

The Role of Effective Management of Currency Risks on Ensuring the Stability of the Public Debt in Uzbekistan



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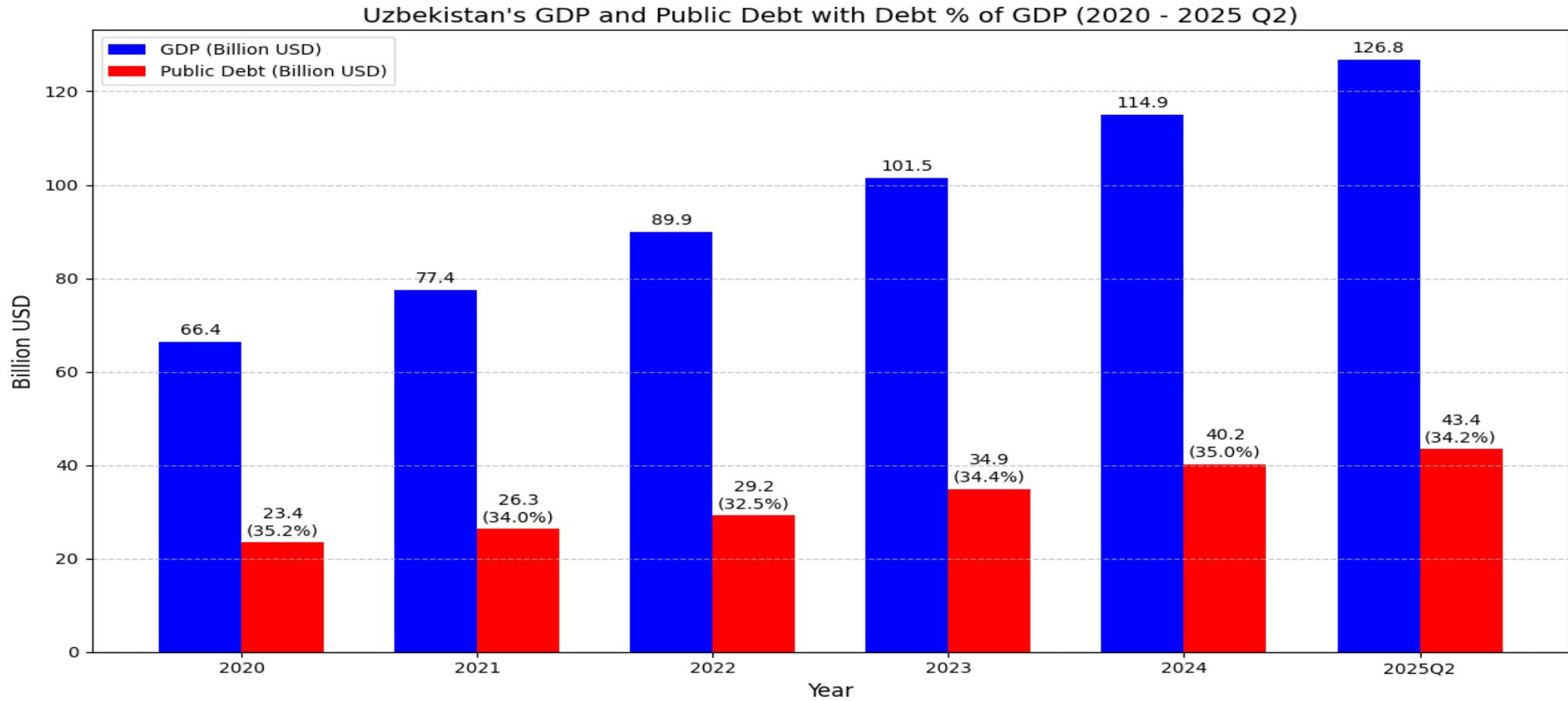
Main contents:

- **Overview of economic growth, Public debt, and EX rate dynamics in Uzbekistan**
- **Analyses on the impact of currency risk on public debt and the state budget**
- **Case studies: Japan, Argentina and Poland**
- **Recommendations for improving currency risk management**

What is public debt sustainability?

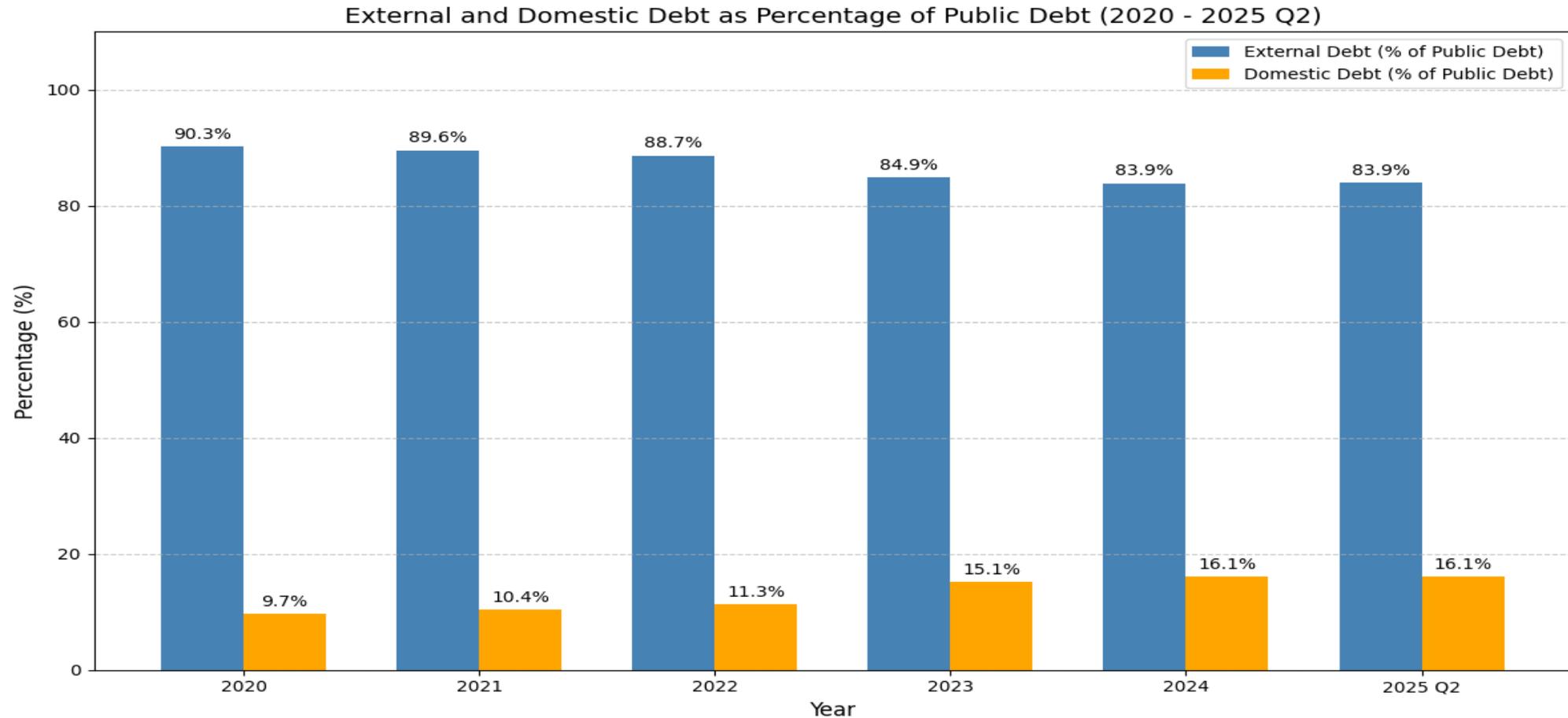
- Public debt sustainability refers to the **government's ability** to meet its current and future **debt obligations without requiring debt relief**, while maintaining stable **economic growth and sound fiscal policies**.
- A Debt-to-GDP ratio ranging from **30% to 60%** is generally regarded as **sustainable**, while levels between **80% and 100%** indicate heightened **risk to fiscal stability** (*IMF methodology*).
- Uzbekistan's **overall risk** of public debt distress is assessed as **low** (*Debt sustainability analyses, World bank and IMF*).

1. Overview (GDP-Debt)



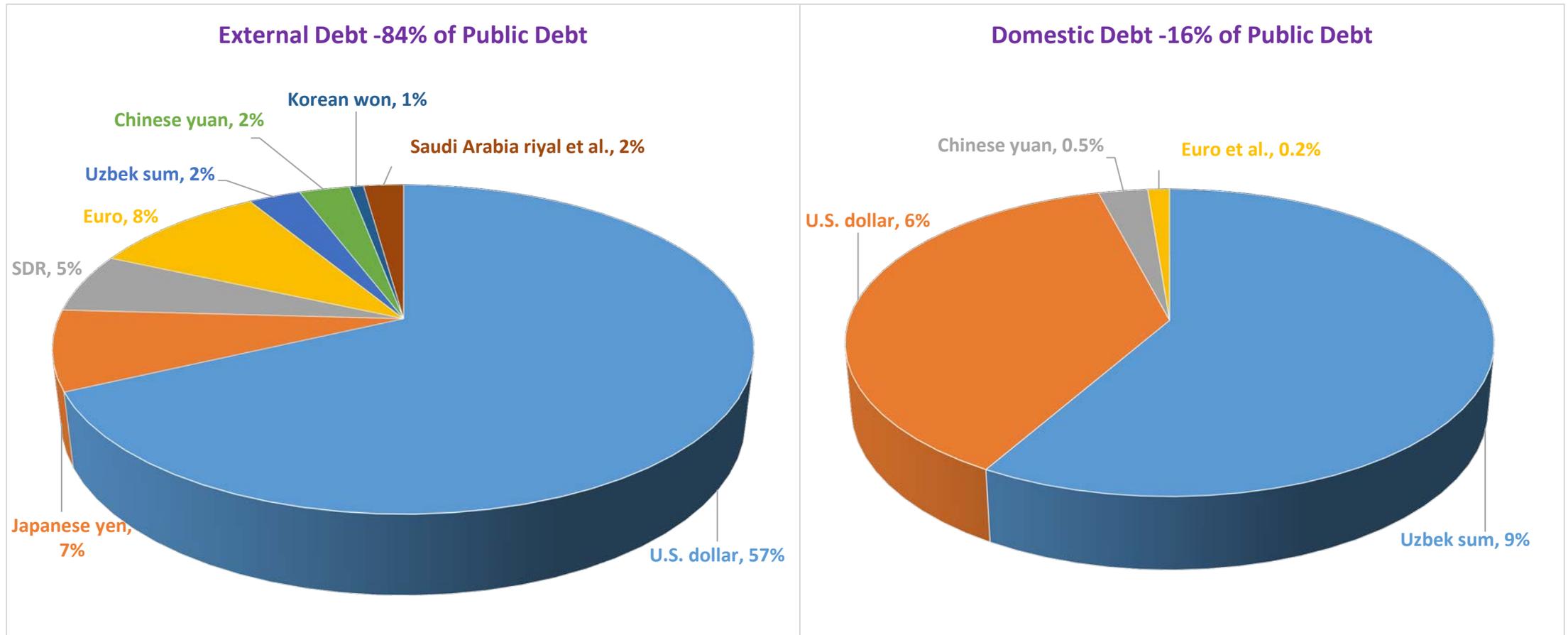
Uzbekistan's current Debt-to-GDP ratio remains within a safe range.

