

The Central Bank of Uzbekistan



Financial Stability Report

2025

The Financial Stability Report is released biannually by the Central Bank of Uzbekistan (CBU). Its purpose is to address macro-financial vulnerabilities and systemic risks, assess the resilience of the domestic financial system, and provide policy recommendations to mitigate risks and strengthen financial stability.

This report is based on data as of January 1, 2026.

This is a translation of the original Uzbek version, which is the only official text.

The Financial Stability Report was prepared by the Financial Stability Department of the CBU.

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If you have any comments, please send them to udjumanazarov@cbu.uz.

Abbreviations

AE	Advanced economy
AUROC	Area under the receiver operating characteristic curve
BBM	Borrower-based measure
CAB	Current account balance
CAR	Capital adequacy ratio
CCA	Caucasus and Central Asia
CBU	Central Bank of Uzbekistan
CCoB	Capital conservation buffer
CCyB	Countercyclical capital buffer
CET1	Common Equity Tier 1
CO ₂	Carbon dioxide
CoVaR	Conditional value at risk
DC	Domestic currency
D-SIB	Domestic systemically important bank
DSTI	Debt service to income
DTI	Debt-to-income
DtD	Distance to default
ECA	Europe and Central Asia
ECB	European Central Bank
EM	Emerging market
EMDE	Emerging market and developing economy
EVT	Extreme value theory
EWI	Early warning indicator
FC	Foreign currency
FCI	Financial conditions index
FSI	Financial stress index
FX	Foreign exchange
GaR	Growth at risk
GDP	Gross domestic product
HaR	House price at risk
HHI	Herfindahl-Hirschman index
HP	Hodrick-Prescott
HQLA	High-quality liquid assets
ICR	Interest coverage ratio
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund
IQR	Interquartile range
LCR	Liquidity coverage ratio
LGD	Loss-given default
LTV	Loan-to-value
MPP	Macroprudential policy
NFA	Net foreign assets
NII	Net interest income
NNII	Net non-interest income
NPL	Non-performing loan
NPAT	Net profit after tax
NSFR	Net stable funding ratio
OTC	Over the counter
PBT	Profit before tax
PCA	Principal component analysis
PD	Probability of default
pnCCyB	Positive neutral countercyclical capital buffer
ROA	Return on assets
ROE	Return on equity
RWA	Risk-weighted assets
SD	Standard deviation
SyRB	Systemic risk buffer
UCI	Uzbekistan Composite Index
USD	United States dollar
UZS	Uzbek soum

Financial Stability Report for 2025

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Executive Summary

Financial conditions in Uzbekistan eased. By the end of 2025, a slight decrease in global uncertainties, along with positive developments in the banking sector, the foreign exchange (FX) market and the macroeconomic conditions, was reflected in the loosening of the country's financial conditions. The magnitude of risks that may adversely affect Uzbekistan's economic growth in the coming periods has narrowed, and the economic growth is expected to be higher than that of its main trading partners.

The banking sector of Uzbekistan remains financially stable and resilient. In 2025, the financial stress level of the banking system decreased to its lowest level on record. As a result of high profitability in banking activities, expansion of the deposit portfolio and reduction in the probability of loan losses, the banking system's solvency further strengthened. At the same time, an increase in the share of high-quality liquid assets (HQLA) in bank assets and the reduction in the share of demand deposits in the deposit portfolio further improved the banking system's liquidity position. In addition, the contagion risk of financial stress within the banking system decreased. The dollarization of banks' loan and deposit portfolios declined.

In Uzbekistan, the macroprudential policy (MPP) framework has been fully aligned with Basel III standards. In particular, the capital conservation buffer (CCoB) of 2.5%, countercyclical capital buffer (CCyB) of 1.5%, and domestic systemically important bank (D-SIBs) surcharge of 1% were introduced. Additionally, the minimum capital adequacy requirements for banks were aligned with the Basel III standards. Borrower-based measures (BBMs) of MPP, including direct limits on the debt service-to-income (DSTI) ratio, the loan-to-value (LTV) ratio, and the debt-to-income (DTI) ratio, were also introduced and further enhanced. In order to ensure greater diversification of bank's loan portfolios, additional concentration requirements for certain loan categories were implemented.

Banks fully comply with minimum capital adequacy and buffer requirements under Basel III. As of January 1, 2026, the Common Equity Tier 1 (CET1) ratio of D-SIBs, including capital buffer, exceeded the minimum requirement of 9.5% while the ratio for other banks remained above the minimum requirement of 8.5%. In addition, the capital adequacy ratio (CAR) of all banks exceeded 13% at the beginning of 2026.

The tightening of MPP measures and rising household incomes improved household sector conditions. The introduction of direct LTV caps for mortgages and car loans to individuals resulted in an improvement in the level of collateralization of these loans. The tightening of BBMs for household lending contributed to a reduction in the level of household debt burden. In particular, a downward trend in the debt burden has been observed in the mortgage and car loan segments.

High level of activity remains in retail lending. The average number of microdebt contracts per borrower is on the rise. The quality composition of non-performing loans (NPLs) in microdebts deteriorated. In 2025, the average DSTI ratio for microdebts increased from 37% to 40%. At the same time, the concentration level in microdebts is on the decline.

Housing prices have returned to within the standard deviation (SD) range of their fundamentals. An increase in housing supply in the real estate market, together with housing price corrections, rising household incomes, and loosened mortgage lending conditions,

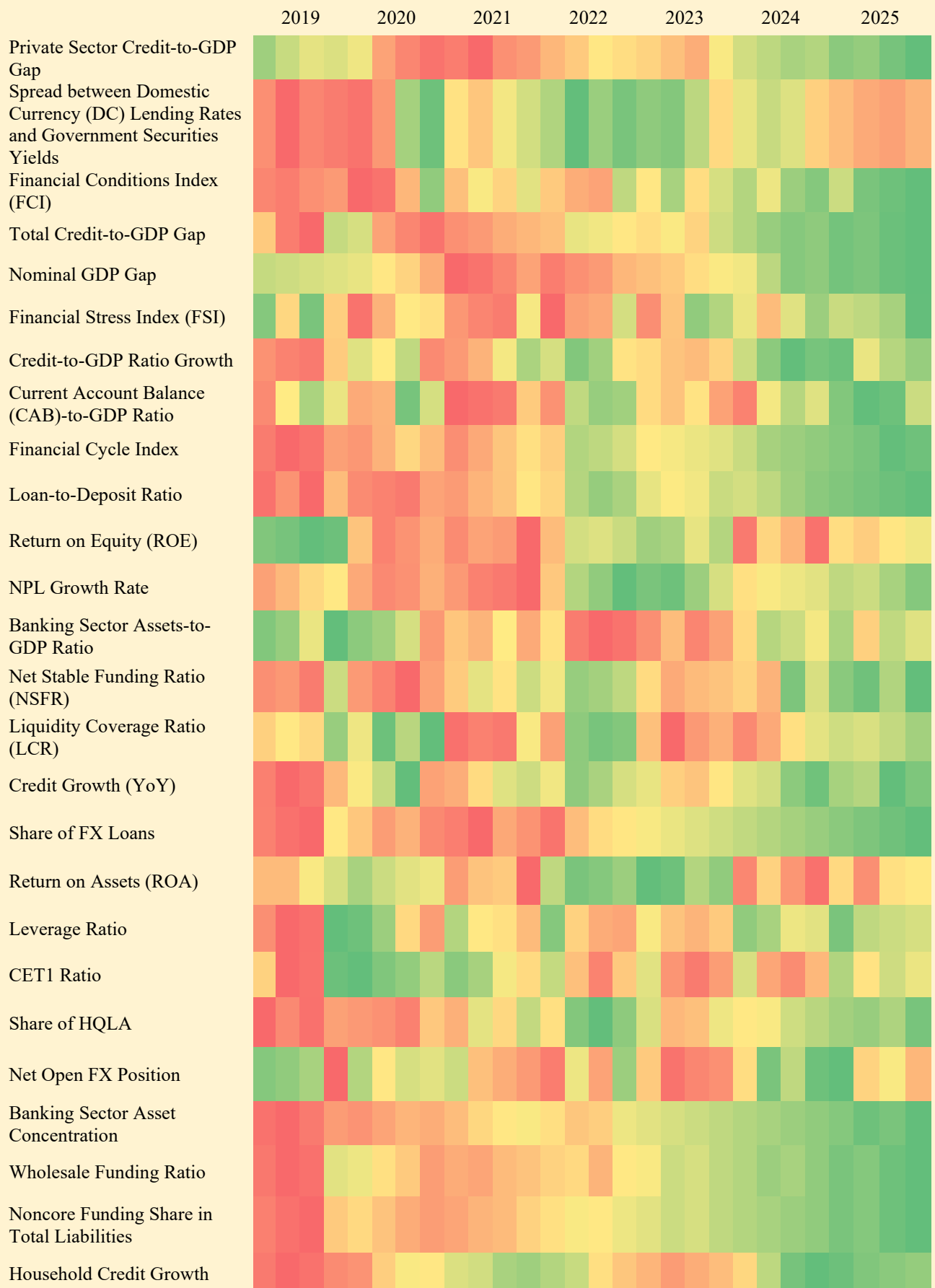
improved housing affordability and increased home-buying activity. Market participants are shifting toward more prudent investment strategies that rely on stable rental income rather than asset price appreciation.

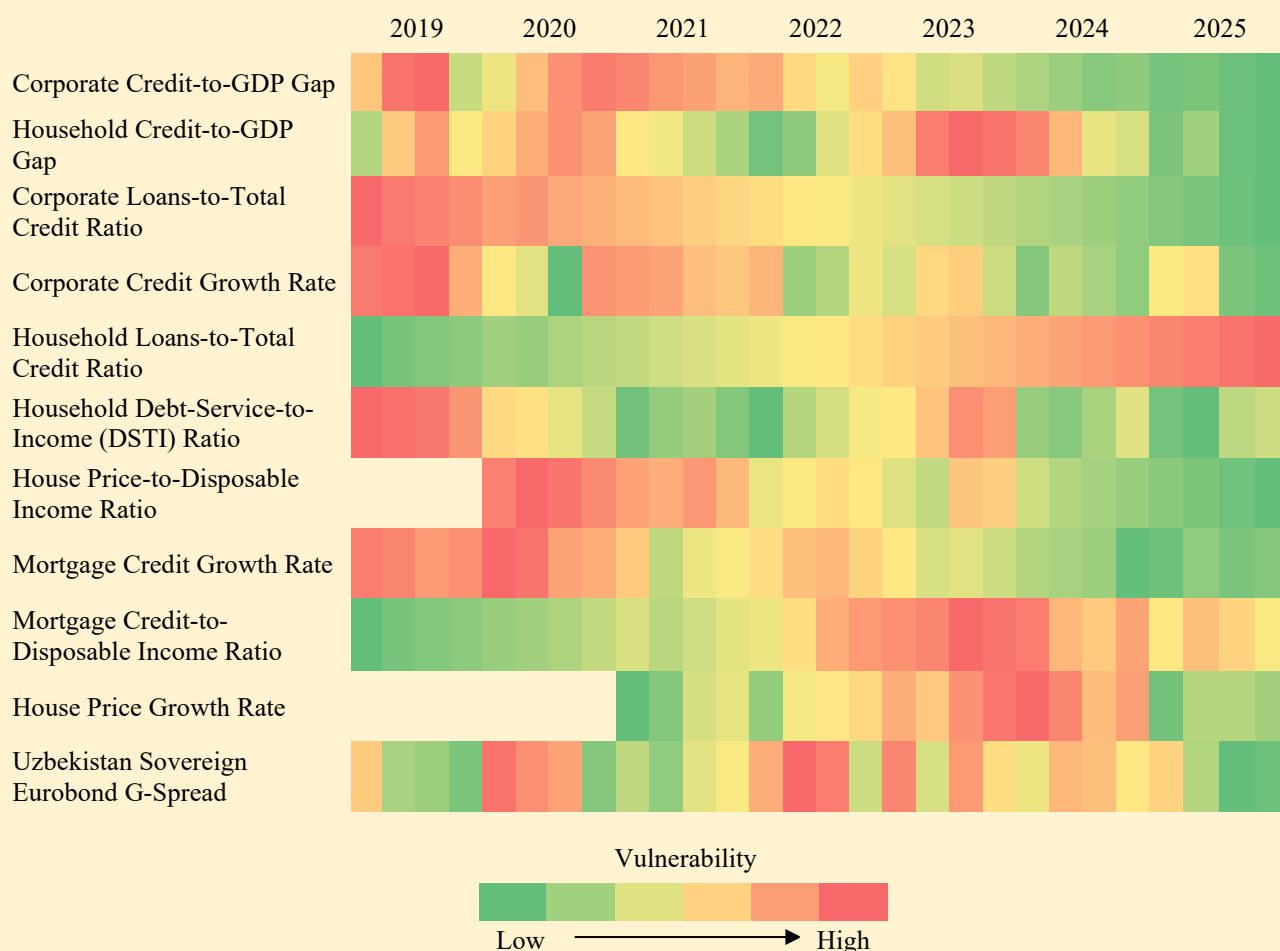
The solvency macro stress test indicates that adverse shocks may affect banks' capital with a time lag. Under the adverse scenario, the CET1 ratio could decline to 5.6% by the end of 2028, while the banking system's CAR could fall to 6.8%. The potential contagion risk from bank defaults remains low. The impact of declining housing prices on mortgage losses is assessed as very limited.

