ECONOMIC SECURITY DASHBOARD FOR UZBEKISTAN

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ABSTRACT

Economic security is essential for sustainable growth, macroeconomic stability, and resilience to domestic and external shocks. Uzbekistan's economic transformation and deeper integration into international markets create a need for systematic monitoring of vulnerabilities across fiscal, monetary, financial, external, and structural dimensions. This article proposes an economic-security dashboard that combines measurable indicators, preliminary risk thresholds, and policy signals in a unified early-warning framework. The conceptual methodology includes indicator selection, threshold classification, composite risk scoring, and historical validation. The dashboard covers inflation, real GDP growth, public debt, fiscal balance, the current account, international reserves, credit growth, non-performing loans, export concentration, unemployment, and critical-import dependence. Green, yellow, and red zones are proposed as initial screening rules rather than official national standards. Recent IMF assessments show that Uzbekistan recorded real GDP growth of 7.7% in 2025, year-end inflation of 7.3%, a current-account deficit of 3.9% of GDP, and a consolidated fiscal deficit of 2.1% of GDP. These figures illustrate how the dashboard can distinguish between improving macroeconomic performance and remaining vulnerabilities. The article concludes that operational use requires country-specific calibration, reliable data, institutional coordination, and back-testing.

Keywords: economic security; Uzbekistan; early-warning system; macroeconomic stability; risk indicators; fiscal sustainability; policy dashboard.

INTRODUCTION

Economic security describes an economy's capacity to maintain stable functioning, protect critical economic interests, absorb shocks, and support long-term development. It extends beyond conventional national-security concerns to include price stability, fiscal sustainability, financial resilience, external-sector viability, employment, and access to essential resources.

Economic vulnerabilities are interconnected. Rapid credit growth can weaken lending standards and increase future non-performing loans. Persistent fiscal deficits may raise borrowing and refinancing needs, while reliance on a narrow range of export commodities can expose public revenues and foreign-exchange receipts to international price changes. For these reasons, monitoring isolated indicators may not provide a complete picture of national economic resilience.

Uzbekistan is a relevant case for an integrated monitoring framework. The IMF reported that real GDP grew by 7.7% in 2025, year-end consumer price inflation was 7.3%, the current-account deficit narrowed to 3.9% of GDP, and the consolidated fiscal deficit declined to 2.1% of GDP. The IMF's 2026 assessment also highlighted strong domestic demand, global uncertainty, and the need to preserve macro-

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financial stability (IMF, 2026). These developments make it important to monitor both current performance and the accumulation of future risks.

The research problem addressed here is how to organize key economic-security indicators into a unified framework that identifies emerging risks, classifies their severity, and links warnings to proportionate policy responses.

Research objective and questions

The objective is to design a conceptual economic-security dashboard for Uzbekistan by selecting core indicators, proposing preliminary thresholds, and linking risk signals to policy actions. The article addresses three questions: (1) Which indicators best represent Uzbekistan's economic-security vulnerabilities? (2) How can thresholds classify risk in a transparent manner? (3) How can indicator movements inform coordinated policy responses?

The contribution is a practical monitoring design that connects indicators, risk zones, data frequency, and policy signals. It is a conceptual proposal with an illustrative application, not a statistically validated forecasting model.

METHODOLOGY

Research design and data sources

The study adopts a conceptual, indicator-based design. It draws on macroeconomic surveillance practices and proposes a structured sequence: (1) select indicators; (2) define measurement rules and thresholds; (3) assess the level, direction, persistence, and interaction of risks; and (4) translate warnings into possible policy responses.

An empirical implementation should rely on the Statistics Agency of Uzbekistan, the Central Bank of Uzbekistan, the Ministry of Economy and Finance, the IMF, the World Bank, and international trade databases. Monthly indicators should be updated monthly, quarterly indicators quarterly, and structural indicators annually or when new observations become available. The database should retain historical observations and identify the publication date, reference period, unit, and source for every value.

Table 1. Proposed dashboard dimensions, indicators, and data responsibilities

Dimension	Core indicators	Suggested frequency	Proposed data lead
Macroeconomic stability	CPI inflation; real GDP growth	Monthly / quarterly	Statistics Agency; Central Bank
Fiscal sustainability	Public debt; fiscal balance; interest payments/revenue; guarantees	Quarterly	Ministry of Economy and Finance
External resilience	Current account; reserves; external debt; export concentration	Monthly / quarterly	Central Bank; Ministry of Economy and Finance
Financial stability	Credit growth; NPL ratio; capital adequacy; FX exposure; liquidity	Monthly / quarterly	Central Bank
Structural and social resilience	Unemployment; poverty; productivity; energy and critical-	Quarterly / annual	Statistics Agency and relevant

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	import dependence		ministries

Indicator selection

Indicators are selected according to relevance, measurability, timeliness, comparability, and policy usefulness. The framework aims to remain small enough for regular use while covering the principal sources of vulnerability. Supplementary indicators—such as short-term external debt, the maturity structure of public debt, contingent liabilities, and bank capital adequacy—should be included when consistent data are available.

