

American Journal of Economics and Business Management

Vol. 9 Issue 10 | **pp.** 265-273 | **ISSN:** 2576-5973
Available online @ https://www.globalresearchnetwork.us/index.php/ajebm

Article

Fiscal Discipline and Budget Credibility as Preconditions for Results-Based Medium-Term Budgeting: Evidence from Uzbekistan

Allakuliev Akmal Baltayevich*[1]

1. PhD, Acting Professor, Rector of Kimyo International University in Tashkent (KIUT)
*Correspondence: a.allakuliyev@kiut.uz

Abstract: Results-based budgeting presupposes that approved allocations are executed broadly as planned and that medium-term expenditure ceilings are credible. This article examines whether Uzbekistan's fiscal framework meets these preconditions. It combines budget credibility indicators for 2021–2023 from the 2024 PEFA assessment with an accounting decomposition of public debt dynamics for 2024–2027 based on the IMF World Economic Outlook (April 2026) and the 2026 Article IV consultation. Aggregate expenditure outturns remained within 95–105 per cent of approved budgets in each year, but revenue outturns reached 110.3 and 112.7 per cent in 2021 and 2022, and the functional composition of expenditure deviated from the approved budget by 15.5 per cent in 2022. The decomposition shows that nominal GDP growth of 14–22 per cent reduced the debt ratio by 3.5–5.5 percentage points of GDP a year, more than offsetting consolidated budget deficits, while a positive stock-flow residual of 0.9–2.7 points indicates financing needs that are not captured by the consolidated budget balance. As disinflation lowers nominal growth, the deficit consistent with a stable debt ratio falls from 5.5 per cent of GDP in 2024 to roughly 2.0–2.9 per cent under long-run nominal growth of 8–12 per cent. The article argues that results-based budgeting should be embedded in binding medium-term ceilings, comprehensive coverage of operations outside the consolidated budget and stricter rules for in-year reallocation.

Keywords: Fiscal discipline; budget credibility; medium-term budget framework; public debt dynamics; results-based budgeting.

Citation: Baltayevich A. A. Fiscal Discipline and Budget Credibility as Preconditions for Results-Based Medium-Term Budgeting: Evidence from Uzbekistan. American Journal of Economics and Business Management 2026, 9(10), 265-273.

Received: 10th Jul 2026
Revised: 11th Aug 2026
Accepted: 11th Sep 2026
Published: 10th Oct 2026

Copyright: © 2026 by the authors. Submitted for open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/)

1. Introduction

Public expenditure management pursues three objectives in a definite order: aggregate fiscal discipline, allocation of resources in line with strategic priorities, and efficient delivery of services [1]. Performance budgeting operates mainly at the second and third levels. Its promise is that information on results will improve the choice between programmes and the way programmes are run. That promise depends on the first level. If the aggregate envelope is unstable, if revenues are routinely underestimated and the surplus is distributed during the year, or if significant operations take place outside the budget, performance targets attached to programme appropriations lose their meaning, because the appropriations themselves are not a reliable expression of policy [2], [3].

Uzbekistan offers an instructive case. Between 2016 and 2020 general government debt increased from 7.2 to 31.9 per cent of GDP, reflecting the liberalisation of the exchange rate in 2017, external borrowing for investment and the response to the pandemic [4]. Since then the authorities have introduced a three-year budget horizon, fiscal rules on the debt

and deficit ratios and an annual ceiling on external borrowing [5], and a law adopted in 2022 caps public debt at 60 per cent of GDP [6]. The PFM Strategy for 2025–2030 places the strengthening of budget discipline and of medium-term planning first among its five priority areas, ahead of the result-oriented budgeting goal [7]. The IMF has recommended that the country upgrade medium-term budgeting, insulate spending from volatile mineral revenues and consider a ceiling on the non-mineral primary deficit [8].

This article asks whether the fiscal preconditions for results-based medium-term budgeting are in place in Uzbekistan. It addresses three questions. How credible is the annual budget as an expression of policy? What has driven the evolution of the debt ratio, and how much fiscal room does the present configuration of growth, inflation and interest rates provide? What adjustments to the fiscal framework would make programme appropriations credible enough to support performance budgeting?