The liquidity stress test indicates positive net cash inflows under the adverse scenario. The maturity mismatch between assets and liabilities in the banking system has narrowed. Even for banks facing the most severe liquidity pressures, available HQLA would be sufficient to cover expected net cash outflows, thereby mitigating liquidity risk across the banking system.

External financial stability risks are predominantly long-term, while domestic risks are more short-term. Key risks include tighter global financial conditions due to geopolitical tensions, credit risk associated with microdebts, cybersecurity threats, and climate-related risks.

Early Warning Indicators Heatmap





The early warning indicators (EWI) heatmap shows that the banking system's exposure to FX risk increased in 2025, while credit risks persisted. Despite the slowdown in the growth of outstanding household loans, the share of retail loans in the banking system's loan portfolio continues to increase (Appendix 1).

The widening gap between the banking system's assets and liabilities in FX was reflected in an increase in the net open FX position at the end of 2025. In particular, the long FX position heightened the banking system's exposure to exchange rate fluctuations.

The widening of the spread between DC lending rates and government securities yields indicates an increase in the credit risk premium. In particular, the slower decline in lending rates relative to yields on government securities suggests that banks are assessing credit risk as higher.

In 2025, the tightening of BBMs was reflected in improvements in the overall debt burden of individuals, taking into account both bank and non-bank liabilities. In particular, the improvement in the debt burden of households reduced the risk of losses on banks' household loan portfolios.

I. Macrofinancial Conditions

Global financial conditions eased toward the end of 2025. The adverse effects of higher tariffs and trade policy uncertainties were offset by increased technology-related investments and loosened financial conditions at the end of 2025¹. Favorable financing conditions and lower currency volatility also supported portfolio investment inflows into emerging markets (EMs). At the same time, steady capital inflows into DC debt markets were observed².

Global uncertainties declined slightly. The elevated trade policy concerns observed in H1 2025 eased in H2 2025, as reflected in the decline of the Trade Policy Uncertainty Index³. In addition, economists' concerns about international uncertainties moderated. Accordingly, the World Uncertainty Index⁴ entered a downward phase at the end of 2025. Despite the reduction in global economic policy uncertainties, the persistence of concerns over geopolitical conditions in the world in 2025 was reflected in fluctuations in the Geopolitical Risk Index⁵.

Global stock markets strengthened. In 2025, the average values of the Morgan Stanley Capital International (MSCI) indices for advanced economies (AEs), emerging markets (EMs), and the MSCI World Index each rose by 14% relative to 2024. The strengthening of stock prices was supported by positive investor sentiment, reflecting expectations of monetary policy easing by the world's leading central banks⁶. The average MSCI indices for AEs and EMs reached USD 4,010 and USD 1,225, respectively, while the MSCI World Index averaged USD 915⁷. Furthermore, the increase in MSCI indices suggests an improvement in investors' risk perceptions of companies in both AEs and EMs in international financial markets.

Financial conditions in Uzbekistan eased. By the end of 2025, resilient external financial conditions, combined with favorable developments in the banking sector, the FX market, and macroeconomic conditions, contributed to a moderation in domestic financial conditions. In particular, the Chicago Board Options Exchange (CBOE) Volatility Index⁸, which captures investor expectations in international financial markets, averaged 16 at the end of 2025, representing a 2% decline from the corresponding period of 2024⁹. In addition, the yield on Uzbekistan's FX-denominated sovereign eurobonds, which reflects investors' assessment of risk, declined relative to benchmark bonds in 2025.

¹ International Monetary Fund. (2026, April). World Economic Outlook.

² International Monetary Fund. (2026, January). World Economic Outlook.

³ Matteo Iacoviello. (2026). Trade Policy Uncertainty (TPU) Index.

The index includes 7 leading newspapers: Boston Globe, Chicago Tribune, Guardian, Los Angeles Times, New York Times, Wall Street Journal, Washington Post.

⁴ World Uncertainty Index. (2026). World Uncertainty Index (WUI): Global.

⁵ Matteo Iacoviello. (2026). Geopolitical Risk (GPR) Index.

The index includes 10 leading newspapers: Chicago Tribune, Daily Telegraph, Financial Times, Globe and Mail, Guardian, Los Angeles Times, New York Times, USA Today, Wall Street Journal, Washington Post.

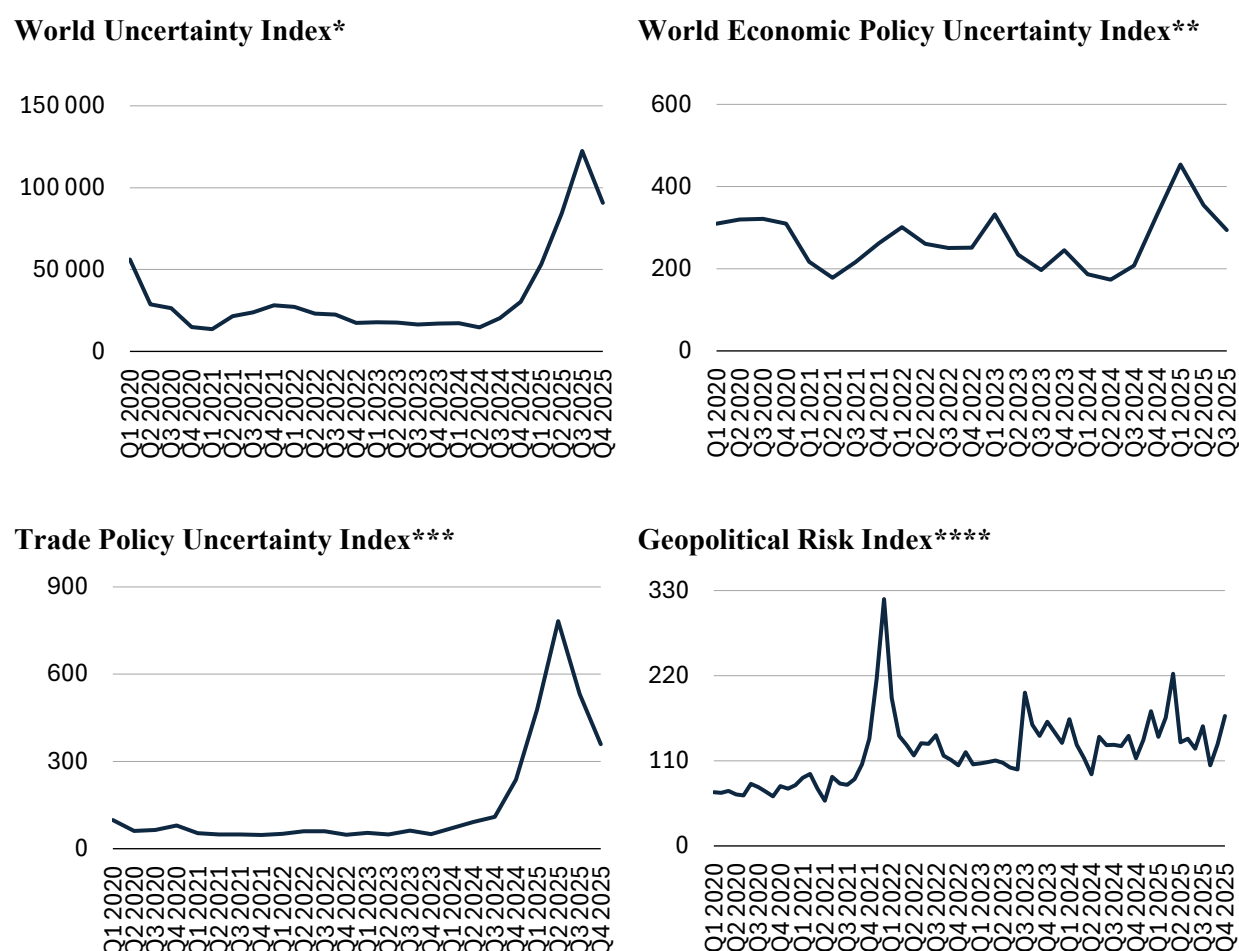
⁶ International Monetary Fund. (2026, January). World Economic Outlook.

⁷ Morgan Stanley Capital International. (2026). Real Time Index Data Search.

⁸ The VIX index is the CBOE (Chicago Board Options Exchange) volatility index, which reflects the level of stress in the stock market. The higher the volatility index, the higher the level of stress and uncertainties in the market.

⁹ Federal Reserve Bank of St. Louis. (2026). CBOE Volatility Index: VIX.

Figure 1. Global Uncertainties



Sources: World Uncertainty Index, World Economic Policy Uncertainty Index and Matteo Iacoviello.

Notes: A high value of the indices means a high level of uncertainties, while a low value means a low level of uncertainties.

*The World Uncertainty Index covers 143 countries and is determined by multiplying 1,000,000 to the share of word “uncertainty” (or its variants) in the total number of words used in the Economist Intelligence Unit’s quarterly country reports, and calculating the weighted average value based on the countries’ GDP.

**The Global Economic Policy Uncertainty Index is determined by calculating the weighted average value based on the economic policy uncertainty indices computed for 18 countries and the countries’ GDP. The Economic Policy Uncertainty index for each country is obtained by finding the proportion of articles in newspapers published in each country that contain sentences related to the words “economics”, “politics” and “uncertainty” in the total number of articles in these newspapers. Then, it is normalized by setting the average value of these ratios for the years 1997–2015 to 100.

***In determining the Trade Policy Uncertainty Index, the shares of the total number of articles discussing trade policy uncertainty in the 7 leading newspapers are calculated as a percentage of the total number of articles. To obtain the final index value in a normalized form, each percentage share is set equal to 100.

****The Geopolitical Risk Index is computed by calculating the number of articles on adverse geopolitical events in the top 10 newspapers, including 6 newspapers published in the United States, 3 in the United Kingdom, and 1 in Canada, as a percentage of the total number of articles in these newspapers. The final GPR is estimated by setting the average value of the calculated shares for the years 1985–2019 to 100.

Figure 2. Morgan Stanley Capital International Indexes*, USD

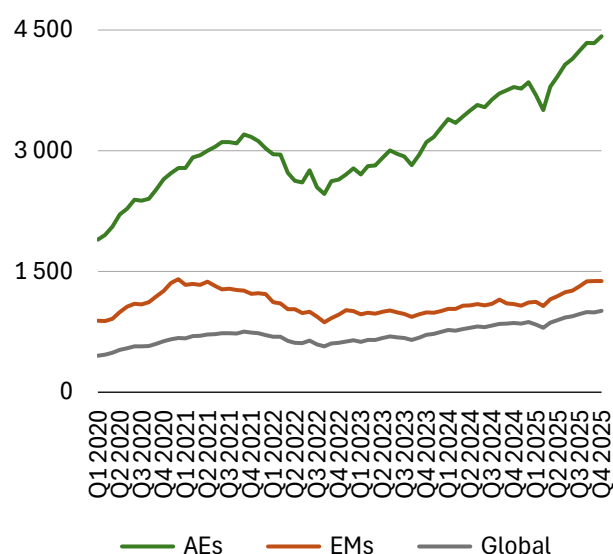
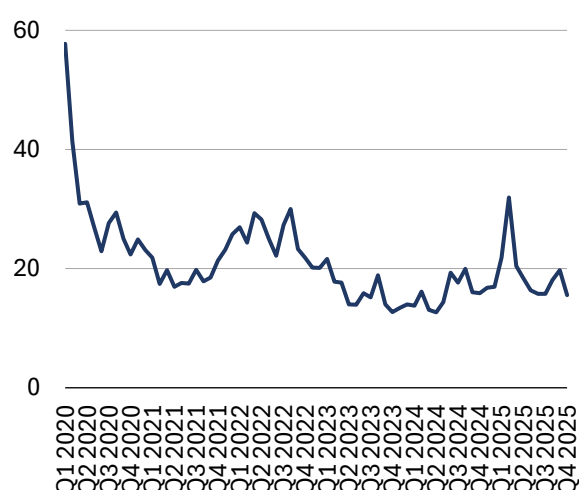


Figure 3. Chicago Board Options Exchange Volatility Index**



Sources: Morgan Stanley Capital International and Federal Reserve Bank of St. Louis.