External and domestic debt of Uzbekistan



The share of **external debt** as a percentage of public debt has **gradually decreased from 90%** in 2020 to around **84% in mid-2025**, while the domestic debt share has increased.

Currency composition of public debt



Overall, **88 percent** of the total public debt is denominated **in foreign currency (63 percent in USD)**, and **12 percent** is in the **national currency**.

Uzbekistan's External Debt in 2022–2024: A Creditor-Based Breakdown

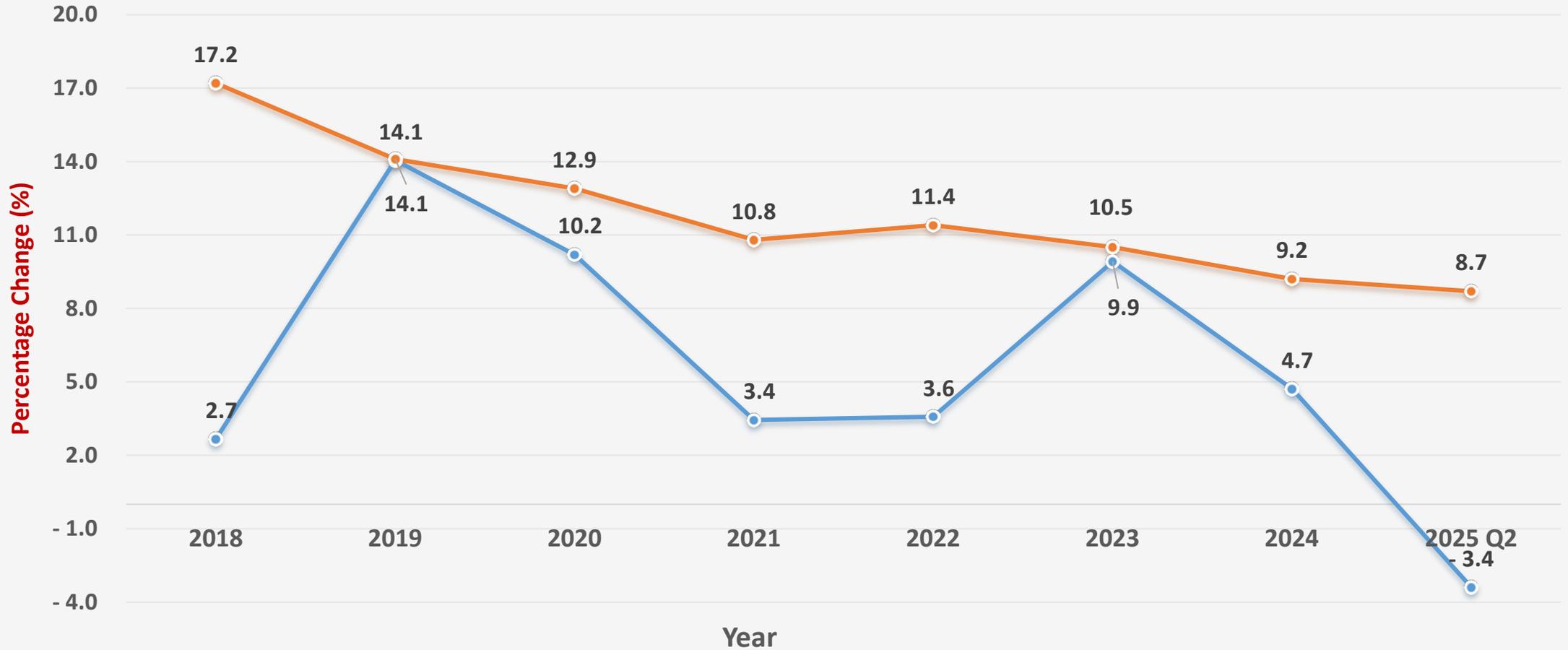
Indicator name	2022		2023		2024	
	mln USD	%	mln USD	%	mln USD	%
State external debt, total	25 914	100%	29 639	100%	33 726	100%
International financial institutions	13 804	53%	16 627	56%	19 143	57%
Asian Development Bank	6 030	23%	6 441	22%	7 415	22%
World Bank	5 527	21%	6 570	22%	7 639	23%
Islamic Development Bank	904	3%	911	3%	946	3%
Asian Infrastructure Investment Bank	570	2%	1 321	4%	1 652	5%
International Monetary Fund	367	1%	811	3%	669	2%
European Bank for Reconstruction and Development	132	1%	174	1%	341	1%
Other	274	1%	399	1%	481	1%
The organizations of foreign governments	9 519	37%	9 614	32%	10 448	31%
China Development State Bank, China Eximbank, etc.	3 965	15%	3 775	13%	3 767	11%
Japan International Cooperation Agency	2 300	9%	2 359	8%	2 889	9%
Korean Eximbank, Korean Economic Development Fund	966	4%	794	3%	740	2%
French Development Agency	718	3%	828	3%	977	3%
Saudi Development Fund	143	1%	140	0%	139	0%
State Bank of Germany	116	0%	114	0%	415	1%
State Bank of Spain	80	0%	73	0%	66	0%
Others	1 230	5%	1 531	5%	1 455	4%
Investors	2 591	10%	3 397	11%	4 135	12%
International bonds	2 591	10%	3 397	11%	4 135	12%

Despite moderate levels of public debt, Uzbekistan's debt portfolio is subject to exchange rate risk!!!

(High-Level Summary Technical Assistance Report of IMF, World Bank)

- Until 2017, Uzbekistan had a **dual exchange rate system**: the **official rate** was around 4,210 UZS per USD, while the **unofficial market rate** was nearly 8,000. In September 2017, the government **unified the rates at 8,100 UZS per USD**.
- Although Uzbekistan liberalized its exchange rate regime in 2017, the **national currency** continued to **depreciate** against foreign currency gradually between **2018 and 2024**, averaging an annual depreciation of **5–6% against the U.S. dollar**.
- This ongoing depreciation **increased the cost of servicing external debt**, as a large portion of Uzbekistan's public debt is denominated in foreign currencies. As a result, currency risk became a **significant factor in fiscal planning and debt sustainability**.

Inflation and Exchange Rate Trends



—●— EX rate (eop) —●— Inflation (average)

Overview of the relationship between Exchange Rate, Inflation, and the Original Sin Index

- **The Original Sin Index (OSIN)** is an indicator that measures the extent to which a **country is unable to borrow in its own currency** in international financial markets.

The Original Sin Index ranges **from 0 to 1**:

OSIN = 0 (country can borrow in its own currency)