The literature on budget institutions shows that procedural rules shape fiscal outcomes. Alesina and Perotti found that hierarchical procedures, which give the finance minister strong agenda-setting power and fix the aggregate envelope before allocation, are associated with lower deficits than collegial procedures [9]. Numerical fiscal rules complement procedural rules; Debrun and co-authors showed for European Union countries that stronger and broader rules are associated with higher cyclically adjusted primary balances [10]. Medium-term expenditure frameworks extend these mechanisms over several years. A World Bank review of experience in more than a hundred countries found that frameworks improve fiscal discipline when ceilings are binding and fully reconciled from one year to the next, but that their allocative benefits appear only at more advanced stages, when ceilings are set by programme and linked to performance information.

The same review distinguishes three stages of medium-term frameworks: a medium-term fiscal framework that sets aggregate revenue and expenditure targets, a medium-term budget framework that distributes the aggregate among ministries, and a medium-term performance framework that links ministry or programme allocations to outputs and outcomes. The stages are cumulative. A performance framework cannot be credible unless the budget framework beneath it is binding, and the budget framework in turn depends on a realistic fiscal framework. This sequence provides the analytical structure of the present article: it examines whether the first two stages are sufficiently developed in Uzbekistan to support the third.

A second strand analyses debt sustainability. The arithmetic of debt dynamics shows that the change in the debt ratio depends on the primary balance, the differential between the effective interest rate and nominal GDP growth, and stock-flow adjustments that capture valuation effects and operations recorded below the line [11]. Blanchard emphasised that when the interest rate is below the growth rate, debt ratios can be stable even with primary deficits, although this condition may not persist [12]. Ghosh and co-authors demonstrated that the response of the primary balance to rising debt weakens at high debt levels, so that fiscal space is finite even for countries with strong policy records [13].

A third strand concerns budget credibility. The PEFA framework measures it through the deviation of aggregate expenditure, expenditure composition and revenue outturns from the originally approved budget [14]. Robinson and Last stress that performance-based budgeting requires programme appropriations that are stable enough for managers to plan delivery and for the finance ministry to hold them accountable. The link between aggregate discipline and the feasibility of performance budgeting is widely acknowledged but rarely quantified for transition economies. This article combines credibility indicators with debt-dynamics arithmetic to provide such an assessment for Uzbekistan.

2. Materials and methods

Three sources are used. Annual general government gross debt for 1997–2031, including IMF projections from 2026, is taken from the April 2026 World Economic Outlook database. Consolidated budget revenue, expenditure and balance, policy lending, real GDP growth, the GDP deflator and nominal GDP for 2023–2027 are taken from the selected indicators of the 2026 Article IV consultation, which are based on the revised national accounts [8]. Budget credibility indicators for 2021–2023 and the corresponding PEFA scores are taken from the 2024 PEFA assessment, which applied the same 2016 methodology as the previous assessment and therefore permits comparison over time [15].

Changes in the debt ratio are decomposed with the standard accounting identity

$$\Delta d_t = def_t - [g_t / (1 + g_t)] \cdot d_{t-1} + sfa_t , \qquad (1)$$

where d_t is the debt-to-GDP ratio, def_t the consolidated budget deficit in per cent of GDP, g_t the growth rate of nominal GDP and sfa_t the stock-flow residual, obtained as the difference between the observed change in the debt ratio and the first two terms. The residual captures exchange-rate valuation effects, on-lending and other financing operations not reflected in the consolidated balance, and differences in coverage between the debt and balance series. Setting Δd_t and sfa_t to zero yields the deficit that stabilises the debt ratio:

$$def_t^* = [g_t / (1 + g_t)] \cdot d_{t-1} . \quad (2)$$

The corresponding debt-stabilising primary balance is

$$pb^* = [(i - g) / (1 + g)] \cdot d_{t-1} , \qquad (3)$$

where i is the effective nominal interest rate on public debt. For 2023 it was approximated as the ratio of general government interest expenditure (UZS 8,587 billion [15]) to the debt stock at the end of 2022, estimated from the debt ratio and nominal GDP [4], [8], which gives $i \approx 2.8$ per cent. Because the balance series refers to the consolidated budget and the debt series to general government, and because 2026–2027 values are projections, the decomposition is approximate and its residual is interpreted only in terms of direction and order of magnitude.

