 0.4% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% |
| | | | | | | | | | |
| GDP (USD BN) (K) | 327 | 302 | 377 | 395 | 425 | 448 | 473 | 500 | 527 |
| | | | | | | | | | |
| Total FX Reserves | 15 | 9 | 8 | 12 | 14 | 15 | 16 | 17 | 18 |
| Net Reserve Increase | | | (1) | 4 | 2 | 1 | 1 | 1 | 1 |
| | | | | | | | | | |
| Debt USD BN: | | | | | | | | | |
| Domestic Public Debt (L) | 152 | 139 | 166 | 171 | 175 | 175 | 174 | 173 | 171 |
| Domestic Public Assets (M) | 24 | 18 | 21 | 22 | 24 | 25 | 26 | 27 | 28 |
| External Public Debt (N) | 89 | 86 | 89 | 105 | 119 | 133 | 148 | 163 | 180 |
| Net Public Debt O = (L - M + N) | 217 | 206 | 235 | 253 | 270 | 283 | 295 | 309 | 322 |
| | | | | | | | | | |
| Debt to GDP: | | | | | | | | | |
| Domestic Public Debt (L/K) | 46.4% | 45.9% | 43.9% | 43.2% | 41.1% | 39.0% | 36.7% | 34.5% | 32.5% |
| Domestic Public Assets (M/K) | 7.2% | 6.0% | 5.5% | 5.7% | 5.6% | 5.6% | 5.5% | 5.5% | 5.4% |
| External Public Debt (M/K) | 27.1% | 28.5% | 23.7% | 26.5% | 28.0% | 29.6% | 31.2% | 32.7% | 34.1% |
| Net Public Debt (O/K) | 66.3% | 68.3% | 62.2% | 64.0% | 63.5% | 63.1% | 62.4% | 61.8% | 61.1% |

A note on sudden de-leveraging: Currency stability in the face of high nominal GDP growth can result in abrupt movements in the debt-to-GDP ratio. During FY20 – 21, debt ratio fell from 69.9% to 63.9% as nominal GDP grew 17% while the currency appreciated 6%. We see a similar case moving from FY23 to FY24 wherein a combination of high nominal GDP and absence of currency devaluation may contribute to a reduction in the debt-to-GDP.



Fiscal Expenditures excl. Debt Servicing: In Scenario 1 and 2, we assume fiscal expenditures excl. debt Servicing is at 8.0% of GDP, and in Scenario 3, we project a 7.5% of GDP figure. In FY23, this number was 6.5% and may fall to 6.1% in FY24. Because of high double digit inflation and muted nominal growth, current expenditures have shrunk significantly in real terms. This scenario represents a significant risk when expenditures mean revert. Within this head, subsidies and grants combined were 15% of the total in FY16 and currently stand at 38%.

Given other expenditures should mean revert at some point, subsidies and grants should fall to make space for normalized expenditures. This scenario underlies the basis for our 8.0% of GDP assumption for fiscal expenditures excl. debt servicing in the medium to long term.

As explained in our previous report, <u>"Higher For Longer"</u>, we expect the IMF to aggressively push for reducing subsidies and grants and therefore expect administered prices such as electricity to rise significantly during the program, contributing to inflation and higher rates.



Source: BMA Research, PBS

Implications for fiscal policy: Deleveraging requires significant and urgent efforts to raise tax collection to avoid the Debt to GDP ratio rising beyond 70%; the government may introduce additional taxation measures to offset the collection deficits. News reports suggest the reimposition of ADR tax on banks, reduction in subsidies, implementation of fixed electricity charges, lending-related taxes for the banking sector, and additional taxes for the salaried class by reducing slabs.

We believe these measures are likely and expect significant taxation-related measures in the next budget. We think that monetary easing is likely to be gradual while the GDP growth rate could be lower. Increasing exports will be difficult given the sharp rise in administered energy prices. Industrial consumers need to be cross-subsidized by raising bills on domestic consumers. This is a hard pill that the government has to swallow to grow exports sustainably.

Data from other countries on debt sustainability: We look at 36 emerging market defaults and their external debt to GDP and external debt / exports Ratio. The latter is more useful as the level of exports determines debt repayment capacity in the absence of any other major inflows. As shown on the next page, in the year of default, external debt to GDP averages 68% while external debt to exports averages 229%.