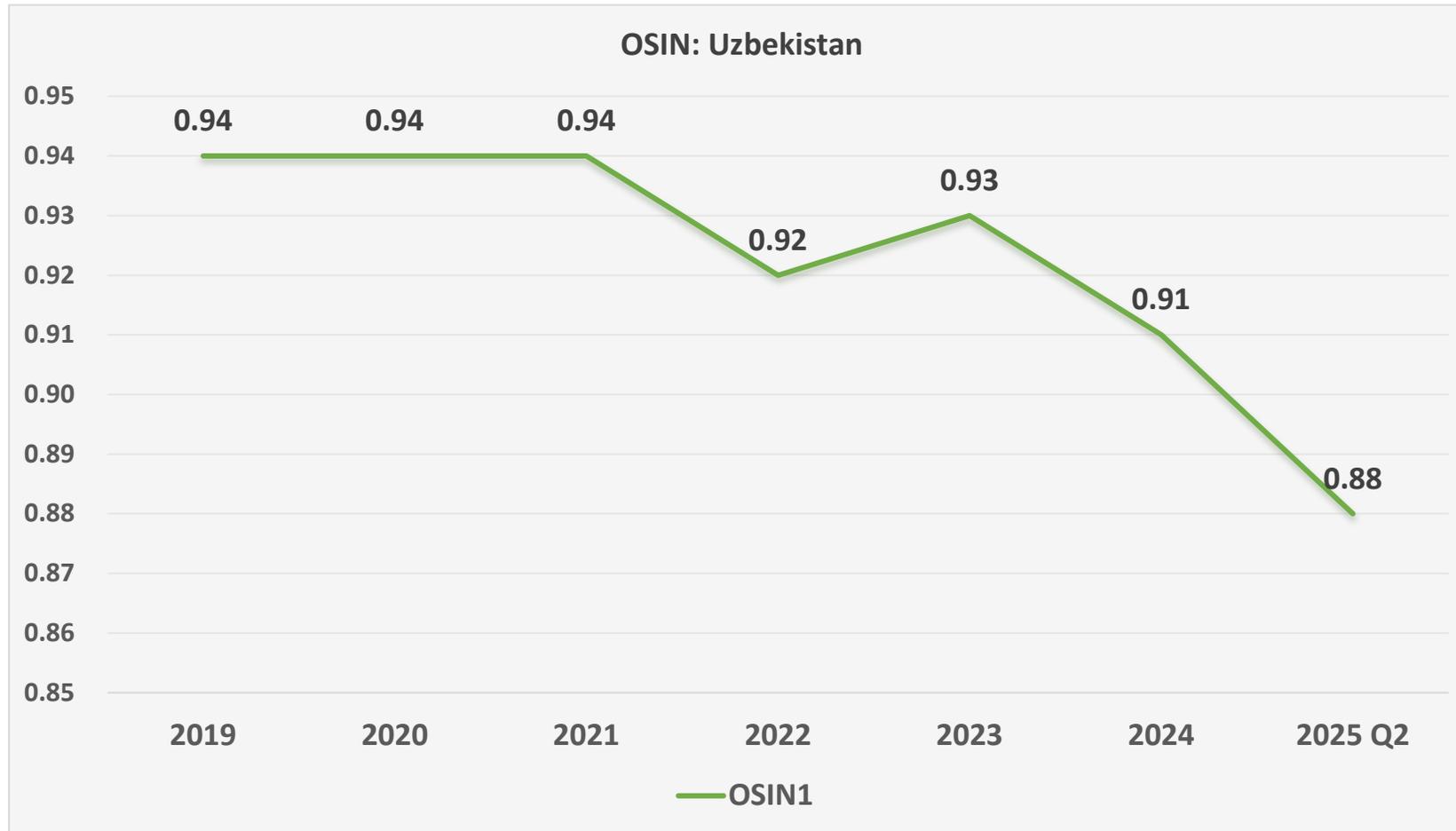
OSIN = 1 (country can only borrow in foreign currencies)

High inflation = high Original Sin

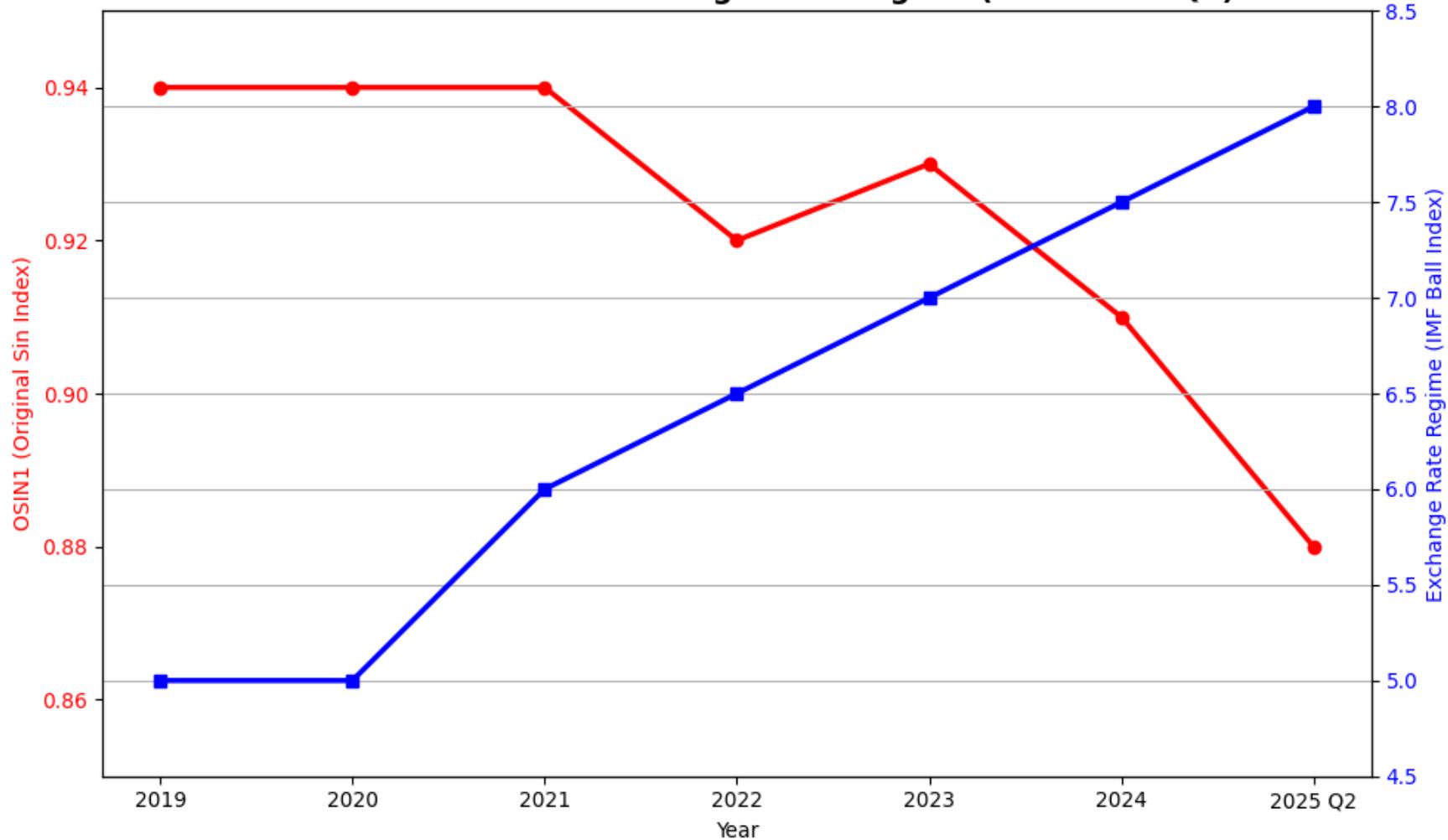
- Countries with high inflation tend to have a higher level of “original sin,” meaning they are unable to borrow in their own currency.
- In recent years, Uzbekistan has been trying to reduce inflation, but it has historically remained **in double digits (above 10%)**. This reflects **low monetary credibility**. As a result, Uzbekistan faces **serious limitations** in issuing international debt in its national currency.

High degree of Original Sin in Uzbekistan

$$\text{OSIN } i = 1 - \frac{\text{Debt issued by country in its own currency}}{\text{Debt issued by country}} = 1 - \frac{5.2 \text{ bln USD}}{43.4 \text{ bln USD}} = 0.88$$



Uzbekistan: OSIN1 vs Exchange Rate Regime (2019-2025 Q2)



OSIN has been gradually **declining (from 0.94 to 0.88)**, which is a positive trend. **The Exchange Rate Regime index** has been **increasing (from 5 to 8)**, indicating a gradual liberalization of exchange rate policy (**managed floating regime**). **Conclusion:** As exchange rate flexibility increases, Uzbekistan is relying less on foreign-currency-denominated debt.