3. Results

The debt trajectory

Figure 1 shows the long-run path of general government debt. After falling from 18.9 per cent of GDP in 2005 to a low of 5.4 per cent in 2014, the ratio rose to 17.3 per cent in 2017, when the exchange rate was unified and liberalised, and to 31.9 per cent in 2020. It has since fluctuated around 30 per cent and declined to 28.6 per cent in 2025; the IMF projects a gradual decline to 26.8 per cent by 2029–2031 [4].

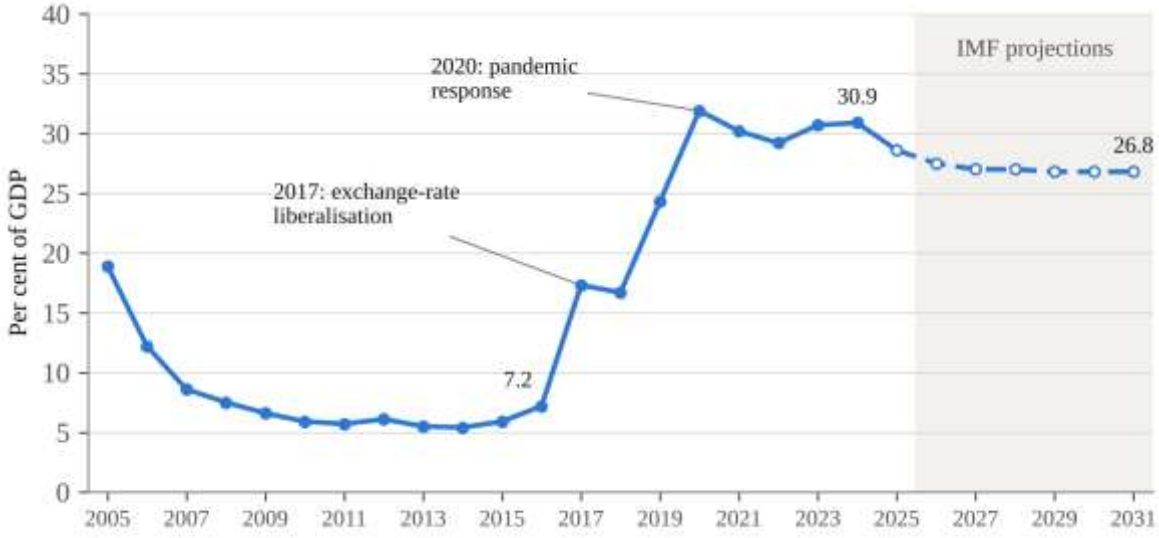


Figure 1. General government gross debt of Uzbekistan, 2005–2031, per cent of GDP

Note: values for 2026–2031 are IMF projections. Source: [4].

The level of debt is moderate by international standards, but its composition matters. Deficits in 2021–2023 were financed mainly externally, by 2.5–4.5 per cent of GDP a year against 1.1–2.6 per cent from domestic sources [15], and the external debt of the economy as a whole reached 54.2 per cent of GDP in 2025 [8]. The jump in 2017 illustrates the sensitivity of the debt ratio to the exchange rate, a sensitivity that a medium-term framework must take into account.

Fiscal aggregates

Table 1 summarises the fiscal aggregates. The consolidated budget deficit narrowed from 4.6 per cent of GDP in 2023 to 3.0 per cent in 2024 and 2.1 per cent in 2025, and the IMF projects 1.5 per cent in 2026 and 2.0 per cent in 2027. Revenue rose from 25.2 per cent of GDP in 2024 to 27.2 per cent in 2025, in a period of high gold prices in which the IMF cautioned against procyclical spending [16], while expenditure was held below 30 per cent of GDP. Policy lending, which is recorded outside the consolidated balance, amounted to 0.8, 0.9 and 0.5 per cent of GDP in 2023–2025.