Notes: *Morgan Stanley Capital International indexes provide an overview of the global stock market by tracking the large companies' stock prices in 23 AEs and 24 EMs. If the index values increase, it means that the stock prices of the companies in the index have increased.

**A higher CBOE volatility index indicates elevated levels of market stress and uncertainties, whereas a lower volatility index indicates reduced levels of market stress and uncertainties.

The moderation of pressures in the domestic FX market contributed to a relaxation of overall financial conditions in the country. At the end of 2025, the UZS appreciated by 6.9% against the USD compared to the corresponding period of 2024¹⁰. Uzbekistan's international reserves totaled USD 66.3 billion. In particular, the country's international reserves increased by 61% during 2025 and by 23% excluding gold¹¹. In addition, during 2025, the volume of FC purchased by commercial banks from individuals exceeded the volume of FC sold to individuals by USD 9.7 billion, representing an increase of 44% compared with 2024¹².

¹⁰ The Central Bank of the Republic of Uzbekistan. (2026). Archive of FX rates.

¹¹ The Central Bank of the Republic of Uzbekistan (2026). International reserves of the Republic of Uzbekistan.

¹² The Central Bank of the Republic of Uzbekistan. (2026). Statistical Bulletin for 2025.

Figure 3. Uzbekistan's Financial Conditions Index (FCI)*

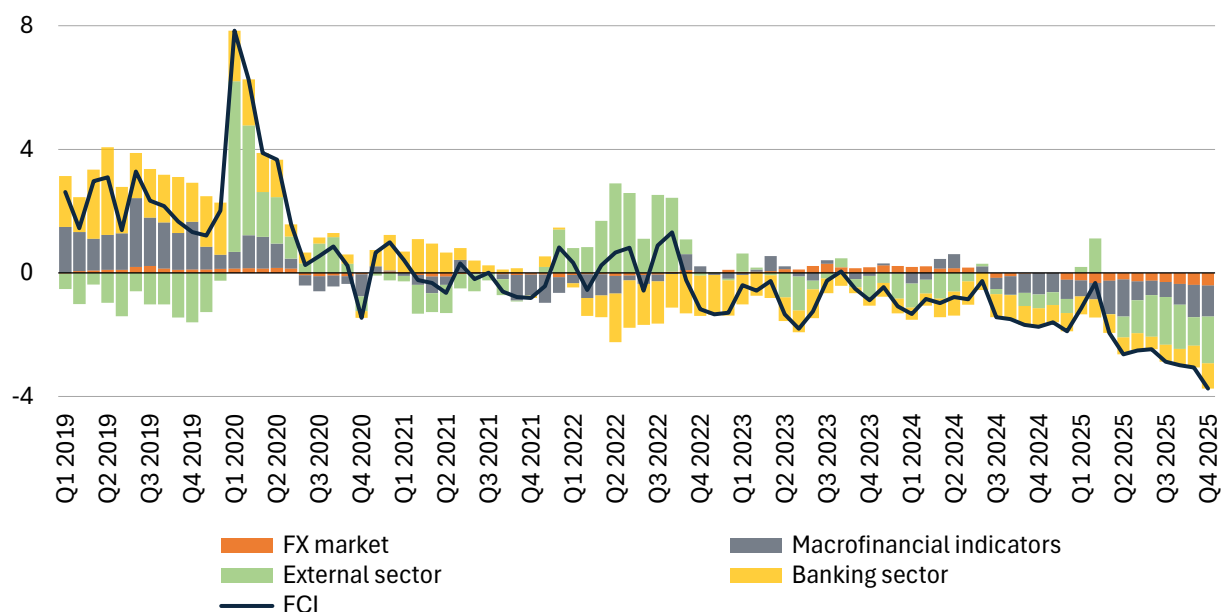
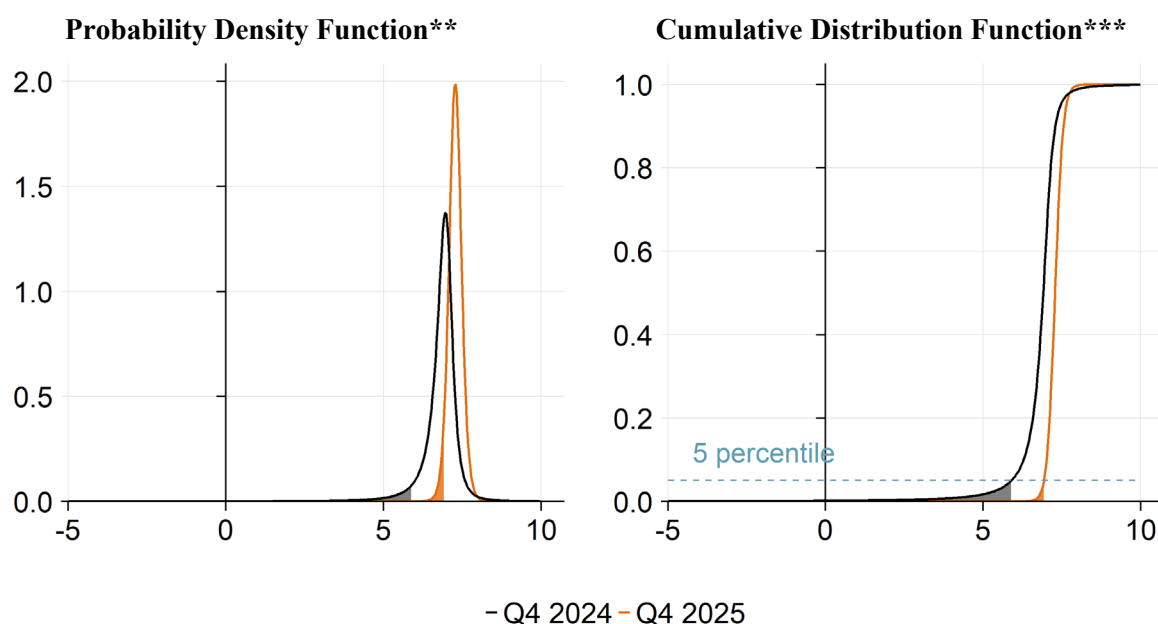


Figure 4. Growth at Risk (GaR) Model Results for Real GDP Growth Rate in 2026



Sources: National Statistics Committee and CBU staff calculations.

Note: *Positive values of the FCI¹³ indicate a tightening of financial conditions, while negative values indicate a loosening of financial conditions.

** The probability density function represents the probability density¹⁴ of a random variable over a given interval.

*** The cumulative distribution function represents the degree of probability¹⁵ that a random variable will assume a certain value and is determined by taking the integral from the probability density function.

¹³ The methodology for calculating Uzbekistan's FCI is presented in the research publications of CBU.

¹⁴ Probability density is the probability of occurrence of a random variable corresponding to a specified interval unit. The probability density will have values not smaller than 0.

¹⁵ The degree of probability is a quantitative indicator of the possibility of occurrence. The probability level is formed between 0 and 1.

Risks to Uzbekistan's economic growth in the coming periods have moderated. According to the results of the GaR¹⁶ model at the end of 2025, the country's real GDP growth rate could reach 6.9% in the next year with a 5% probability under risk conditions. Due to the decline in the magnitude of risks and the easing of financial conditions in 2025, this indicator was 1 percentage point (p.p.) higher than the level estimated at the end of 2024.

The expansion of domestic demand, underpinned by consumption expenditure, continues to support economic growth. In 2025, Uzbekistan's annual real GDP growth reached 7.7%, rising by 1 p.p. compared with 2024¹⁷. In particular, the negative impact of the widening of the negative net export on real GDP growth in 2025 was offset by an increase in domestic demand in the country. In 2025, the positive contribution of the domestic demand to real GDP growth was 5.3 p.p., while the contribution of negative net exports amounted to negative 2.2 p.p. The main driver of high domestic demand was the annual increase in household final consumption expenditures by 9.5%¹⁸ at constant prices.

Uzbekistan's economic growth is expected to continue to outpace that of its main trading partners. According to International Monetary Fund (IMF) projections, Uzbekistan's annual real GDP growth rate is projected to be 6.5% in 2026 and 5.9% in 2027¹⁹, while the World Bank forecasts growth at 6.4% and 6.7%, respectively²⁰. In addition, based on IMF data, the average economic growth rates of Uzbekistan's main trading partners²¹ are projected at 3.8% in 2026 and 3.5% in 2027.

The CAB Deficit-to-GDP ratio is contracting. In 2025, the negative CAB relative to GDP stood at 3.9%, while in 2024 it was 4.7%²². In particular, the trade balance deficit of USD 19.9 billion in 2025 was partially offset by a positive primary and secondary income balance of USD 14.1 billion²³. In addition, the IMF projects CAB Deficit-to-GDP ratio of Uzbekistan at 1.3% and 3.4%²⁴ in 2026 and 2027 respectively.

¹⁶ GaR model methodology is presented in Financial Stability Report for 2024.

¹⁷ National Statistics Committee. (2026). Growth rates of gross domestic product (by expenditures method, quarterly).

¹⁸ National Statistics Committee. (2026). Growth rates of final consumption expenditures (quarterly).

¹⁹ International Monetary Fund. (2026, April). World Economic Outlook.

²⁰ World Bank. (2026, April). Industrial Policy. Europe and Central Asia Economic Update.

²¹ The countries of South Korea, Russia, Türkiye, China and Kazakhstan are taken into account.

²² International Monetary Fund. (2026, April). World Economic Outlook.

²³ The Central Bank of the Republic of Uzbekistan. (2026). Balance of payments of the Republic of Uzbekistan (standard presentation).

²⁴ International Monetary Fund. (2026, April). World Economic Outlook.

Figure 5. Annual GDP Growth Decomposition*, p.p.

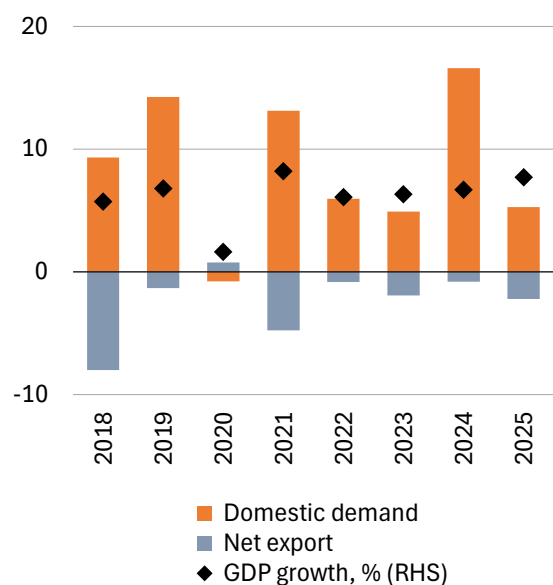


Figure 6. Economic Growth of Uzbekistan's Main Trading Partners, %**

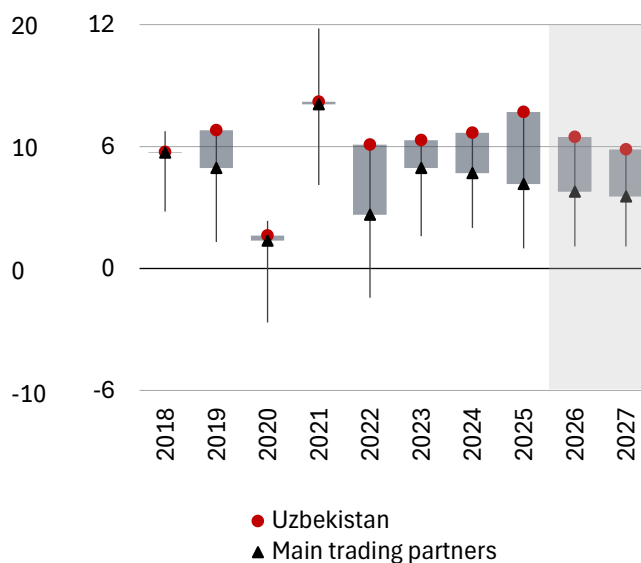


Figure 7. CAB, billion USD

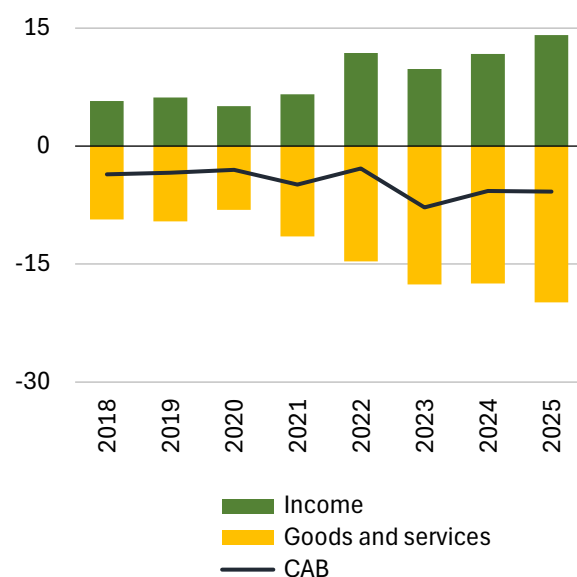
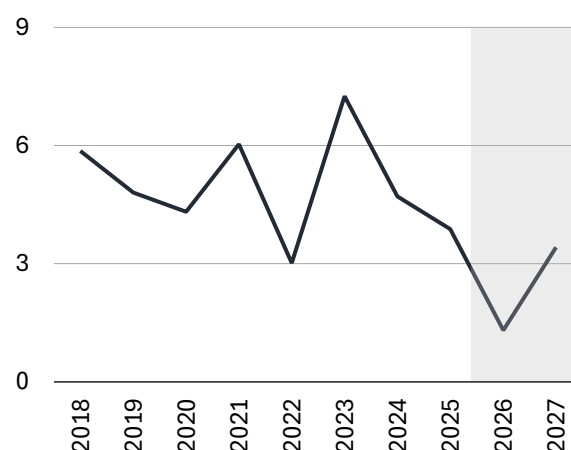


Figure 8. CAB Deficit-to-GDP Ratio, %



Sources: National Statistics Committee, IMF, and CBU staff calculations.