2. The Negative Impact of Exchange Rate Fluctuations on Public Debt Sustainability and the Fiscal Balance

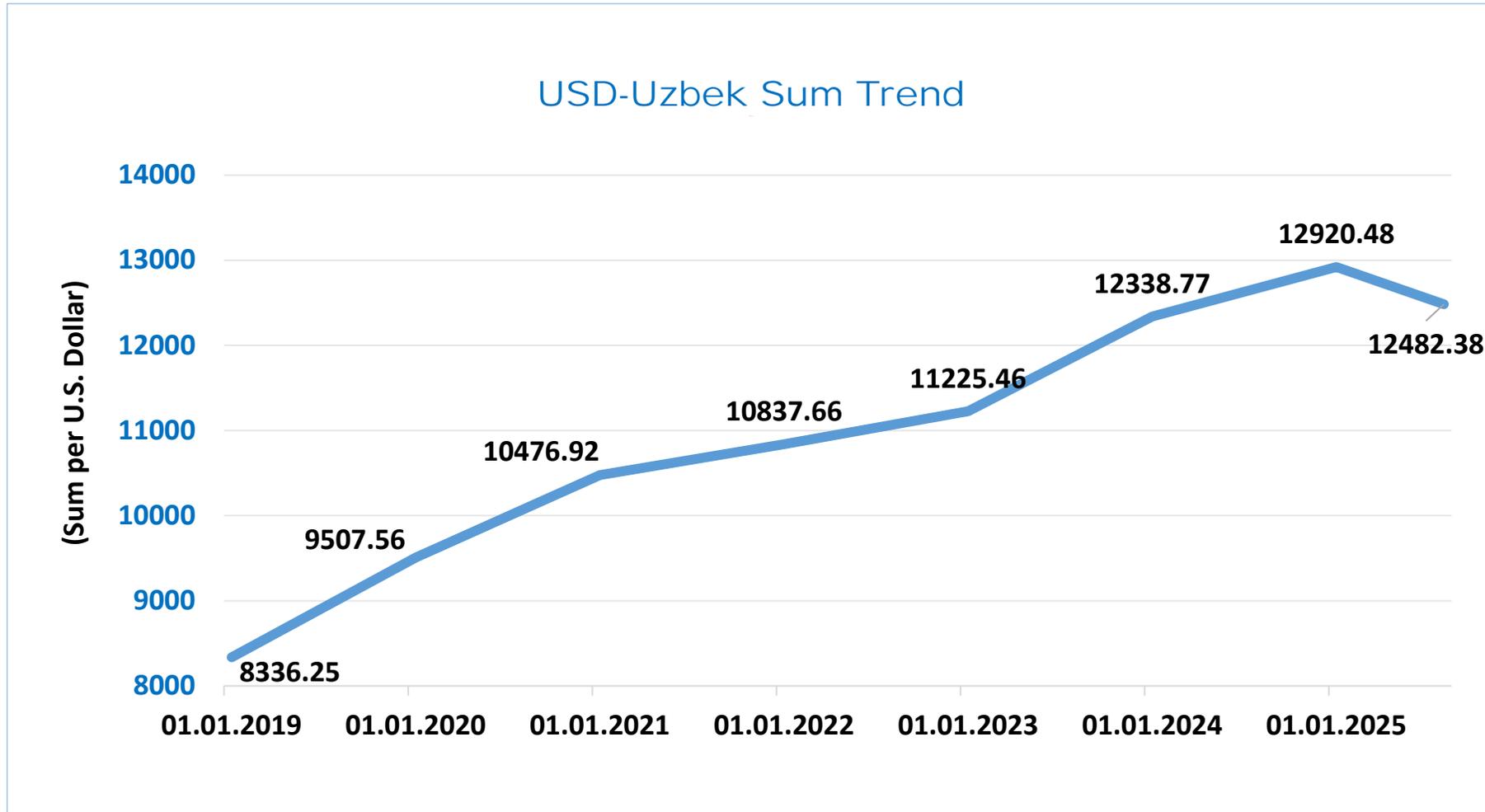
Additional debt service payments

Growing budget expenditures

Increasing budget deficit

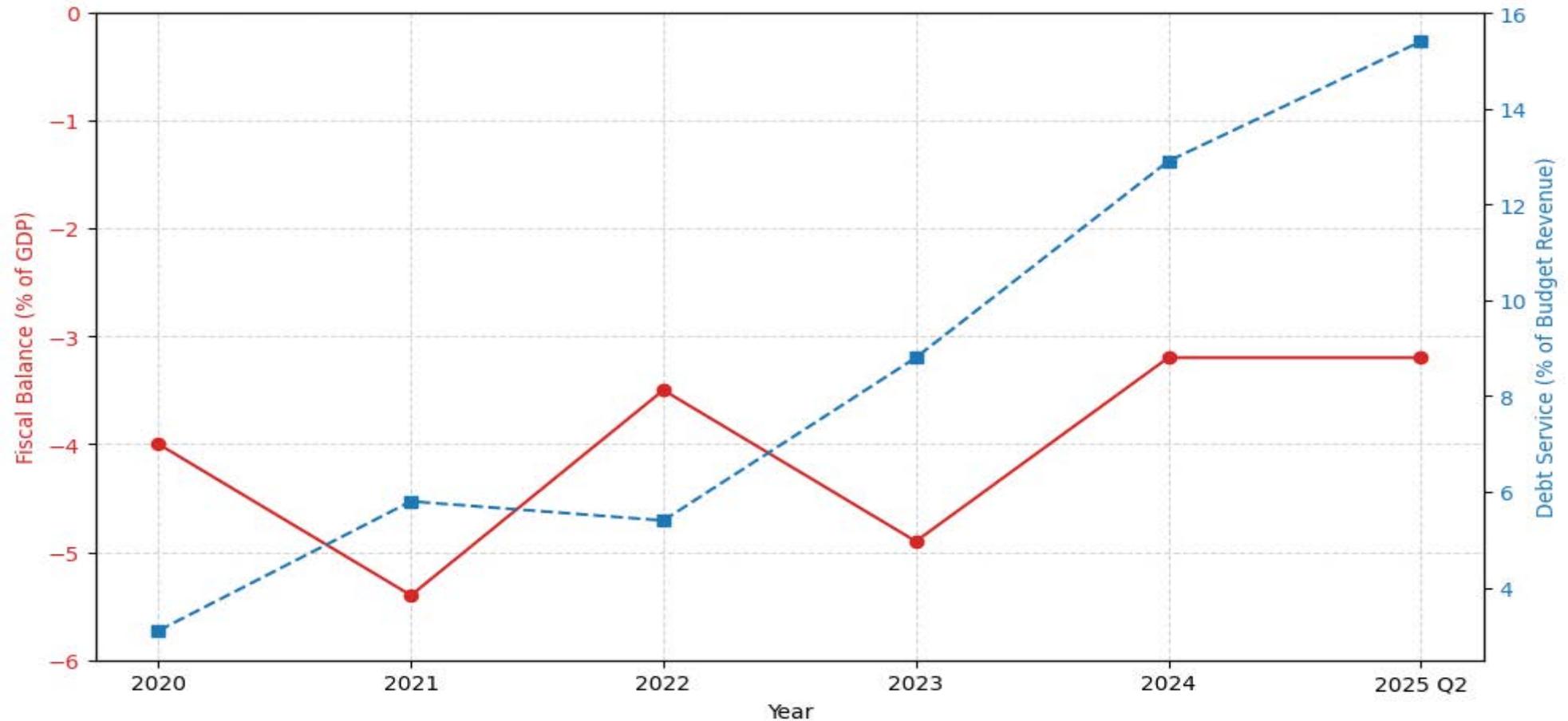
Pressure on debt sustainability

Exchange rate dynamics



In recent years, the Uzbekistan national currency, the sum, has depreciated against the U.S. dollar at an average **annual rate of approximately 5–6%**.

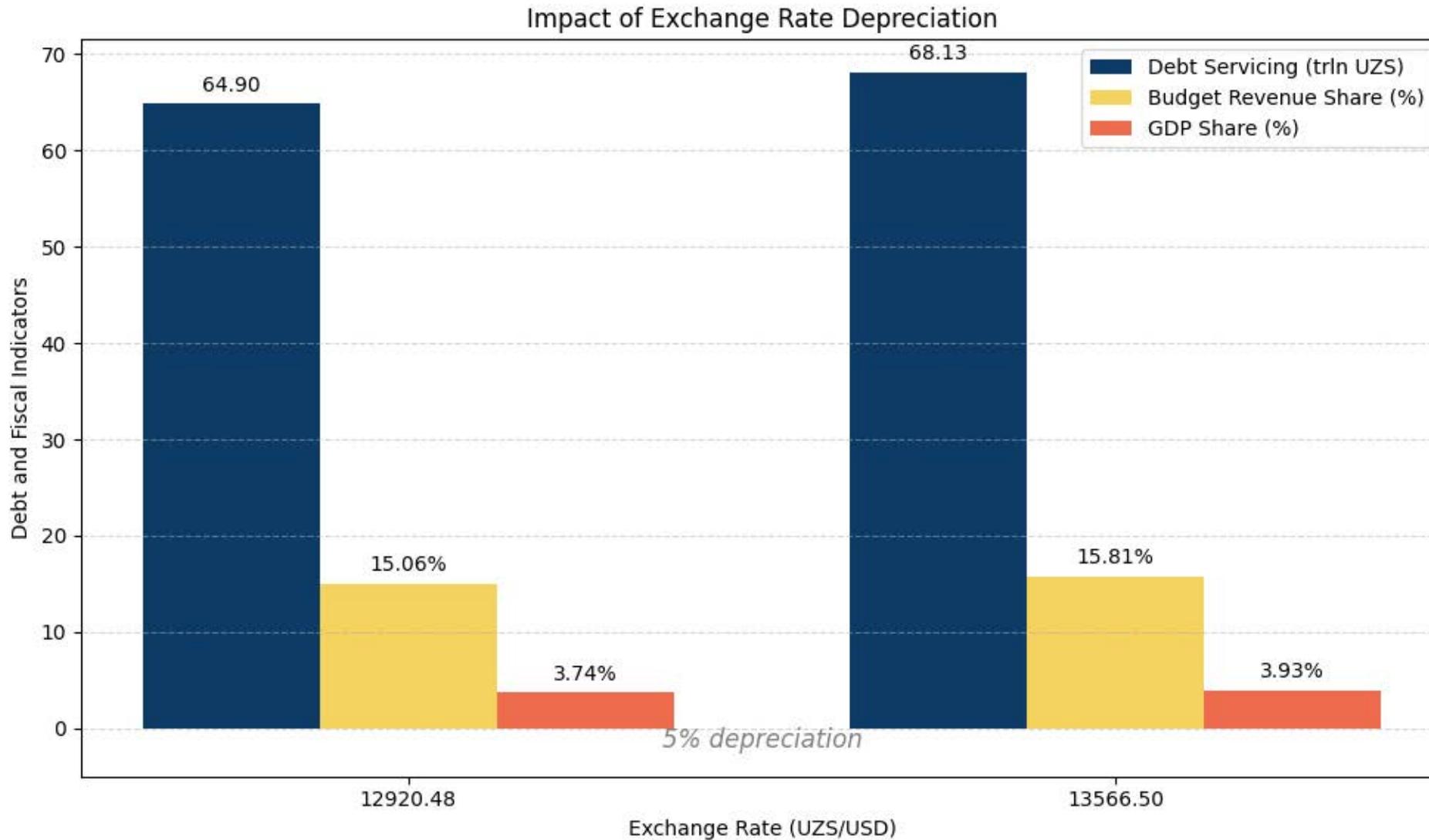
Fiscal Balance and Debt Service Ratio (2020 - 2025 Q2)