Table 1. Selected fiscal and macroeconomic indicators of Uzbekistan, 2023–2027

Indicator	2023	2024	2025	2026 (proj.)	2027 (proj.)
Real GDP growth, %	6.3	6.7	7.7	6.8	6.0
GDP deflator, % change	13.9	14.1	11.9	9.0	8.0
Nominal GDP, trillion sum	1,262	1,535	1,850	2,154	2,465
Nominal GDP growth, % (calculated)	…	21.6	20.5	16.4	14.4
Consumer price inflation, end of period, %	8.8	9.8	7.3	5.0	…
Consolidated budget revenue, % of GDP	25.6	25.2	27.2	28.2	27.7
Consolidated budget expenditure, % of GDP	30.2	28.1	29.3	29.7	…
Consolidated budget balance, % of GDP	−4.6	−3.0	−2.1	−1.5	−2.0
Policy lending, % of GDP	0.8	0.9	0.5	…	…
General government gross debt, % of GDP	30.7	30.9	28.6	27.5	27.0

Note: "…" denotes values not reported in the source. Source: [8]; general government debt from [4]; nominal GDP growth calculated by the author.

Two features of the table are important for the analysis that follows. Nominal GDP growth was exceptionally high, 21.6 per cent in 2024 and 20.5 per cent in 2025, because real growth of 6.7–7.7 per cent coincided with GDP deflator inflation of 11.9–14.1 per cent. Both components are projected to moderate, and nominal growth falls to 14.4 per cent in 2027. In addition, the 2025 Article IV consultation noted that borrowing and spending of the broader public sector had been higher than anticipated [16], a point that reappears in the decomposition below.

Budget credibility

Table 2 reports the budget credibility indicators. Aggregate expenditure outturns were 96.7, 104.7 and 99.4 per cent of the approved budget in 2021–2023, which earns the highest PEFA score, as in the previous assessment. Revenue outturns were less accurate: 110.3 per cent in 2021 and 112.7 per cent in 2022, before falling to 100.9 per cent in 2023, so the revenue score declined from B+ to B. The composition of expenditure was stable in 2021 and 2023, but in 2022 the functional composition deviated from the approved budget by 15.5 per cent and the economic composition by 8.5 per cent, while revenue composition deviated by 17.9 per cent.

Table 2. Budget credibility indicators of Uzbekistan, 2021–2023, and PEFA scores

Indicator (PEFA dimension)	2021	2022	2023	Score 2018	Score 2024
Aggregate expenditure outturn, % of approved budget (PI-1)	96.7	104.7	99.4	A	A
Variance of expenditure composition by function, % (PI-2.1)	1.7	15.5	3.4	B	A
Variance of expenditure composition by economic type, % (PI-2.2)	3.9	8.5	0.8	B	A
Expenditure charged to contingency reserves, % of budget (PI-2.3)	0.4	0.3	0.3	A	A
Aggregate revenue outturn, % of approved budget (PI-3.1)	110.3	112.7	100.9	A	B
Variance of revenue composition, % (PI-3.2)	7.4	17.9	7.7	B	B

Note: indicators cover budgetary central government; the 2018 assessment used data for 2015–2017. Overall scores changed from A to A for PI-1, from B+ to A for PI-2 and from B+ to B for PI-3. Source: [15].

These figures describe a budget that is disciplined in aggregate but flexible in composition. In 2022 revenue overperformance coincided with an expenditure outturn of 104.7 per cent and a functional variance of 15.5 per cent, which shows that additional resources were distributed across sectors during the year rather than through the approved allocation. The PEFA assessment adds two observations relevant to programme budgeting. "Other expenditure" and three groups of state targeted funds that cannot be allocated to a specific function accounted for about 52 per cent of allocated expenditure in 2023, which limits the usefulness of the functional classification for policy analysis, and the medium-term perspective in expenditure budgeting received the lowest score, D, with medium-term expenditure estimates, expenditure ceilings and the consistency of budgets with previous-year estimates all rated D [15].

Decomposition of debt dynamics

Figure 2 decomposes the annual change in the debt ratio according to Equation (1). In 2024 the consolidated deficit of 3.0 per cent of GDP was more than offset by the effect of nominal growth, which reduced the ratio by 5.5 percentage points. The debt ratio

nevertheless rose by 0.2 points, because the stock-flow residual added 2.7 points. In 2025 nominal growth reduced the ratio by 5.3 points against a deficit of 2.1 per cent, the residual was 0.9 points and the ratio fell by 2.3 points. For 2026 and 2027 the IMF projections imply growth effects of 4.0 and 3.5 points and residuals of 1.4 and 1.0 points.