Note: *Domestic demand is the sum of consumption and gross capital formation. The statistical discrepancy in the calculation of GDP by the final consumption method is not reflected in the chart.

**The rectangle displayed in the chart represents the variation between Uzbekistan's GDP growth rate and the weighted average of GDP growth rates for main trading partners. The length of the rectangle indicates the difference between the growth rates. If Uzbekistan's GDP growth rate exceeds the weighted average, the rectangle is shaded, and if it is the opposite, the rectangle remains blank. The vertical black line on the chart represents the maximum and minimum growth rates among the seven countries for a given year.

Figure 9. Net Foreign Assets (NFA) of Banks, trillion UZS

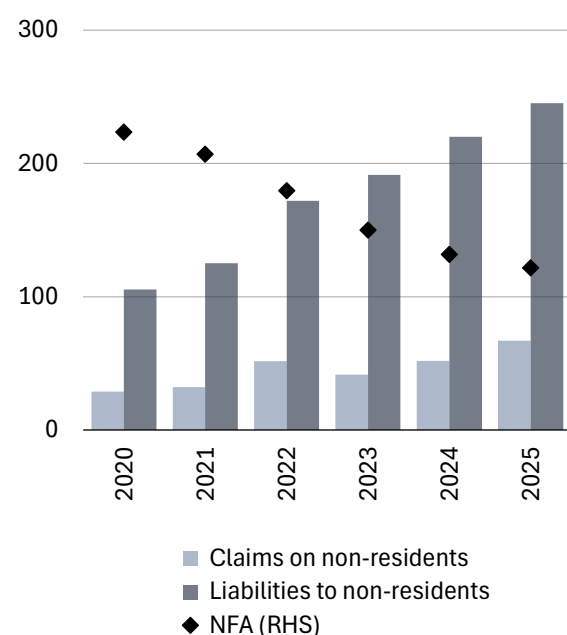
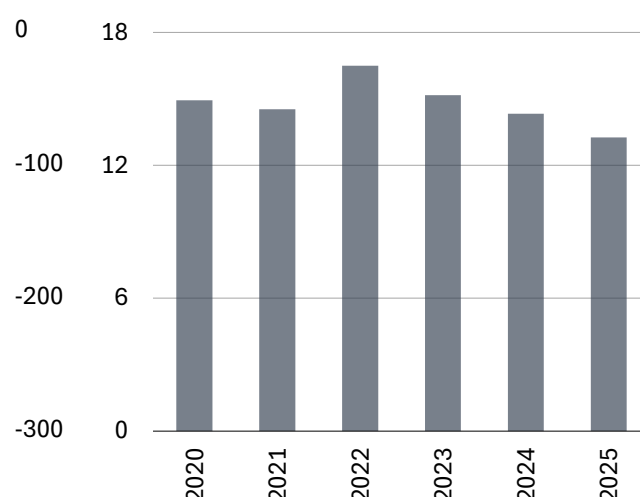


Figure 10. Bank Liabilities to Non-Residents as a Share of GDP, %



Sources: National Statistics Committee and CBU staff calculations.

Uzbekistan's banking system remains exposed to global macrofinancial conditions. In 2025, the liabilities of banks to non-residents²⁵ rose by 11%, and claims on non-residents²⁶ by 29%. The negative balance of banks' NFA amounted to UZS 178.3 trillion at the end of 2025, representing a year-on-year increase of 6%²⁷. At the same time, the banking system's liabilities to non-residents grew more slowly than nominal GDP. In particular, the ratio of banks' liabilities to non-residents to GDP stood at 13% at the end of 2025, decreasing by 1 p.p. compared with the corresponding period of 2024. Although the banking system's exposure to external risks has increased, the stable and strong growth of the country's economy reduces concerns associated with the global integration of banks.

²⁵ Liabilities to non-residents represent deposits and loans raised by banks from non-residents, together with accrued interests thereon, as well as subordinated debt.

²⁶ Claims on non-residents represent FC cash held by banks, funds held in correspondent and deposit accounts with non-resident banks, together with accrued interests thereon, as well as loans allocated to non-residents, investments, and advance payments.

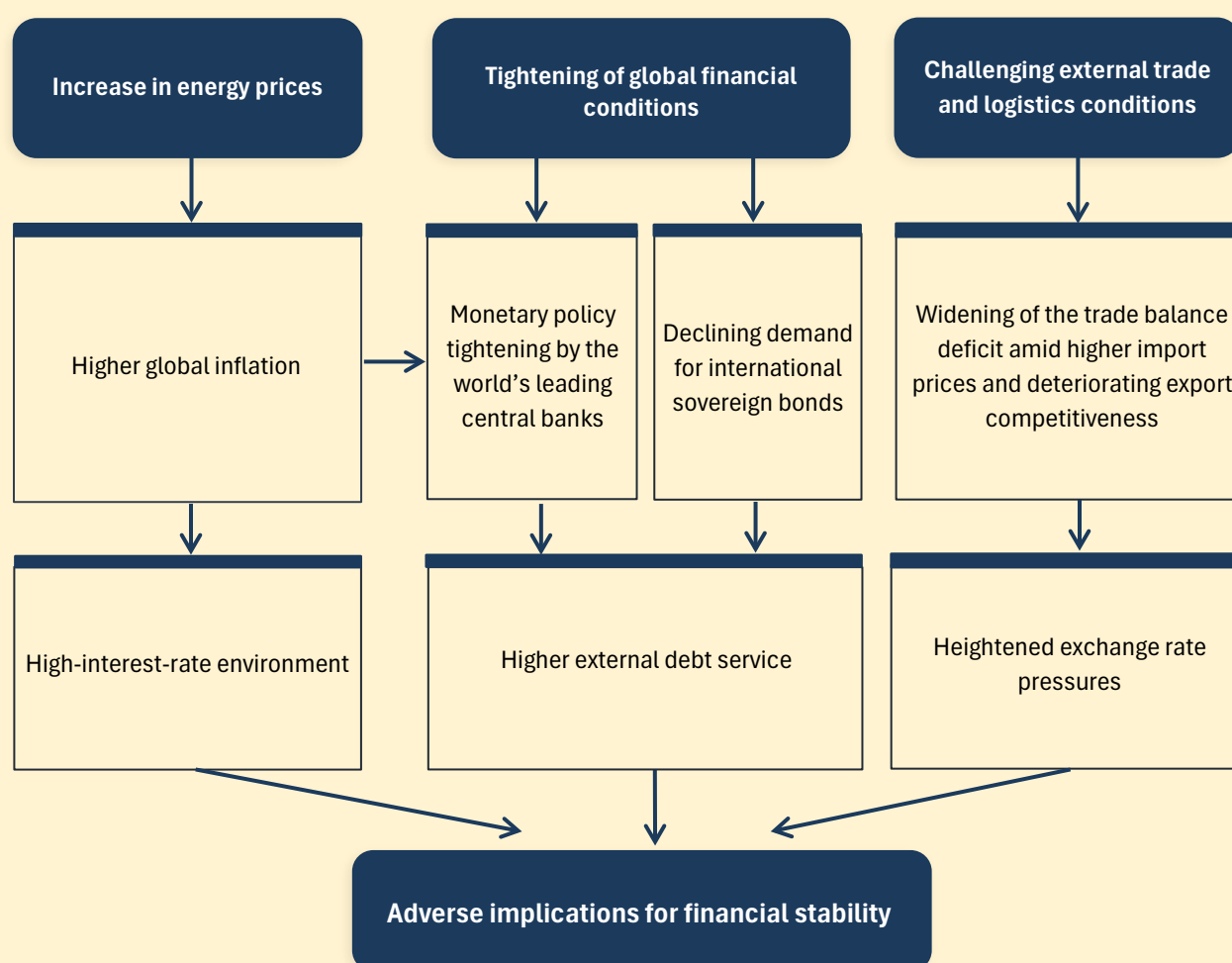
²⁷ The Central Bank of the Republic of Uzbekistan. (2026). Statistical Bulletin for 2025.

Box 1. Financial Stability Implications of Developments in the Middle East

Geopolitical developments in the Middle East continue to pose risks to Uzbekistan's financial stability through higher energy prices, a tightening of global financial conditions, and heightened external trade pressures.

In particular, elevated energy prices may intensify global inflationary pressures and sustain a higher-for-longer interest-rate environment. The tightening of global financial conditions may increase Uzbekistan's external financing costs through higher policy rates at the world's leading central banks and weaker demand for sovereign international bonds. At the same time, shifts in external trade conditions may widen Uzbekistan's trade balance deficit through higher import prices and a deterioration in the competitiveness of export goods.

Figure 11. Transmission Channels of Geopolitical Developments in the Middle East to Uzbekistan's Financial Stability



Source: CBU.

Global energy prices observed a significant increase in early 2026. According to IMF data, global oil prices are projected to increase by 22% and natural gas prices by 17% in 2026²⁸. Oil supply disruptions and restrictions on trade routes due to geopolitical tensions in the Middle East led to a sharp increase in global energy prices. In particular, average global oil and natural gas prices increased by 41% and 24%²⁹, respectively, in March 2026 compared with February, amid instability in the Middle East. A sharp increase in global energy prices raises transportation and production costs, thereby intensifying pressures on the global inflation.

The increase in energy prices driven by geopolitical instability has raised global inflation expectations. In particular, due to geopolitical tensions in the Middle East, the IMF revised upward its global inflation forecasts. According to the IMF's October 2025 projections, average global inflation in 2026 was expected to reach 3.7%³⁰. In April 2026, global inflation expectations were revised and increased to 4.4%³¹. Elevated inflation expectations are reflected in an increase in interest rates in international financial markets.

Global inflationary pressures may lead to a high-interest rate environment. In particular, expectations for global policy rates have shifted upward, with policy rate expectations in some countries changing from a downward trend to an upward one. This is reflected in investors' expectations of monetary policy tightening by central banks to moderate price growth³². In particular, the European Central Bank (ECB) is expected to raise the policy interest rate for the euro area from 2% to 2.5% in 2026³³.

The occurrence of a high-interest rate environment increases external financing costs. Geopolitical tensions in the Middle East contributed to higher interest rates in financial markets due to heightened risk expectations of investors. In particular, the average 6-month EURIBOR interest rate increased to 2.5% in April 2026³⁴, while the 12-month EURIBOR interest rate rose by 0.5 p.p. compared with the beginning of 2026, reaching 2.7%³⁵. An increase in interest rates in international financial markets may increase the cost of servicing foreign debt for financial system participants, particularly for banks.

²⁸ International Monetary Fund. (2026, April). World Economic Outlook.

²⁹ World bank. (2026). World Bank Commodities Price Data (The Pink Sheet).

³⁰ International Monetary Fund. (2025, October). World Economic Outlook.

³¹ International Monetary Fund. (2026, April). World Economic Outlook.

³² International Monetary Fund. (2026, April). Global Financial Stability Report.

³³ International Monetary Fund. (2026, April). World Economic Outlook.