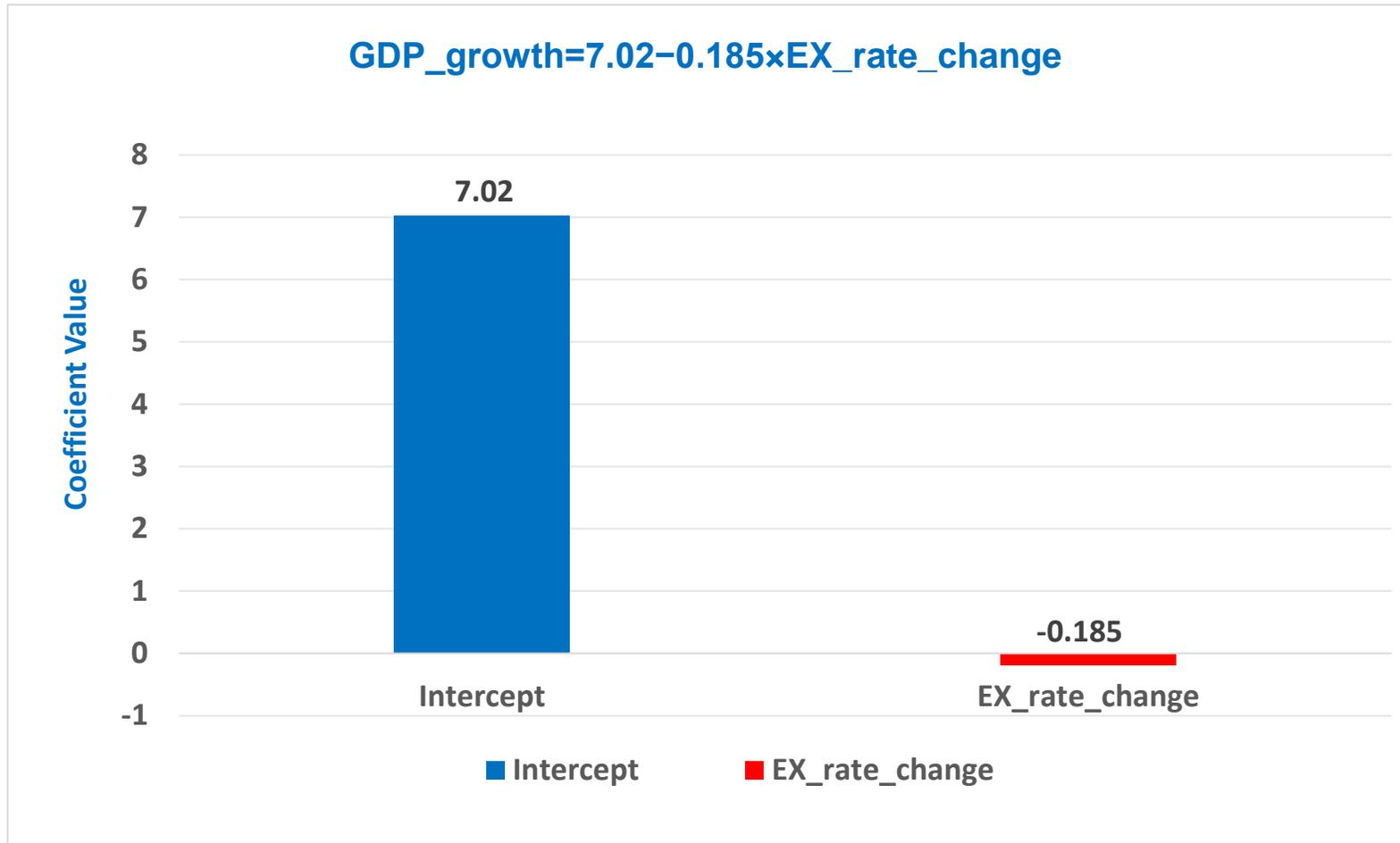
The fiscal balance remained in deficit between **-3% and -5% of GDP**, while debt service as a share of budget revenue steadily increased, **reaching over 15%** by mid-2025.

According to IMF methodology, a debt service-to-revenue ratio between **10–20% is considered safe**, while **30% or higher indicates a high risk**.

Illustrative impact of exchange rate depreciation on debt servicing in 2025



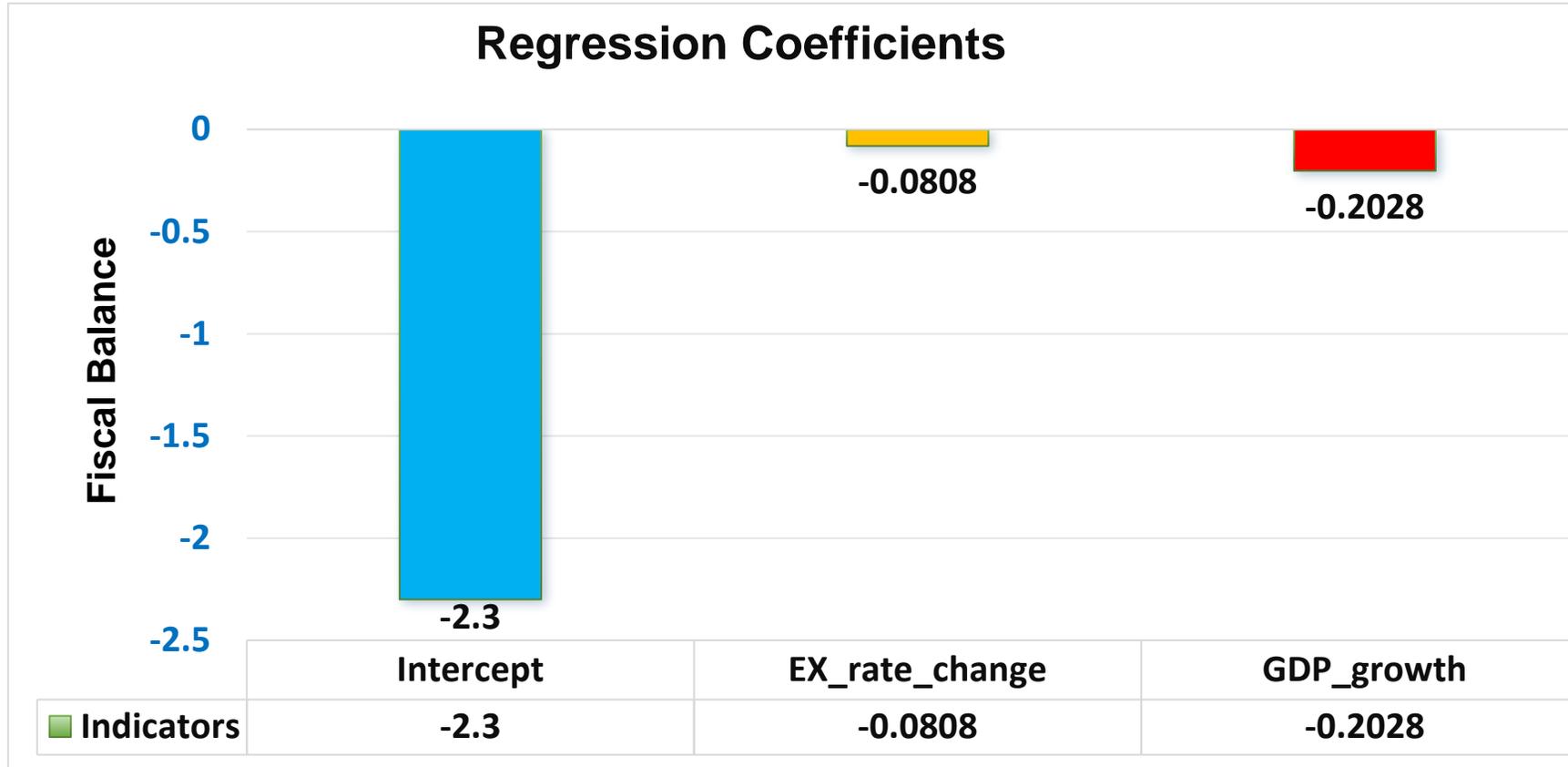
1- Regression Model Coefficients - $GDP_growth_t = \beta_0 + \beta_1 \cdot FX_risk_t + \epsilon_t$



If the **exchange rate increases by 1%**, economic growth (**GDP**) **decreases** by approximately **0.185%**.
If the **exchange rate is 0**, economic growth (**GDP**) will be approximately **7.02%** (currently growth is at 6%).
 $R^2 = 0.18$ (the model only explains about 18% of the data) and 82% are other factors.

2-Regression Model: $\text{Fiscal_balance}_t = \alpha_0 + \alpha_1 \times \text{EX_rate_change}_t + \alpha_2 \cdot \text{GDP_growth}_t + \varepsilon$

$$\text{Fiscal_balance}_t = -2.30 - 0.0808 \times \text{EX_rate_change}_t - 0.2028 \times \text{GDP_growth}_t$$