The cost of debt is also rising. General government interest expenditure increased from UZS 2,269 billion in 2021 to UZS 3,892 billion in 2022 and UZS 8,587 billion in 2023, from 0.3 to 0.8 per cent of GDP in the national accounts base used by the PEFA assessment [15]. Even at this level interest payments are modest, but the more than threefold increase in two years shows how quickly the effective interest rate can move as the debt stock grows and its composition changes.

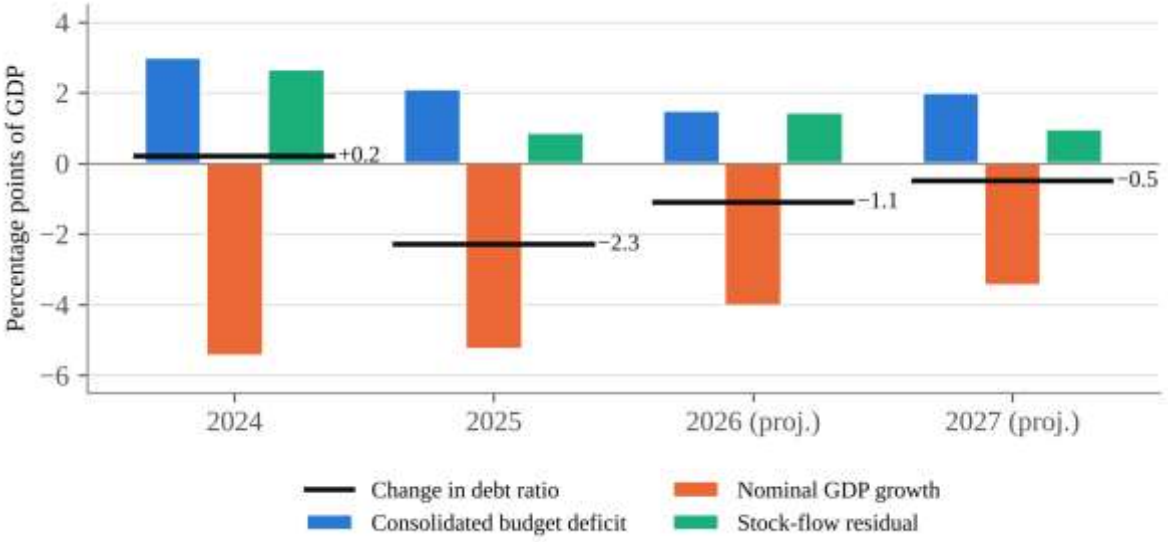


Figure 2. Decomposition of the change in the general government debt ratio, 2024–2027

Note: positive values raise the debt ratio; values for 2026–2027 are based on IMF projections. Source: calculated by the author with Equation (1) on the basis of [4] and [8].

Two results stand out. The first is that the stock-flow residual is positive in every year, between 0.9 and 2.7 percentage points of GDP. In 2024 it coincided with currency depreciation from 12,339 to 12,920 sums per US dollar and with policy lending of 0.9 per cent of GDP [8]; in 2025, when the sum appreciated, the residual remained positive. This pattern indicates that part of the public sector's financing need arises outside the consolidated budget balance, consistent with the IMF's observation on the broader public sector.

The second result concerns fiscal room. Equation (2) gives debt-stabilising deficits of 5.5 per cent of GDP in 2024, 5.3 per cent in 2025, 4.0 per cent in 2026 and 3.5 per cent in 2027. With the effective interest rate of about 2.8 per cent and nominal growth of 14.4 per cent, Equation (3) yields a debt-stabilising primary balance of −2.8 per cent of GDP, that is, a primary deficit of that size would keep the debt ratio constant. The calculation is sensitive to the interest rate: at effective rates of 6 and 9 per cent, which would correspond to a shift from concessional towards market financing, the stabilising primary deficit falls to 2.0 and 1.3 per cent of GDP. Once disinflation is complete and nominal growth settles at 8–12 per cent, the stabilising overall deficit at a debt ratio of 27 per cent declines to between 2.0 and 2.9 per cent of GDP.

Discussion

The results support three conclusions about the preconditions for results-based budgeting in Uzbekistan. First, aggregate fiscal discipline has been maintained. Expenditure outturns are close to approved totals, deficits have narrowed, and the debt

ratio is projected to decline. In this respect the country meets the first precondition identified in the literature [1], [3].