³⁴ European Central Bank. (2026). Euribor 6-month - Historical close, average of observations through period, Euro area, monthly.

³⁵ European Central Bank. (2026). Euribor 1-year - Historical close, average of observations through period, Euro area, Monthly.

Figure 12. Projection of Annual Growth in Global Energy Prices*, %

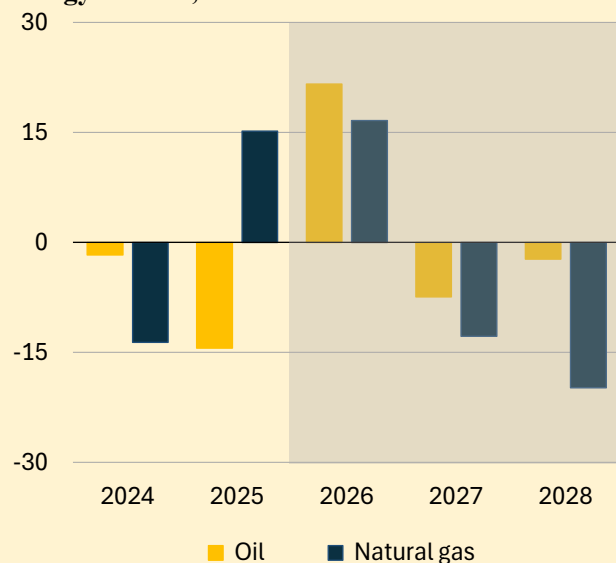


Figure 13. Global Inflation Projection, %**

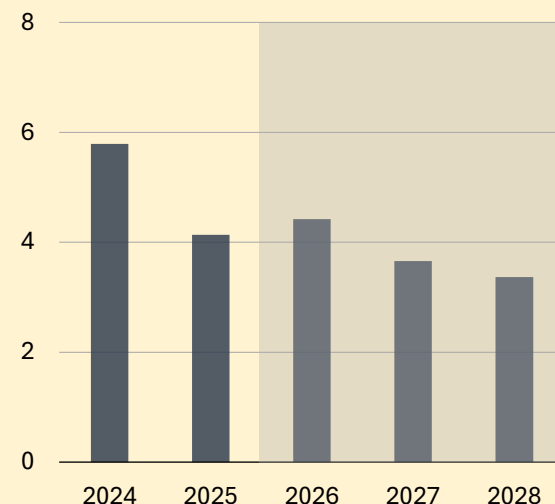


Figure 14. Dynamics of Long-Term EURIBOR* Interest Rates, %**

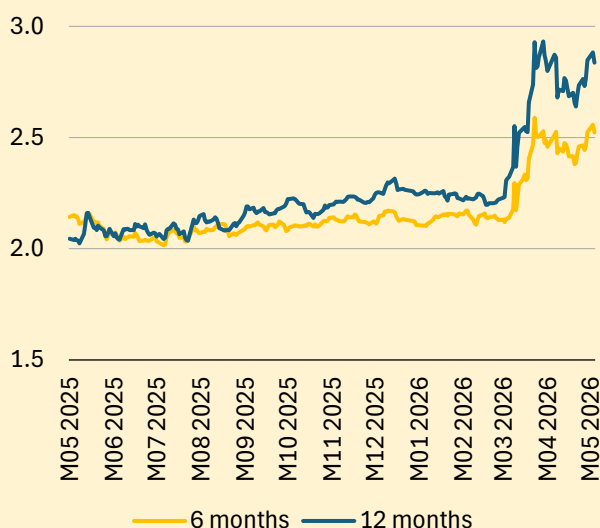
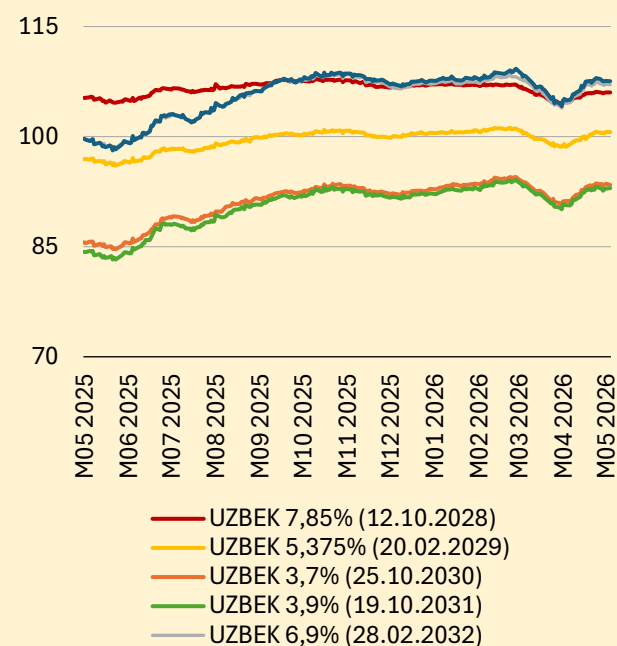


Figure 15. Current Price of Uzbekistan Sovereign Eurobonds**, %**



Sources: Ministry of Economy and Finance of Uzbekistan, IMF and ECB.

Notes: *The global oil price is calculated based on Brent, Dubai and West Texas Intermediate crude oil prices. In addition, natural gas prices include Europe, Japan, and the USA natural gas prices.

**The global inflation rate is determined by calculating the weighted average value of each country's inflation and GDP based on purchasing power parity. The average consumer price change was taken into account as the global inflation rate.

***Euro Interbank Offered Rate (EURIBOR) represents the average interest rate at which European commercial banks lend to one another. In particular, these interest rates are used as a benchmark interest rate for lending in international money markets.

****The current price of Uzbekistan's sovereign eurobonds represents the change in their market price relative to their nominal value.

Under conditions of financial instability, investors tend to shift their funds toward safe-haven assets. In particular, global uncertainties may reduce demand for the sovereign debt instruments of developing countries, leading to a decline in the market prices of these securities. In March 2026, a decrease in the market prices of Uzbekistan's sovereign eurobonds was observed, and the market prices of bonds issued at relatively lower interest rates fell below their nominal value. The persistence of global uncertainties may result in higher interest rates on the additional issuance of treasury bonds in international financial markets and, consequently, increase debt servicing costs.

Figure 16. Uzbekistan's Foreign Trade Turnover with Middle East Countries*

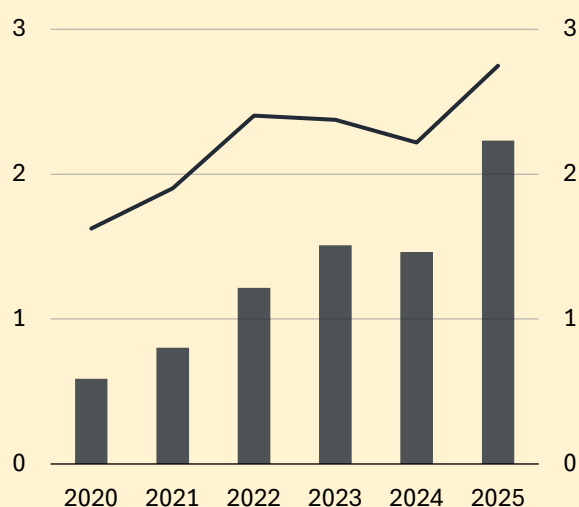
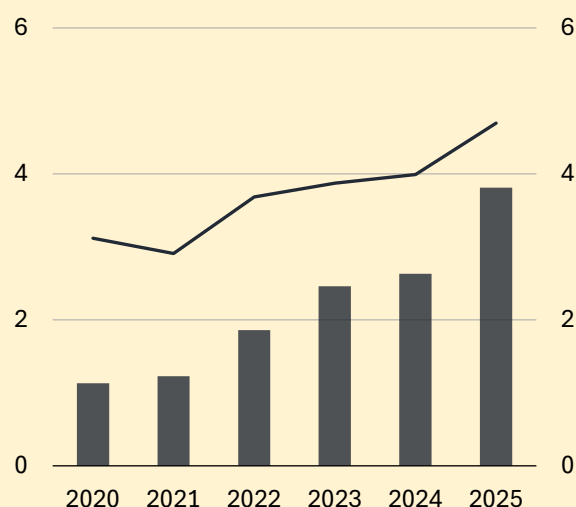


Figure 17. Uzbekistan's Foreign Trade Turnover with Countries using the Railway Trade Corridor through Iran**



■ Foreign trade turnover, billion USD
 — Share in total foreign trade turnover, % (RHS)

Source: National Statistics Committee

Notes: *The World Bank's Middle East country group includes Bahrain, the United Arab Emirates, Iraq, Israel, Jordan, Lebanon, Egypt, Saudi Arabia, the Syrian Arab Republic, Oman, Palestine, Iran, Yemen, Kuwait and Qatar.

**Uzbekistan conducts foreign trade with Bangladesh, the United Arab Emirates, Vietnam, Indonesia, Pakistan, Malaysia, Oman and India using the railway trade corridor through Iran.

The importance of the Middle East in Uzbekistan's foreign trade is growing. In particular, in 2025, Uzbekistan's foreign trade turnover with Middle East countries increased by 52% compared with 2024, reaching USD 2.2 billion³⁶. At the same time, Uzbekistan's foreign trade relations with the Persian Gulf countries³⁷, as well as India, Pakistan, Bangladesh and Southeast Asian countries³⁸ rely on the international transport corridor through Iran³⁹. In particular, Uzbekistan's foreign trade turnover with countries via the transport corridor through Iran amounted to USD 3.8 billion in 2025, accounting for nearly 5% of the country's total foreign trade turnover.

Geopolitical tensions in the Middle East may lead to a widening of Uzbekistan's trade balance deficit. In particular, the geopolitical situation in the region may result in restrictions on international trade transit routes, an increase in insurance and logistics costs, and longer delivery times, thereby reducing the efficiency of foreign trade. In this context, the country's trade balance deficit is expected to widen as a result of an increase in the prices of imported products and reduced export competitiveness. This, in turn, may reduce the supply of FX in the country and put pressure on the exchange rate.

The escalation of the situation in the Middle East was taken into account in the adverse scenario developed to assess the solvency and liquidity of the banking system through macro stress testing. In particular, when estimating real GDP growth under the adverse scenario using the GaR model, factors such as an increase in production costs due to elevated commodity prices and supply chain disruptions under the influence of external geopolitical uncertainties, and a reduction in domestic supply were taken into account. The adverse scenario also incorporated an increase in credit risk resulting from a decline in economic growth and the emergence of a high-interest rate environment driven by global inflationary pressures. In addition, the potential adverse impact of higher external financing costs on banks' net interest income (NII) in FX was assessed under the adverse scenario (Chapter V).

³⁶ National Statistics Committee. (2026). Growth rate of foreign trade turnover (by country, by month).

³⁷ Uzbekistan's foreign trade is conducted with the United Arab Emirates and Oman among the Persian Gulf countries.

³⁸ Southeast Asian countries include Thailand, Malaysia, Indonesia and Vietnam.

³⁹ Ministry of Transport. (2019). International transport corridors of the Republic of Uzbekistan.

II. Financial Sector

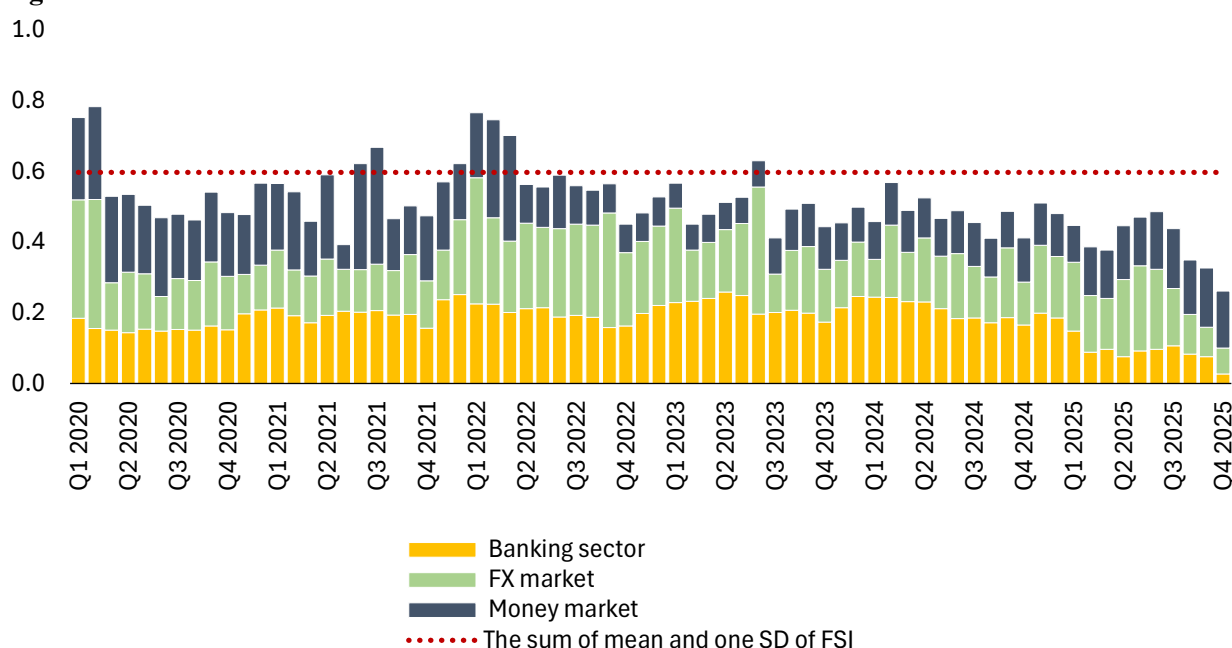
2.1. Banking Sector

Uzbekistan's banking sector remains financially stable and resilient to risks. In 2025, the solvency of the banking system further strengthened as a result of banks' high profitability, the expansion of the deposit portfolio and the decline in the probability of default (PD). At the same time, an increase in the share of HQLA in bank assets, a reduction in the share of demand deposits in the deposit portfolio contributed to a further improvement in the banking system's liquidity.