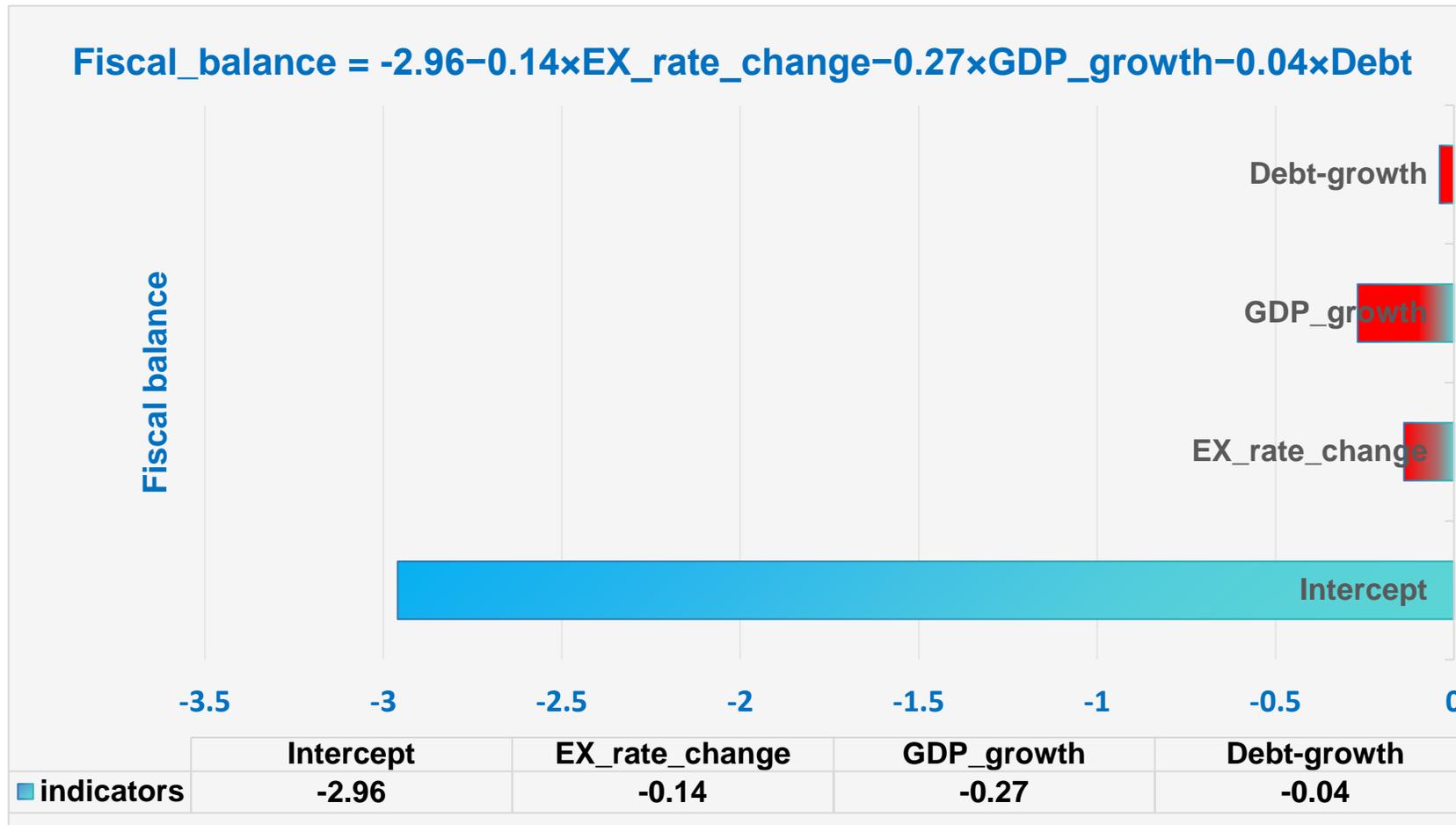


If there is neither **exchange rate change** or **economic growth (both 0%)**, then the budget deficit will be around **-2.3%** (*Current FB = -3.2%*).

If the **exchange rate increases by 1%**, then the **deficit will increase by 0.0808%**.

If **economic growth increases by 1%**, it will **negatively affect the fiscal balance by 0.2028%** (*increases investment and infrastructure spending during periods of economic growth*).

3-Regression Model: $\text{Fiscal_balance} = \alpha_0 + \alpha_1 \cdot \text{EX_rate_change} + \alpha_2 \cdot \text{GDP_growth} + \alpha_3 \cdot \text{Debt} + \varepsilon$



In the **absence of changes (zero)** in the explanatory variables, the **fiscal balance is estimated at -2.96%**.

1% increase in exchange rate change reduces the fiscal balance by 0.14%.

1% increase in GDP growth reduces the fiscal balance by 0.27% (*increases investment and infrastructure spending*).

1% increase in debt reduces the fiscal balance by 0.04%.

3. Related Case Studies

Poland: **A Model of Currency Risk Containment**

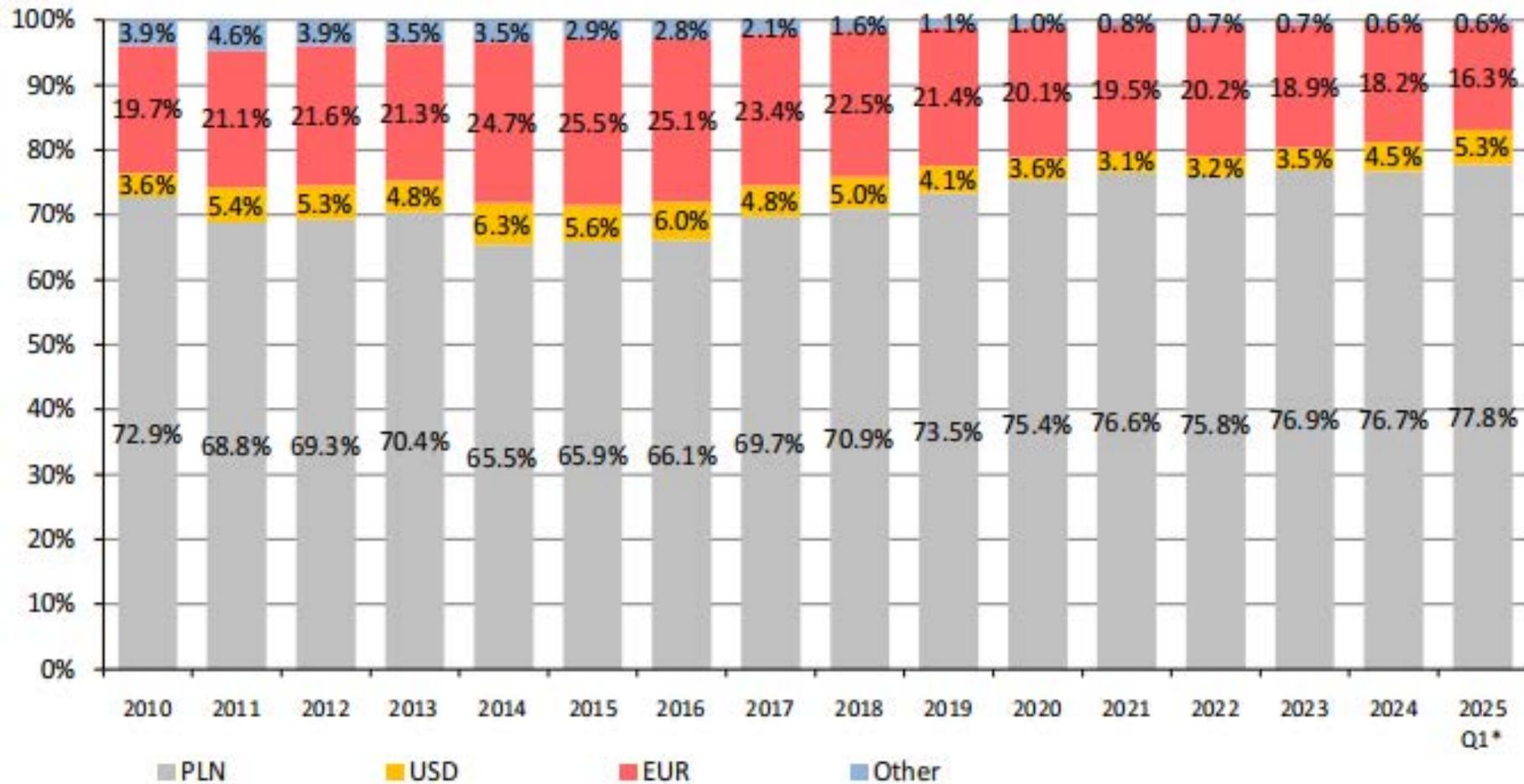
Poland has demonstrated how a strong institutional framework and prudent fiscal-monetary coordination can successfully limit currency risk exposure.



Poland's policy measures for currency risk management

- ✓ According to the Polish Constitution, public debt must **not exceed 60% of GDP**. *Polish Constitution (1997) – Article 216, Section 5*. At the end of the first quarter of 2025, public debt (443.6 bln USD) was **46.3% of GDP**.
- ✓ Based on the “Public Finance Sector Debt Management Strategy for 2024–2027,” the **share of the foreign currency** denominated debt in **State Treasury debt** is to be maintained **below 25%** (2014-35.5%, 2023-24.3%, 2025-22.2%, *reducing currency risk*).
- ✓ The active involvement of the Ministry of Finance and the National Bank of Poland in **the derivatives and hedging instruments market**, well-defined strategy for the expansion of derivative transactions (*10 bln Euro swap with The European Central Bank, cross currency swaps of USD 3.5 bln exchanged to EUR 3.2 bln for 10 years, Interest Rate Swap Transactions 64.0 bln PLN for distribute debt servicing costs, etc.*).
- ✓ High liquidity – The Polish Ministry of Finance maintained **liquid assets** totaling **PLN 133.5 bln** (*as of the end of June*) to **secure public debt servicing**.

Currency Structure of Poland's Public Debt



At the end of the first quarter of 2025 liabilities **denominated in PLN** accounted for **77.8%** of the public debt. The share of debt denominated in **EUR** amounted to **16.3%** and denominated in **USD** amounted to **5.3%**.

The overall risk of sovereign **debt stress** and **currency risk** exposure is **low**.