Second, the favourable debt dynamics owe much to a temporary configuration. Between 2024 and 2027 nominal growth absorbs 3.5–5.5 points of GDP of debt pressure a year, mainly because of inflation. As inflation falls towards the central bank's target and as the share of concessional debt declines, the gap between the interest rate and the growth rate will narrow, in line with the caution expressed by Blanchard [12]. The present room for deficits of 4–5 per cent of GDP will shrink to about half of that. The medium-term framework must therefore be calibrated to the post-disinflation environment rather than to current nominal growth, which argues for an operational anchor, such as the ceiling on the non-mineral primary deficit recommended by the IMF [8], alongside the 60 per cent debt cap.

Third, the credibility of the composition of the budget is weaker than that of its total. Revenue overperformance, large functional reallocations in 2022 and the positive stock-flow residuals indicate that a significant share of resource allocation takes place outside the approved budget, either during the year or below the line. This is the main obstacle to performance budgeting. Programme managers cannot be held accountable for targets attached to appropriations that change substantially during the year, and the finance ministry cannot use performance information to reallocate resources if part of the reallocation occurs through supplementary decisions or off-budget financing. The finding that Uzbekistan did not meet the minimum requirements of the 2026 US fiscal transparency assessment, which pointed to incomplete disclosure of debt obligations and of transfers to state-owned enterprises [17], underlines the same problem of coverage.

The size of this adjustment can be expressed in budgetary terms. The difference between the debt-stabilising deficit of 2024 (5.5 per cent of GDP) and the long-run value at 10 per cent nominal growth (about 2.5 per cent) is roughly 3 percentage points of GDP. At the nominal GDP projected for 2027, this corresponds to about UZS 74 trillion, or about one tenth of consolidated expenditure if expenditure remains near the 29.7 per cent of GDP projected for 2026. Fiscal room of this order will not be available from nominal growth in the future, and new priorities will increasingly have to be financed by reallocation within a stable envelope. This is precisely the situation in which performance information is most valuable, because it gives the finance ministry and the legislature an evidence base for deciding which programmes to expand and which to scale back. The fiscal outlook therefore strengthens rather than weakens the case for results-based budgeting, provided that it is introduced inside a credible medium-term framework.

The analysis also identifies a link between fiscal discipline and the quality of programme costing. The PEFA assessment found that recurrent and capital expenditure are subject to dual budgeting and that the operation and maintenance costs of investment projects are assessed annually rather than over the project life cycle [15]. In a programme budget, the full cost of a programme includes both the investment and its future running costs. If running costs are not projected over the medium term, new investments generate claims on future budgets that are not visible when ceilings are set, and the ceilings themselves become unreliable. The integration of capital and recurrent budgeting is therefore as much a condition of fiscal discipline as of performance budgeting.

Several adjustments follow. Medium-term ceilings should be made binding at the level of ministries and, as programme budgeting expands, of programmes, with transparent reconciliation of changes between successive budgets. The legal basis for this exists: after the approval of the fiscal strategy, which takes place by mid-June, the Ministry of Economy and Finance must communicate upper limits to lower-level budgets within five working days [15], and the same procedure could be applied to ministries and programmes of the republican budget for all three years of the planning horizon. Revenue windfalls, especially from gold and other minerals, should be governed by an explicit rule.

A mechanism already exists: the revenues of the Uzbekistan Fund for Reconstruction and Development include the excess of world prices for strategic resources over a cut-off price [15]; extending this principle to all mineral windfalls, and publishing the cut-off prices in the fiscal strategy, would prevent windfalls from being converted into unplanned in-year spending. Rules for in-year reallocation and supplementary budgets should be tightened so that changes above a defined threshold require parliamentary approval accompanied by revised performance targets. Finally, the fiscal strategy and the budget message should report an augmented balance that includes policy lending and the borrowing of state-owned enterprises, so that the envelope within which programmes compete reflects the full fiscal position.

The analysis has limitations. The decomposition combines series with different coverage, the residual cannot be split into its components without detailed financing data, and the projections for 2026–2027 are conditional on the IMF baseline. The effective interest rate is an approximation for a single year. Future research could extend the analysis with a formal fiscal reaction function once a consistent general government primary balance series becomes available for a longer period.