Financial stress in the banking system eased to a record low. At the end of 2025, the positive developments observed in the domestic FX market and the banking sector, together with stable conditions in the money market, were reflected in the FSI⁴⁰ staying below its mean and one SD.

Improved bank liquidity conditions and stronger profitability contributed to a decline in the FSI. As of January 1, 2026, outstanding deposits with a maturity of over one year in the banking system amounted to UZS 156.7 trillion, rising by 31% compared with the corresponding period of 2025⁴¹. The growth in the volume of long-term deposits, together with total outstanding deposits in the banking system remaining above their long-term trend, was reflected in the strengthening of banks' liquidity position.

Figure 18. Uzbekistan's Financial Stress Index

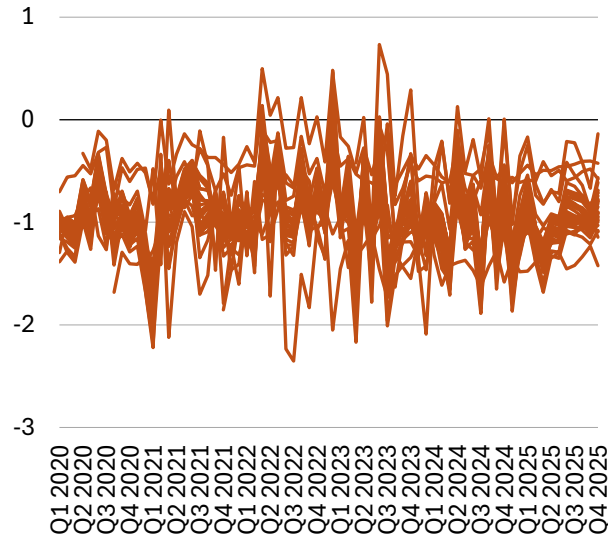
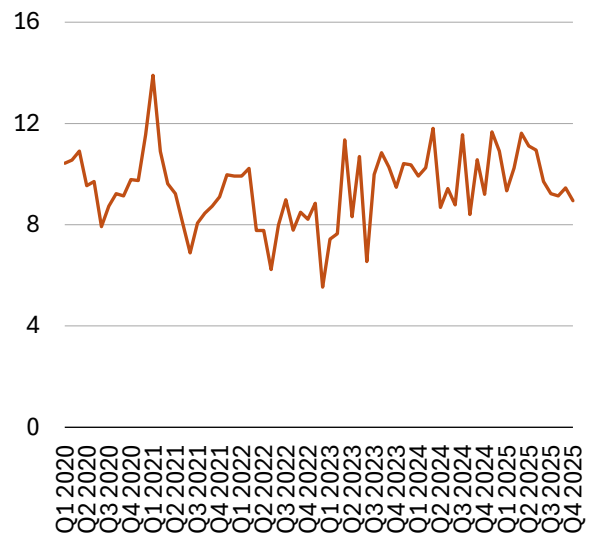


Source: CBU staff calculations.

Notes: The FSI value close to 1 indicates a high level of stress, while a value near 0 indicates a low level of stress.

⁴⁰ The FSI methodology is presented in the research publications of the CBU.

⁴¹ The Central Bank of the Republic of Uzbekistan. (2026). Indicators of the banking system.

Figure 19. Bank-by-Bank ΔCoVaR **Figure 20. ΔCoVaR for Banking System**

Source: CBU staff calculations.

Notes: The increase in the ΔCoVaR ⁴² means that risk in the banking system is building up, while the decrease in ΔCoVaR means that risk is decreasing.

The ΔCoVaR for banking system is presented using the exponential moving average⁴³.

The risk of financial stress contagion across the banking system diminished. In 2025, the increase in banks' profits, the improvement in liquidity and solvency were reflected in a decline in the ΔCoVaR ⁴⁴ for the banking system. Positive developments were also observed in the bank-by-bank ΔCoVaR . This positive trend indicates a decrease in the risk level associated with the contagion of financial stress within the banking system.

The PD of D-SIBs declined. Systemic Contingent Claims Analysis⁴⁵ showed that the distance to default (DtD)⁴⁶ for banks widened in 2025. The increase in the equity market value of the selected D-SIBs⁴⁷, the decrease in the risk-free rate were reflected in the positive DtD. As a result of the increase in the DtD for the analyzed banks, the simple arithmetic mean of the model-estimated PD decreased by 4 p.p. during 2025, reaching 46%.

⁴² The ΔCoVaR for the banking sector was calculated using data from 33 banks, considering the long time series available during the observation period and the similarity of individual bank conditions to the banking system. The ΔCoVaR for the banking sector was calculated as the absolute value of the sum of the products of each bank's ΔCoVaR and their respective shares of total banking system capital.

The exponential moving average is a technique used to smooth out the value of an indicator by reducing random and short-term fluctuations. Unlike the simple moving average, this method gives more weight to recent values of the indicator, making it a more accurate representation of current changes in its value.

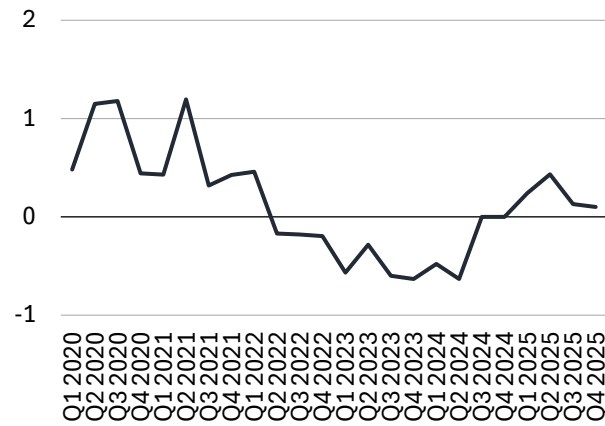
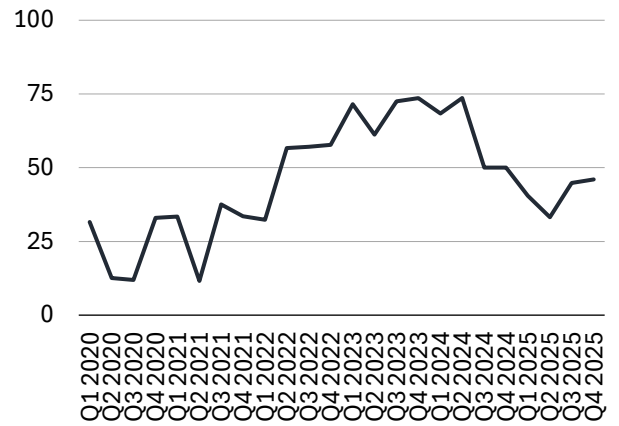
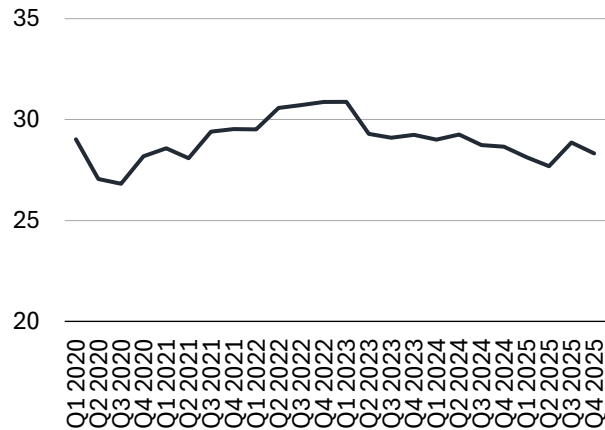
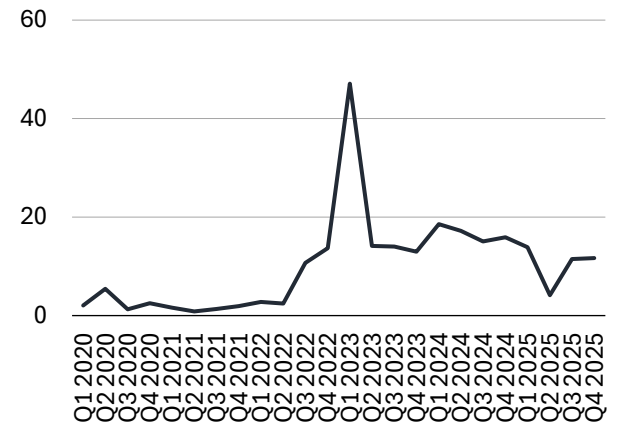
⁴³ The exponential moving average methodology is presented in the Financial Stability Report for 2024.

⁴⁴ The methodology of the dynamic ΔCoVaR model is presented in research publications of the CBU.

⁴⁵ The Systemic Contingent Claims Analysis methodology is presented in the Financial Stability Report for H1 2025.

⁴⁶ DtD measures the number of SD by which the estimated values of assets exceed the distress barrier.

⁴⁷ In the Systemic Contingent Claims Analysis, D-SIBs were selected based on their stock exchange listing, the volatility of their stock prices and the availability of required time-series data.

Figure 21. Distance to default⁴⁸, number of SD**Figure 22. Probability of default, %⁴⁹****Figure 23. Expected Loss of D-SIB Assets, natural logarithm⁵⁰****Figure 24. Share of Expected Shortfall⁵¹ in Banking System Assets, %**

Source: CBU staff calculations.

Notes: DtD value of 0 corresponds to PD of 50%. Also, a positive value indicates a PD below 50%, while a negative value denotes a PD above 50%.

⁴⁸ The DtD is determined using the inverse standard normal distribution based on the aggregated PD:

$$\Phi(x) = \frac{1}{\sqrt{2\pi}} \int_{-\infty}^x e^{-\frac{t^2}{2}} dt$$

$$y = \Phi^{-1}(1 - x)$$

Where,

$\Phi(x)$ – cumulative distribution function of standard normal distribution;
 y – aggregate DtD;
 x – aggregate PD.

⁴⁹ The banks' PDs are aggregated using the simple arithmetic mean.

⁵⁰ In order to aggregate the expected losses of bank assets, the sum of expected losses of each commercial bank is standardized as the natural logarithm of UZS.

⁵¹ Expected shortfall is determined by the expected losses of D-SIBs and the interconnectedness of banks, and represents the expected value of financial losses on assets that exceed the level of VaR(alpha)=0.95.

Contagion risks arising from expected losses in banks declined. The total expected losses on the analyzed D-SIBs' assets in 2025 decreased by 29%. In turn, the share of expected shortfall in total banking system's assets at a 5% probability level declined by 4 p.p. in 2025, reaching 12% at the end of the year. As a result, the total expected losses estimated under the contagion risk decreased.

Credit market conditions improved. As of January 1, 2026, the private credit-to-nominal GDP ratio stood at 28%, remaining nearly unchanged compared with the corresponding period of 2025. In addition, the interest coverage ratio (ICR)⁵² in 2025 reached 20%, representing an increase of 8 p.p. compared with 2024. Despite interest expenses increasing by 15% in 2025 compared with 2024, the ICR strengthened due to the 1.9-fold increase⁵³ in profit before tax (PBT).

Debt-servicing capacity is showing a positive trend. Household deposits are growing faster than the retail loan portfolio. As of January 1, 2026, the deposit balance of individuals amounted to UZS 169.1 trillion, marking an annual increase of 30%. The outstanding household loans increased by 24%, reaching UZS 220.3 trillion⁵⁴. In addition, due to rising household incomes in 2025, household loans-to-disposable income ratio declined by 17%.