Including private and public external debt of USD 128bn (since both have to be financed the distinction between public and private does not matter), the external debt to GDP ratio stands at 42%. External debt to exports, based on 12-month trailing exports, stands at 425%. After including remittances, the ratio drops to 229%.



| External Debt to GDP and Exports in year of default | Year | External Debt / | External Debt / |
|--|------|--------------------|--------------------|
| | | GDP | Exports |
| Ecuador | 2008 | 30.0% | 74.6% |
| Uruguay | 2003 | 95.3% | 334.4% |
| Argentina | 2001 | 57.4% | 409.8% |
| Ecuador | 2000 | 107.3% | 181.5% |
| Russian Federation | 1998 | 30.5% | 109.8% |
| Iran | 1992 | 41.8% | 77.6% |
| Russian Federation | 1991 | 12.3% | n.a |
| Albania | 1990 | 16.6% | 98.6% |
| Bulgaria | 1990 | 57.1% | 154.0% |
| Iraq | 1990 | n.a | n.a |
| Jordan | 1989 | 181.9% | 234.2% |
| Trinidad and Tobago | 1989 | 48.5% | 103.6% |
| South Africa | 1985 | n.a | n.a |
| Ecuador | 1984 | 68.0% | 271.5% |
| Egypt | 1984 | 112.7% | 282.6% |
| Peru | 1984 | 65.6% | 288.9% |
| Brazil | 1983 | 50.1% | 393.6% |
| Chile | 1983 | 96.5% | 358.6% |
| Morocco | 1983 | 86.6% | 305.6% |

| External Debt to GDP and Exports in year of default | Year | External Debt / GDP | External Debt / Exports |
|--|------|---------------------------|-------------------------------|
| Panama | 1983 | n.a | 56.8% |
| Philippines | 1983 | 74.0% | 278.1% |
| Uruguay | 1983 | 63.7% | 204.0% |
| Argentina | 1982 | 55.1% | 447.3% |
| Dominican Republic | 1982 | 32.7% | 183.3% |
| Guyana | 1982 | 237.6% | 337.7% |
| Mexico | 1982 | 46.9% | 279.3% |
| Romania | 1982 | 20.3% | 73.1% |
| Venezuela | 1982 | 40.1% | 131.0% |
| Costa Rica | 1981 | 136.9% | 267.0% |
| Honduras | 1981 | 63.5% | 182.8% |
| Poland | 1981 | 26.8% | 108.1% |
| Bolivia | 1980 | 97.1% | 246.4% |
| Jamaica | 1978 | 48.6% | 103.9% |
| Peru | 1978 | 80.9% | 388.5% |
| Turkey | 1978 | 21.0% | 374.2% |
| Chile | 1972 | 31.8% | n.a |
| Average | | 67.7% | 229.4% |
| Pakistan (Current) | | 42.0% | 425.0% |

Source: Reinhart, Rogoff, and Savastano (2003) & World Bank. Pakistan numbers based on private + public external debt. Debt / Exports, accounting for remittances, falls to 228%.

Any discussion on debt sustainability is incomplete without mentioning non-public external debt. Between FY16 and FY23, external non-public debt, comprising external private debt and PSE debt, has risen from USD 16bn to USD 42bn. Much of this debt is CPEC-related and has failed to offer affordable energy and increased exports to finance it. While fiscal reform is the need of the moment and relatively easier to manage, external debt accumulation remains a potent risk over the medium term.



Source: BMA Research, PBS



Implications for equity strategy: The market was fixated on elections and the incoming disinflation. One event is behind us while disinflation, through the high-base effect, is playing out. The attention now must shift to the IMF program, the policy regime that will be in place in the next few years, and how investors might navigate it.

We believe additional taxation is almost a certainty, although it remains to be seen how the tax burden is distributed. The new budget will influence the market's performance for the remainder of 2024 and it remains to be seen if the current account deficit can be kept in check amidst economic recovery. We think the IMF's insistence on abolishing all forms of import controls, although in line with the spirit of trade liberalization, is inappropriate given Pakistan's current predicament and how the authorities navigate this particular area will have implications for how the economy is to be managed.

Given the risks, we advocate a preference for energy and electricity firms that may benefit from rollbacks in subsidies/grants and an increase in electricity/gas prices. We also continue to prefer Banks as we believe monetary easing is likely to be gradual. The economic environment remains restrictive for cyclical firms and import-driven sectors, and as a result, equity returns may continue to be concentrated in large caps.



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Old rating system

Valuation Methodology

To arrive at our period end target prices, BMA Capital uses different valuation methodologies including

- Discounted cash flow (DCF, DDM)
- Relative Valuation (P/E, P/B, P/S etc.)
- Equity & Asset return based methodologies (EVA, Residual Income etc.)