4. Conclusion

Results-based medium-term budgeting can only be as credible as the fiscal framework in which it operates. Uzbekistan has achieved aggregate discipline: expenditure outturns are close to approved totals and the debt ratio is projected to fall below 27 per cent of GDP. The decomposition presented here shows, however, that this outcome depends heavily on high nominal growth and is accompanied by persistent financing needs outside the consolidated balance, while the composition of the budget changes markedly during the year. As disinflation proceeds, the deficit compatible with a stable debt ratio will fall to about 2–3 per cent of GDP.

For performance budgeting, the implication is that the reform of programme structures and indicators must be matched by reform of the envelope: binding medium-term ceilings, a rule for windfall revenues, stricter control of in-year reallocations and comprehensive coverage of quasi-fiscal operations. Without these elements, programme appropriations would remain provisional, and performance targets attached to them would carry little weight.

REFERENCES

[1] A. Schick, *A Contemporary Approach to Public Expenditure Management*. Washington, DC, USA: World Bank Institute, 1998.

[2] M. Robinson and D. Last, "A basic model of performance-based budgeting," International Monetary Fund, Washington, DC, USA, IMF Technical Notes and Manuals 09/01, 2009.

[3] World Bank, *Beyond the Annual Budget: Global Experience with Medium-Term Expenditure Frameworks*. Washington, DC, USA: World Bank, 2013.

[4] International Monetary Fund, *World Economic Outlook Database*, April 2026. Washington, DC, USA: IMF, 2026.

[5] Ministry of Economy and Finance of the Republic of Uzbekistan, "PFM reforms in the Republic of Uzbekistan," presentation at a PEMPAL Budget Community of Practice event, 2025.

[6] "Uzbekistan's foreign debt at $23.2 billion, upper limit for public debt set to not exceed 60% of GDP," *Kun.uz*, Aug. 4, 2022.

[7] Cabinet of Ministers of the Republic of Uzbekistan, "On approval of the Strategy for improving the public finance management system for 2025–2030," Resolution No. 210, Apr. 8, 2025.

[8] International Monetary Fund, "IMF Executive Board concludes 2026 Article IV consultation with the Republic of Uzbekistan," Press Release No. 26/214, Washington, DC, USA, Jun. 18, 2026.

[9] A. Alesina and R. Perotti, "Budget deficits and budget institutions," in *Fiscal Institutions and Fiscal Performance*, J. M. Poterba and J. von Hagen, Eds. Chicago, IL, USA: University of Chicago Press, 1999, pp. 13–36.

[10] X. Debrun, L. Moulin, A. Turrini, J. Ayuso-i-Casals, and M. S. Kumar, "Tied to the mast? National fiscal rules in the European Union," *Economic Policy*, vol. 23, no. 54, pp. 298–362, 2008.

[11] J. Escolano, "A practical guide to public debt dynamics, fiscal sustainability, and cyclical adjustment of budgetary aggregates," International Monetary Fund, Washington, DC, USA, IMF Technical Notes and Manuals 10/02, 2010.

[12] O. Blanchard, "Public debt and low interest rates," *American Economic Review*, vol. 109, no. 4, pp. 1197–1229, 2019.

[13] A. R. Ghosh, J. I. Kim, E. G. Mendoza, J. D. Ostry, and M. S. Qureshi, "Fiscal fatigue, fiscal space and debt sustainability in advanced economies," *The Economic Journal*, vol. 123, no. 566, pp. F4–F30, 2013.

[14] PEFA Secretariat, *Framework for Assessing Public Financial Management*. Washington, DC, USA: PEFA Secretariat, 2016.

[15] World Bank, *Uzbekistan: Public Expenditure and Financial Accountability (PEFA) Performance Assessment Report*. Washington, DC, USA: World Bank, Oct. 2024.

[16] International Monetary Fund, "IMF Executive Board concludes 2025 Article IV consultation with the Republic of Uzbekistan," Press Release No. 25/206, Washington, DC, USA, Jun. 18, 2025.

[17] "Uzbekistan fails US fiscal transparency test as debt and procurement disclosures fall short," *Kun.uz*, Aug. 20, 2026.