The financial soundness conditions of the banking system strengthened. As of January 1, 2026, the share of watch loans and NPLs in the total loan portfolio amounted to 15%, decreasing by 6 p.p. compared with the corresponding period of 2025. Also, the banking system's ROA increased from 1.4% to 2.2%⁵⁵ during 2025. The liquidity and capital adequacy ratios of banks improved.

⁵² The ICR is calculated by dividing PBT by interest expenses.

⁵³ The Central Bank of the Republic of Uzbekistan. (2026). Statistical Bulletin for 2025.

⁵⁴ The Central Bank of the Republic of Uzbekistan. (2026). Statistical Bulletin for 2025.

⁵⁵ The Central Bank of the Republic of Uzbekistan. (2026). Statistical Bulletin for 2025.

Figure 25. Credit Market Conditions

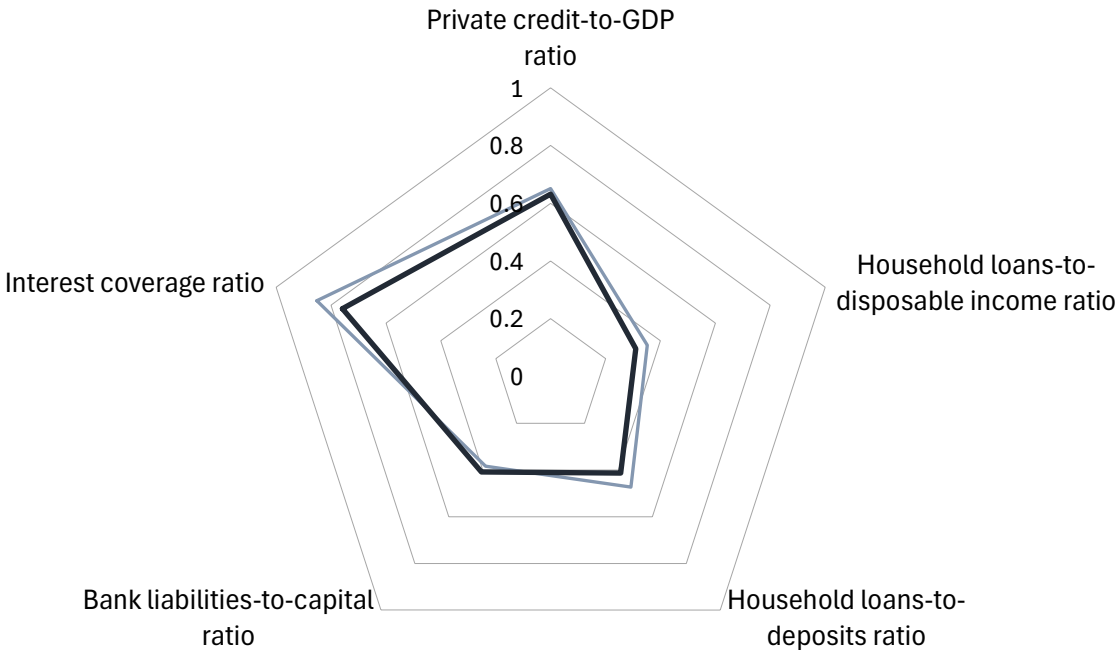
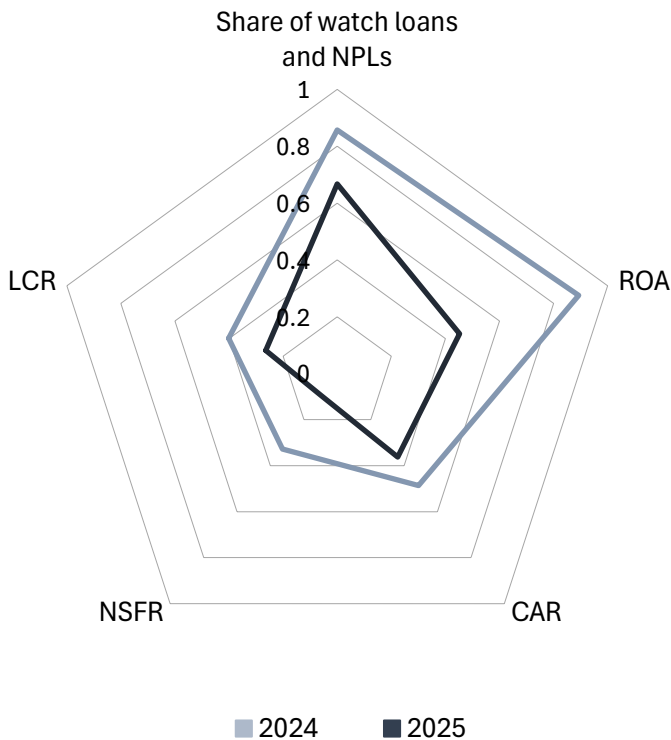


Figure 26. Financial Soundness Conditions



Sources: National Statistics Committee and CBU staff calculations

Notes: Indicator values closer to 0 indicate an improvement in conditions, whereas values closer to 1 indicate a deterioration.

Figure 27. CET1 Ratio, %

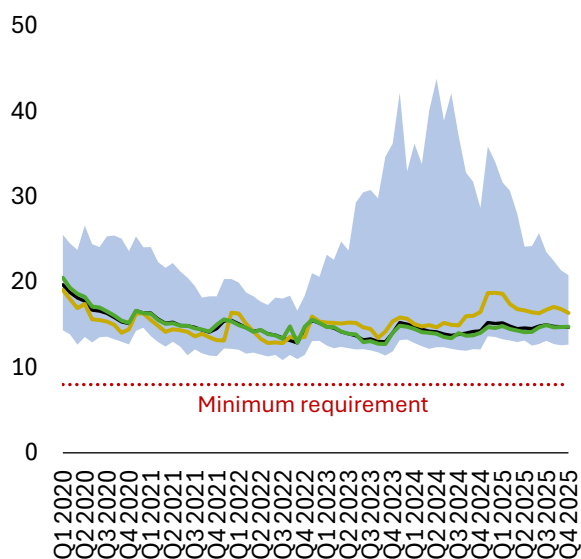
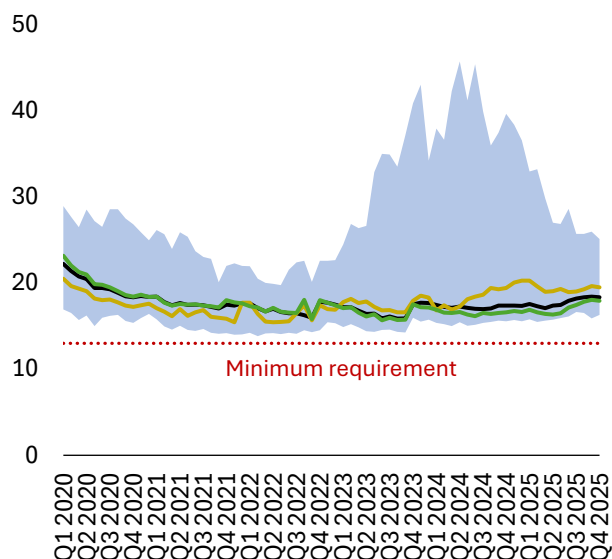
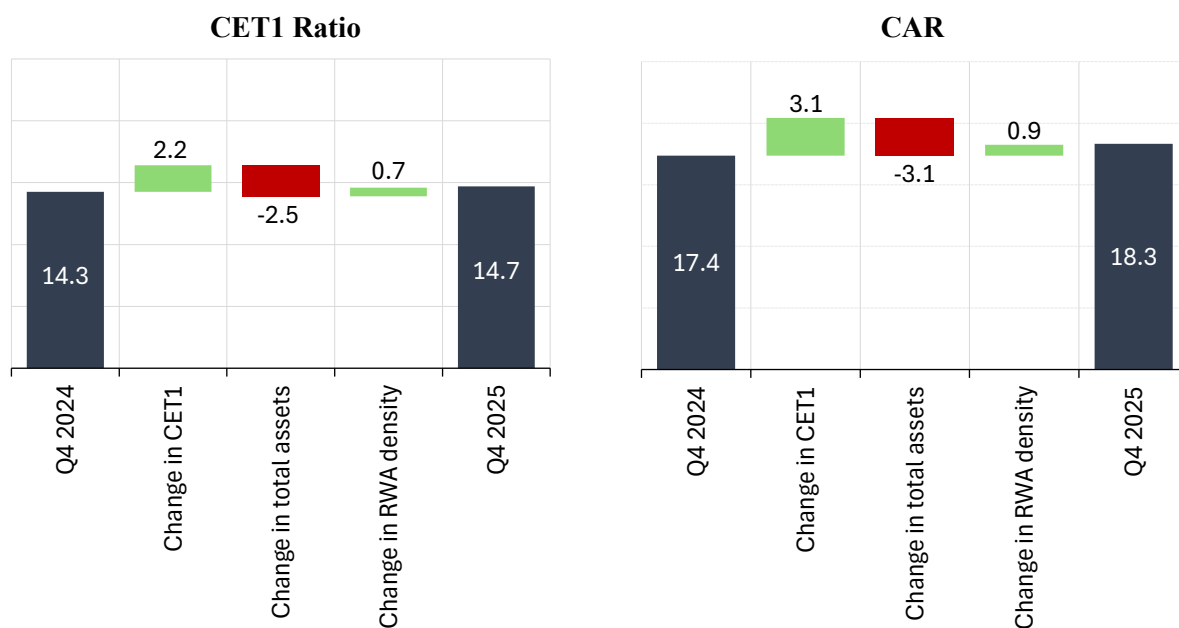


Figure 28. CAR, %



■ Interquartile range (IQR)
— Banking system
— Median
— D-SIBs

Figure 29. Changes in Capital Adequacy Ratios, %



Source: CBU.

Banks maintain sufficient capital buffers. As of January 1, 2026, the CAR of the banking system stood at 18.3%, increasing by 0.9 p.p. in 2025. In this context, the rise in the capital had a positive impact of 3.1 p.p., while the change in the risk-weighted assets (RWA) density exerted a 0.9 p.p. upward impact. The CAR for D-SIBs was 17.9%. In addition, the interquartile range (IQR)⁵⁶ of the CAR narrowed, and the indicators of the banking system and D-SIBs were slightly lower than the median. In particular, the CET1 ratio for the banking system was 14.7%, and 14.8% for D-SIBs. The introduction of an additional capital buffer of 1% for D-SIBs⁵⁷ from January 1, 2026 will contribute to further strengthening the solvency of these banks.

The share of investments and securities in banking system assets increased. As of January 1, 2026, total banking system assets grew by 20% year-on-year, reaching UZS 924.8 trillion. Loans accounted for 63% of bank assets, while investments and securities accounted for 11%. Despite the share of loans in bank assets remaining high, the investment portfolios of banks continue to expand. In particular, in 2025, the net value of investments and securities in banking system assets rose by 73%, amounting to UZS 103 trillion.

The share of deposits in the banking system's funding sources is steadily growing. At the end of 2025, deposits, loans and equity constituted 45%, 27% and 15% of the banking system's funding sources, respectively. While the share of loans in bank liabilities and capital decreased by 4 p.p., the share of deposits rose by 5 p.p. At the same time, as of January 1, 2026, outstanding deposits amounted to UZS 417.3 trillion, increasing by 35%⁵⁸ compared with the corresponding period of 2025.

Banking system's liquidity continues to remain stable. At the end of 2025, the LCR⁵⁹ for the banking system reached 208%, while the NSFR⁶⁰ stood at 120%, representing annual increases of 14 p.p. and 5 p.p., respectively. In addition, the LCR and NSFR of D-SIBs remained below the banking system median, standing at 182% and 120%, respectively.

⁵⁶ The IQR is the interval between the 25th and 75th quantile boundaries.

⁵⁷ O'zbekiston Respublikasi Markaziy banki boshqaruvining 2025 yil 2 oktabrdagi "Banklar kapitalining monandligiga qo'yiladigan talablar to'g'risidagi nizomni tasdiqlash haqida"gi 21/6-sonli qarori.

⁵⁸ The Central Bank of the Republic of Uzbekistan. (2026). Statistical Bulletin for 2025.

⁵⁹ The LCR is defined as the ratio of HQLA to total net cash outflows over the next 30 calendar days.

⁶⁰ The NSFR is defined as the ratio of the available amount of stable funding to the required amount of stable funding.