Threshold classification

Each indicator is assigned a green, yellow, or red zone. Green indicates conditions broadly consistent with the relevant objective or benchmark; yellow signals a developing or persistent vulnerability; and red indicates a serious breach or rapid deterioration requiring urgent assessment. The thresholds below are illustrative screening rules proposed by the author. They are not official Uzbek limits and should be calibrated against national policy objectives, historical data, prudential requirements, and relevant international standards.

Composite Economic Security Risk Index

For summary purposes, each indicator can be transformed into a normalized risk score from 0 to 100, with higher scores representing greater vulnerability. Scores can be aggregated first within each dimension and then across dimensions:

$$\mathbf{ESRI_t = \Sigma\ w_j\ D_{j,t}}$$

Here, $ESRI_t$ is the Economic Security Risk Index at time t, $D_{j,t}$ is the risk score for dimension j, and w_j is the dimension weight, with all weights summing to one. Equal weights may be used for an initial prototype to avoid unsupported assumptions. Alternative weights should be tested through expert consultation, historical crisis analysis, and sensitivity checks. Individual critical alerts must remain visible because an aggregate score can conceal a serious sector-specific risk.

Validation strategy

Before operational use, the framework should be back-tested against historical episodes of inflationary pressure, external imbalance, fiscal deterioration, and financial stress. Sensitivity analysis should examine whether modest changes in thresholds or weights materially change classifications. Expert review should assess whether the selected indicators, update frequency, and policy signals are useful to the responsible institutions. Until these tests are completed, the framework should be described as a proposed monitoring design rather than a validated early-warning model.

RESULTS

Recent macroeconomic context

The IMF's 2026 Article IV assessment provides a recent baseline for demonstrating how the dashboard could be used. Table 3 summarizes selected indicators for 2023–2027. Values for 2026 and 2027 are projections and should not be treated as observed outcomes.

Table 2. Selected economic indicators for Uzbekistan, 2023–2027

Indicator	2023	2024	2025	2026 proj.	2027 proj.
Real GDP growth (%)	6.3	6.7	7.7	6.8	6.0
CPI inflation, year-end (%)	8.8	9.8	7.3	6.8	5.0

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Current-account balance (% GDP)	−7.3	−4.7	−3.9	−3.2	−3.6
Consolidated budget balance (% GDP)	−4.6	−3.0	−2.1	−1.5	−2.0
Public debt (% GDP)	30.7	30.9	28.6	28.2	27.2
Credit growth (%)	23.2	14.0	15.3	16.7	15.7
External debt (% GDP)	50.8	53.1	54.2	51.8	49.5

Source: IMF, 2026 Article IV Consultation, selected economic indicators. Projections are subject to revision.

The data show strong real GDP growth in 2025 and a narrowing fiscal deficit and current-account deficit compared with 2023. Inflation also declined from 9.8% in 2024 to 7.3% in 2025, although it remained above the Central Bank's 5% medium-term target. External debt increased to 54.2% of GDP in 2025 before being projected to decline. These indicators illustrate why a dashboard should assess several dimensions rather than infer overall security from GDP growth alone (IMF, 2026).

Illustrative risk classification

Table 3. Applying proposed thresholds to selected 2025 observations

Indicator	2025 value	Proposed rule	Illustrative signal	Interpretation
Real GDP growth	7.7%	No single cutoff	Context indicator	Strong growth; monitor demand and capacity pressures
CPI inflation	7.3%	Yellow: 5% to <10%	Yellow	Disinflation has progressed, but inflation remains above target
Fiscal deficit	2.1% GDP	Green: ≤3%	Green	Within the proposed screening range
Current-account deficit	3.9% GDP	Yellow: 3–5%	Yellow	Continue monitoring external financing and export receipts
Public debt	28.6% GDP	Green: <40%	Green	Below the proposed cutoff; assess guarantees and debt-service costs
External debt	54.2% GDP	No proposed cutoff	Further assessment	Assess borrower composition, maturity and currency exposure

Source: Author's application of proposed thresholds to IMF 2025 observations.