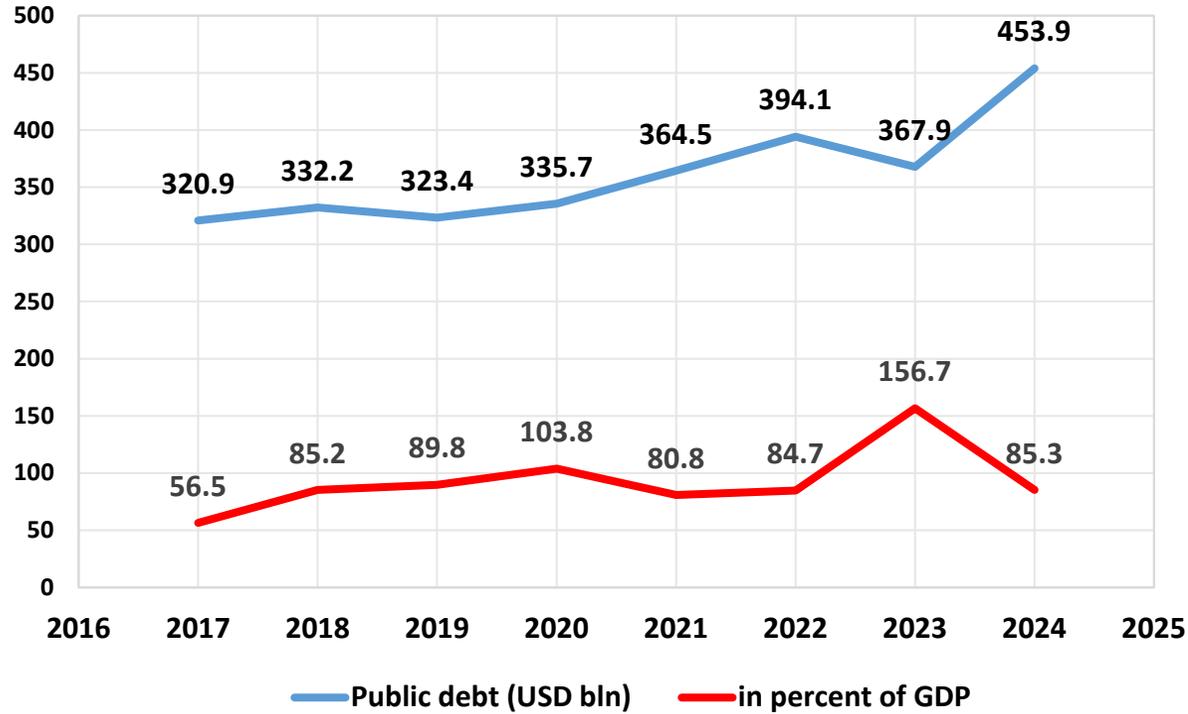
Argentina: Measures to Overcome the Crisis



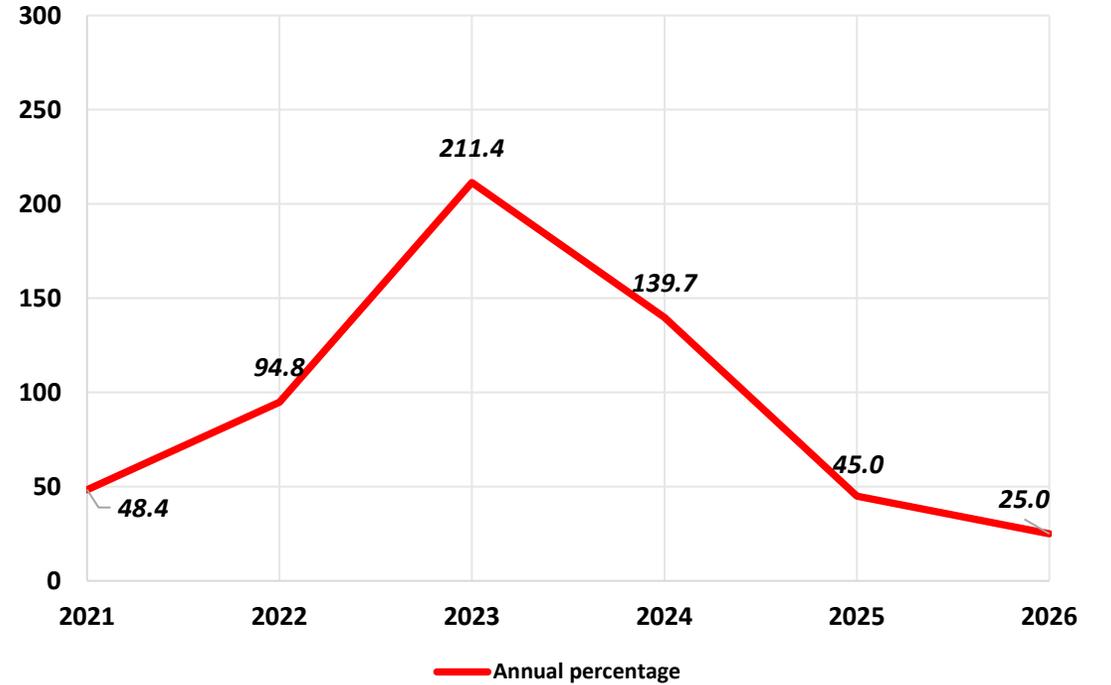
- **Argentina** is currently experiencing one of the **most severe macroeconomic crises** in its recent history characterized **by hyperinflation, unsustainable public debt** levels, persistent **currency depreciation**, and chronic **fiscal deficits**.
- Annual **inflation** has surpassed **100%** in recent years. The Argentine peso continues to lose value against major foreign currencies. Meanwhile, the **government's reliance on foreign-denominated debt** has heightened its exposure to currency mismatches, **exacerbating debt servicing pressures**.

Selected economic indicators for Argentina

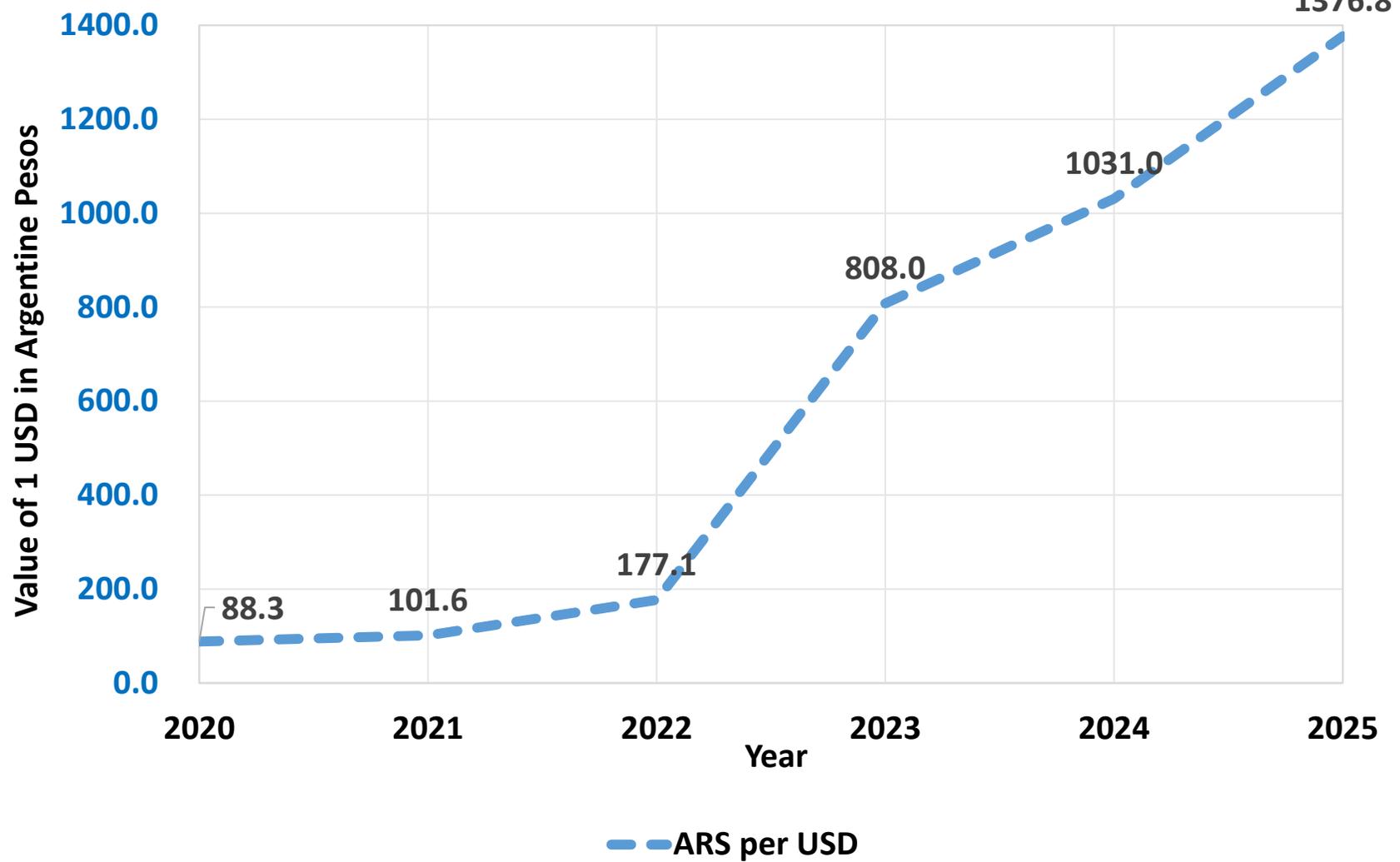
Federal Government Debt



Inflation Rate



Trend of the U.S. Dollar to Argentine Peso



The policy measures being implemented by the Argentine government to ensure public debt sustainability and manage exchange rate risk