These classifications are illustrative and do not represent an official government assessment.

The example classifies inflation and the current-account deficit in the yellow zone, while the fiscal deficit and public-debt ratio fall within the proposed green zone. This does not imply that the economy is

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free of risk. The interpretation depends on the quality of external financing, the composition of public debt, inflation expectations, and the direction of high-frequency indicators.

Dashboard presentation and composite classification

A practical dashboard should show the overall ESRI, dimension-level scores, individual alerts, recent trends, source dates, and responsible institutions. It should include an executive view for decision-makers, an analytical view for specialists, and an institutional view that records data ownership and follow-up actions.

Table 4. Illustrative composite-index bands

ESRI score	Classification	Suggested use
0–24	Low risk	Routine monitoring
25–49	Moderate risk	Review emerging vulnerabilities
50–74	Elevated risk	Coordinate diagnostic assessment and contingency preparation
75–100	High risk	Urgent interagency review and appropriate corrective action

The ESRI bands are illustrative visualization categories, not calibrated probabilities of crisis. A persistence rule can reduce false alarms—for example, confirming a yellow alert when a variable remains in its warning zone for two consecutive reporting periods. Severe breaches or rapidly deteriorating high-frequency indicators may warrant immediate review.

Discussion

Policy implications

An integrated dashboard could improve early identification of vulnerabilities by revealing combinations of risks that may be overlooked when indicators are reviewed separately. It could also support coordination between the Central Bank, the Ministry of Economy and Finance, statistical institutions, and other relevant agencies. Publishing definitions, thresholds, sources, and update dates would improve transparency and make the framework easier to evaluate.

For Uzbekistan, the dashboard should account for commodity-price exposure, remittance flows, the financial position of state-owned enterprises, public-private partnership liabilities, directed lending, and energy and climate-related risks. High gold revenues, for example, can improve fiscal and external balances but may be volatile; the dashboard should distinguish temporary revenue gains from durable fiscal capacity. Similarly, credit growth should be evaluated together with loan quality, capital adequacy, liquidity, and foreign-currency exposure.

Limitations

The proposed thresholds have not yet been statistically validated against historical risk episodes in Uzbekistan. Data are published at different frequencies and may be revised. A composite index can conceal a severe risk in one dimension, and indicator movements can have more than one economic interpretation. Operational use also requires clear institutional responsibility for data verification, risk

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assessment, and follow-up. These limitations mean that the dashboard should complement—not replace—macroeconomic analysis, supervisory judgment, and established policy frameworks.

CONCLUSION

This article proposes an economic-security dashboard for Uzbekistan that integrates macroeconomic, fiscal, external, financial, and structural indicators into a unified monitoring framework. Its central contribution is to connect measurable indicators with preliminary risk thresholds, warning classifications, and indicative policy responses. The illustrative application to 2025 data shows how improving growth and fiscal outcomes can coexist with continuing inflation and external-sector risks.

The framework is a starting point rather than a validated forecasting model. Before adoption, its thresholds and composite index should be tested against historical data, subjected to sensitivity analysis, and reviewed by relevant institutions. A useful dashboard requires reliable data, transparent methodology, clearly assigned responsibilities, and regular evaluation. By combining these elements, Uzbekistan could strengthen the early identification of vulnerabilities and support more coordinated, forward-looking economic policymaking.

REFERENCES

1. International Monetary Fund (IMF). (2026, April 13). Uzbekistan: Staff Concluding Statement of the 2026 Article IV Mission. https://www.imf.org/en/news/articles/2026/04/13/mcs041326-uzbekistan
2. International Monetary Fund (IMF). (2026, June 18). IMF Executive Board Concludes 2026 Article IV Consultation with the Republic of Uzbekistan. https://www.imf.org/en/news/articles/2026/06/18/pr-26214-uzbekistan-imf-executive-board-concludes-2026-article-iv-consultation
3. International Monetary Fund (IMF). (2026). Republic of Uzbekistan: 2026 Article IV Consultation—Press Release and Staff Report. IMF Country Report No. 2026/152. https://www.imf.org/en/publications/cr/issues/2026/06/23/republic-of-uzbekistan-2026-article-iv-consultation-press-release-and-staff-report-577186
4. Central Bank of the Republic of Uzbekistan. Statistics. https://cbu.uz/en/statistics/
5. Ministry of Economy and Finance of the Republic of Uzbekistan. Public debt information and statistics. https://gov.uz/en/imv
6. World Bank. Uzbekistan country overview. https://www.worldbank.org/ext/en/country/uzbekistan

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