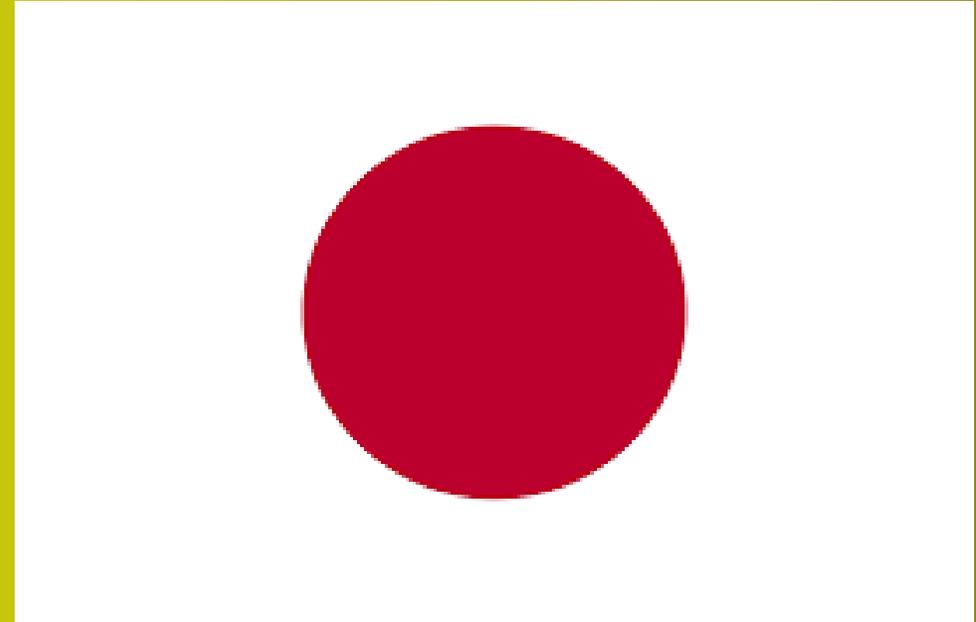
Measures		Beneficial Effects
Exchange rate flexibility	<p>In December 2023, the official exchange rate was changed to 800 pesos to the U.S. dollar from the previous 366.5. Crawling peg was restored (<i>monthly devaluation target of 2%</i>).</p>	<ol style="list-style-type: none"> 1. An artificially low exchange rate undervalues foreign-currency debt, providing misleading signals to the government and investors. 2. Aligning the rate closer to market levels (800 ARS/USD) reveals the true debt burden and grounds fiscal planning in reality. 3. This makes debt servicing projections and financing much easier to calculate.
Debt diversification and strengthening the local currency	<p>To reduce its reliance on the U.S. dollar, Argentina is pursuing a strategy of diversifying its debt portfolio by increasing the issuance of SDR and Euro, and domestic bonds denominated in pesos (in May 2025, Argentina issued peso-denominated bonds totaling USD 1 billion).</p>	<ol style="list-style-type: none"> 1. Reducing reliance on the US dollar mitigates the impact of sharp exchange rate fluctuations. 2. Issuing debt in pesos strengthens the domestic currency and enhances resilience to external shocks. 3. Diversification serves as a signal of stability to investors.

The policy measures being implemented by the Argentine government to ensure public debt sustainability and manage exchange rate risk

	Measures	Beneficial Effects
<p style="text-align: center;">Currency reserve buffer</p>	<p>According to government regulations, exporters were required to convert 95% of their foreign exchange earnings through the Central Bank at the official exchange rate. In addition, temporary restrictions were imposed on capital outflows.</p>	<ol style="list-style-type: none"> 1. The government strengthens foreign reserves (Central Bank FX purchases have exceeded USD\$17 billion). 2. The increase in foreign exchange reserves reduces the sovereign risk of public debt.
<p style="text-align: center;">Hedging operations</p>	<p>FX-denominated domestic debt was reduced through LMO (liability management operations), with 7.8 bln of USD-denominated debt swapped into peso debt.</p>	<ol style="list-style-type: none"> 1. The government's debt burden does not increase sharply even in the event of peso depreciation. 2. The state budget is protected from exchange rate risk. 3. Pressure on foreign exchange reserves is reduced.

The Case of Japan: High Debt - Low Currency Risk

Japan offers a contrasting example: despite having the highest public debt-to-GDP ratio in the world (**234.9% of GDP, at the end of March 2025**), it has **extremely low currency risk** as it is predominantly denominated in the local currency, reducing exposure to exchange rate fluctuations.



Key lessons for Uzbekistan from Japan's public debt management experience

Key Aspects	Outcomes
Debt Composition: Almost all of government debt is denominated in Japanese yen	Currency risk exposure is extremely low
The practice of using internal resources held by domestic investors (<i>Bank of Japan, banks, insurance companies, pension funds and others</i>)	No reliance on foreign capital and resources
Low inflation and strong Central Bank credibility	Domestic and foreign investor confidence
Low-interest bonds (0.25%–0.5%) with yield curve control by the Bank of Japan	Stable debt servicing costs despite high nominal debt, <i>interest payments-to-GDP ratio is about 1.5%</i>
Significant FX reserves (<i>1,272.5 billion USD in assets, as of the end of March 2025</i>)	Resilience to currency volatility and external financial shocks

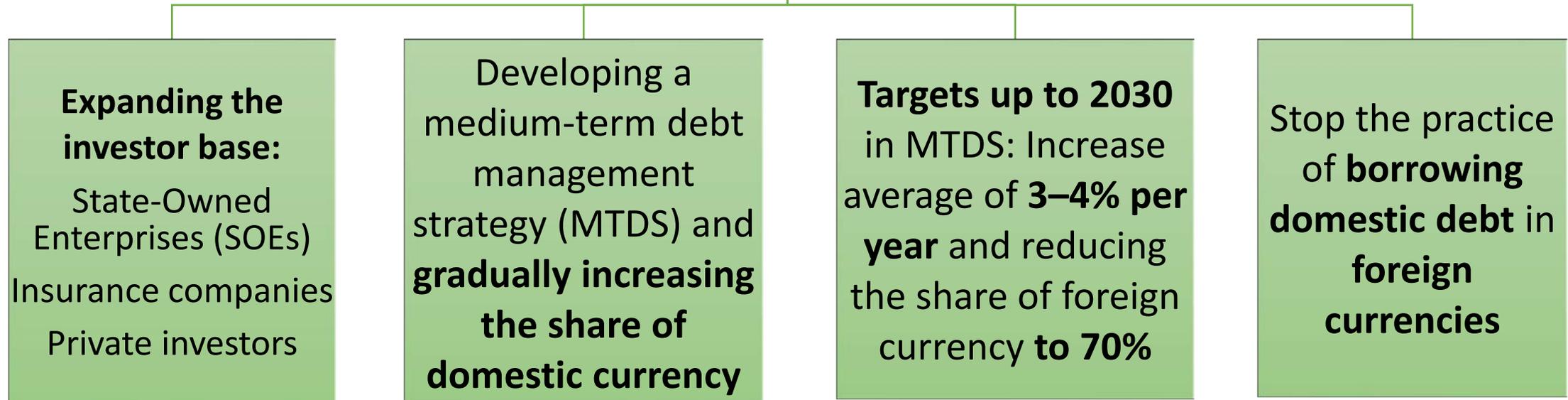
Overall Summary: Currency Risk vs Debt Sustainability

Key Directions	Argentina	Poland	Japan	Uzbekistan
Local Debt Share	 Low	 High	 Very High	 Low but growing
FX Reserve	 Weak	 Medium	 Strong	 Medium
Institutional Quality	 Weak	 Strong	 Strong	 Improving
Monetary Credibility	 Weak	 Medium	 High	 Improving
Currency Risk	 High	 Low	 Very Low	 Exists

4. Recommendations for Reducing Currency Risks on Debt Management

1. Strengthening Debt Issuance in Domestic Currency

Strengthening the domestic bond market is a significant strategy for Uzbekistan to reduce its exposure to foreign exchange risk



2. Currency Diversification

Currency diversification is an essential component of the country's broader debt management strategy to mitigate currency risks in Uzbekistan

1

- **Assessment of its external trade relations** (Russia, China, and the European Union) and considering issuing part of its debt in **euros (EUR), Chinese yuan (CNY),** or Russian ruble (RUB).

2

- Perform scenario **analysis and periodic stress testing** to evaluate how different currencies would impact the sustainability of debt under various global conditions.
- Adjustments made based on economic conditions.

3

- Enhance the use of debt instruments denominated in the IMF's **Special Drawing Rights (SDR)** to diversify the government's external debt.

3. Risk Mitigation Strategy through Hedging Instruments

Hedging—the use of **financial instruments** to reduce or eliminate the risk of currency depreciation—offers a practical and strategic solution for managing such risks. Hedging refers to the **use of financial derivatives** such as **forwards, futures, swaps, and options** to offset potential losses due to adverse currency movements.



Types of Hedging Instruments Suitable for Uzbekistan

- **Currency Forwards:** Given the relative simplicity of forward contracts, Uzbekistan could use them to **fix the exchange rate for upcoming debt repayments** in USD or EUR.
- **Cross-currency Swaps:** For long-term projects financed in foreign currency, the Ministry of Economy and Finance (MoEF) could explore **swap agreements to convert obligations into UZS** equivalents.
- **Natural Hedging:** Uzbekistan earns significant foreign exchange from exports (e.g., natural gas, gold, and cotton). Matching these revenues with foreign currency debt obligations can act as a natural hedge.



Policy Measures Specifically for Uzbekistan

Policy Measures	Details
Regulatory and Legal Framework	The first step toward implementing hedging practices is the development of a clear and supportive regulatory framework, and introducing amendments to allow sovereign use of hedging instruments.
Capacity Building	Effective use of derivative instruments requires technical expertise . It is essential to build institutional capacity within the DMO of MoF and the Central Bank.
Risk Exposure Assessment	Conduct a detailed assessment of the currency composition of the debt portfolio and simulate different depreciation scenarios to understand fiscal impacts.
Establishing Risk Limits	It is also essential to establish clearly defined risk limits , specifying the extent to which financial exposure is to be hedged.
Accounting of Hedging Activities	Clear and accurate accounting of hedging activities are crucial to show an entity's true financial position. Uzbekistan should adopt based on International Financial Reporting Standards (IFRS 9) to ensure consistent handling of hedging instruments.
Start Practical Implementation	Initially, hedge a small portion of debt due in the next 1–2 years using forward or swap contracts , possibly with technical assistance from the World Bank, the IMF or International experts.

Thank you for your attention!