Figure 30. Decomposition of Bank Assets, %

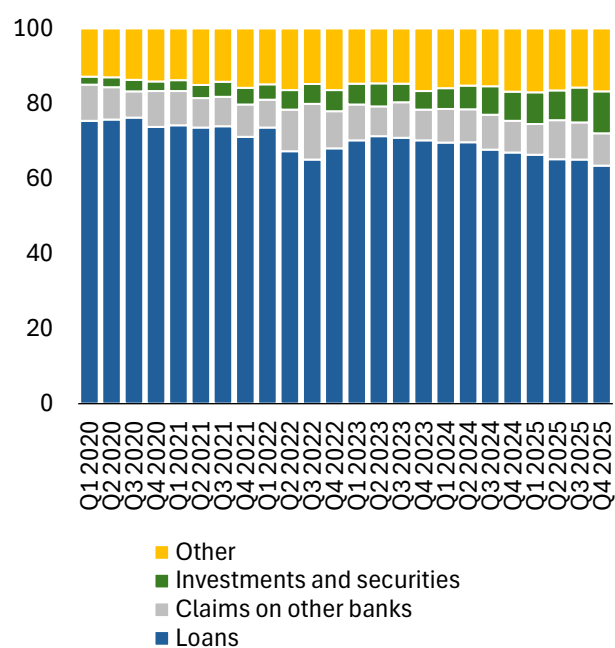


Figure 31. Decomposition of Banks' Funding Sources, %

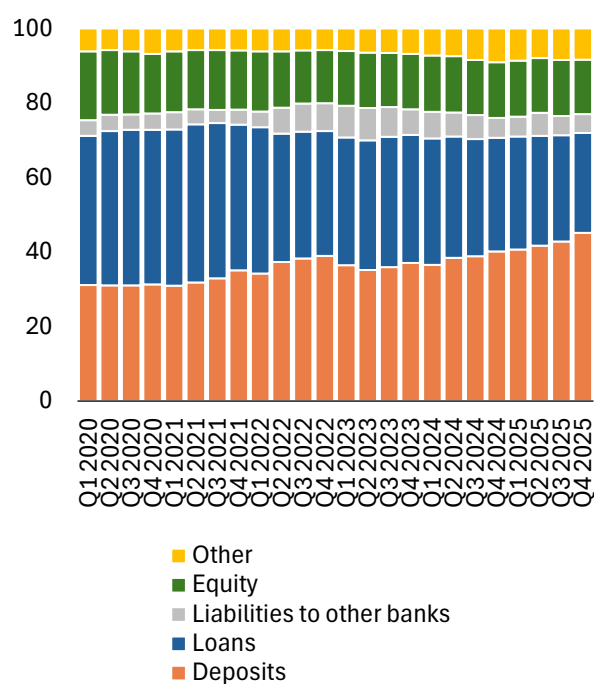


Figure 32. NSFR, %

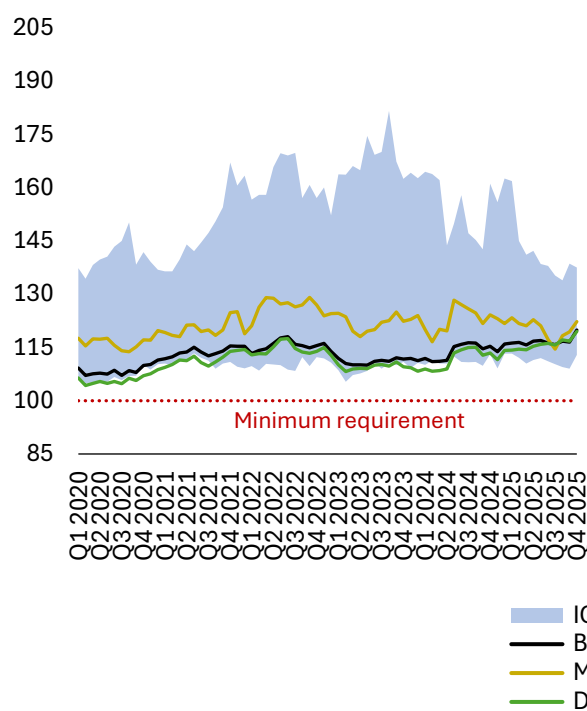
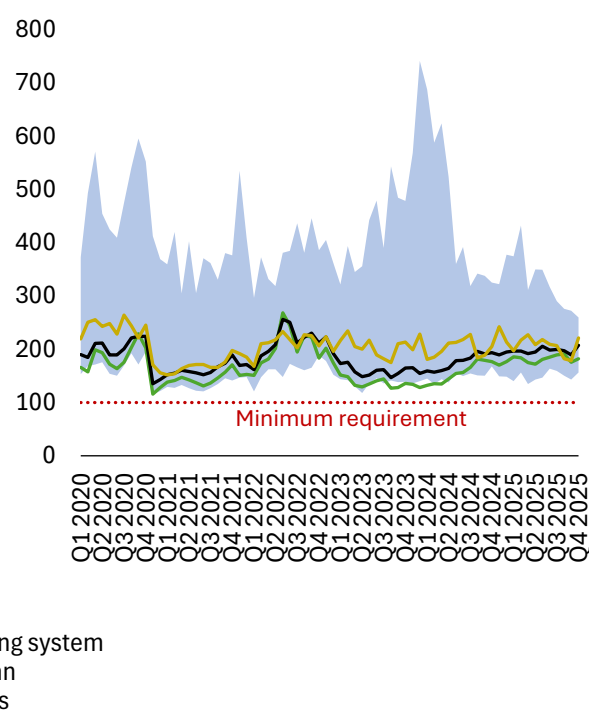


Figure 33. LCR, %



Source: CBU.

Figure 34. RWA Density in Emerging Market and Developing Economies (EMDEs)⁶¹, %

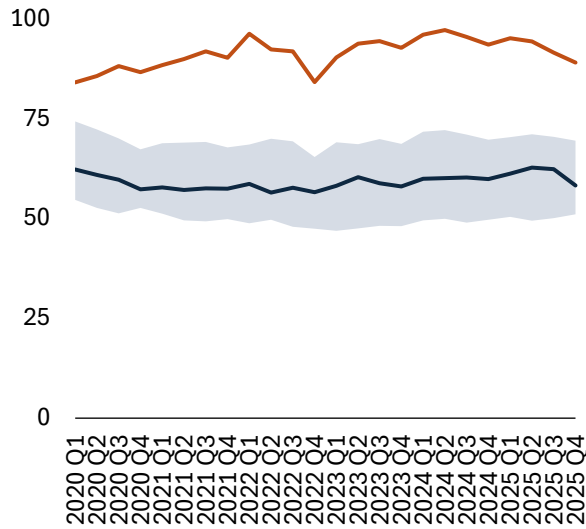
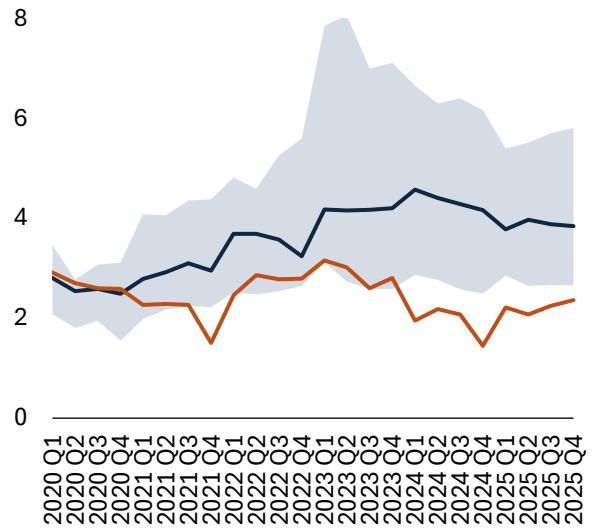


Figure 35. Return on RWA (RORWA) in EMDEs⁶², %



■ IQR
— Median
— Uzbekistan

Sources: National authorities and CBU staff calculations.

RWA density⁶³ in Uzbekistan's banking system remains high. In 2025, the RWA density of Uzbekistan's banking system decreased from 93% to 89%. As of January 1, 2026, the RWA density in Uzbekistan was 20 p.p. higher than the upper limit of the IQR for EMDEs.

The RORWA of Uzbekistan's banking system remains relatively low. The RORWA⁶⁴ of Uzbekistan amounted to 2.4% at the end of 2025. Uzbekistan's RORWA stayed below the IQR of EMDEs.

The banking system recorded high profitability. In 2025, the total net profit after tax (NPAT)⁶⁵ of the banking system amounted to UZS 15.5 trillion, increasing 2.2 times compared with 2024. As a result of the rapid growth of NPAT, the ROE⁶⁶ of banks increased by 5.8 p.p. in 2025, reaching 12.4% as of January 1, 2026.

⁶¹ According to the IMF classification of EMDEs, the following countries are included: Albania, the United Arab Emirates, Bulgaria, Brazil, Bhutan, Hungary, Guatemala, Honduras, Georgia, the Dominican Republic, Zambia, Colombia, the Democratic Republic of the Congo, Lesotho, Mauritius, Malaysia, the Maldives, Mexico, Moldova, Mongolia, Panama, Paraguay, Pakistan, Poland, Romania, Samoa, the Seychelles, Somalia, Thailand, Tajikistan, Tonga, Trinidad and Tobago, Ukraine, Montenegro, North Macedonia, Uzbekistan, Kyrgyzstan, Kazakhstan, Kuwait and India.

⁶² According to the IMF classification of EMDEs, the following countries are included: Albania, Brazil, Hungary, Guatemala, Honduras, the Dominican Republic, Colombia, the Democratic Republic of the Congo, Malaysia, the Maldives, Mexico, Moldova, Panama, Paraguay, Pakistan, the Seychelles, Tonga, North Macedonia, Uzbekistan, Kyrgyzstan, Kazakhstan and India.

⁶³ To calculate RWA density, the amount of RWA is divided by total assets. The RWA density provides a measure of riskiness of assets. An increase in the RWA density indicates a deterioration in overall risk profile of bank assets, while a decrease in the RWA density indicates an improvement in risk quality of assets.

⁶⁴ RORWA is defined as the ratio of annualized PBT to the average amount of RWA of the banking system.

⁶⁵ NPAT is the net profit earned from financial activities after income tax and adjustments to profit.

⁶⁶ ROE is determined by the ratio of annualized NPAT to the average amount of total banking system equity.

Figure 36. NPAT of Banking Sector, trillion UZS

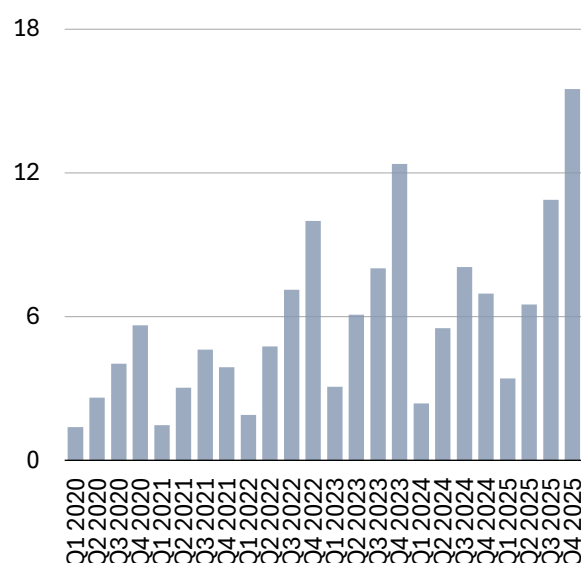


Figure 37. Profitability in Banking Sector, %

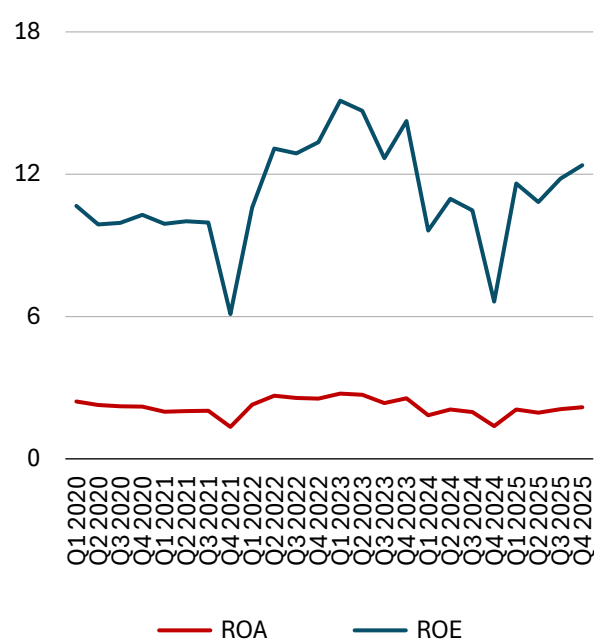


Figure 38. ROA Decomposition, %

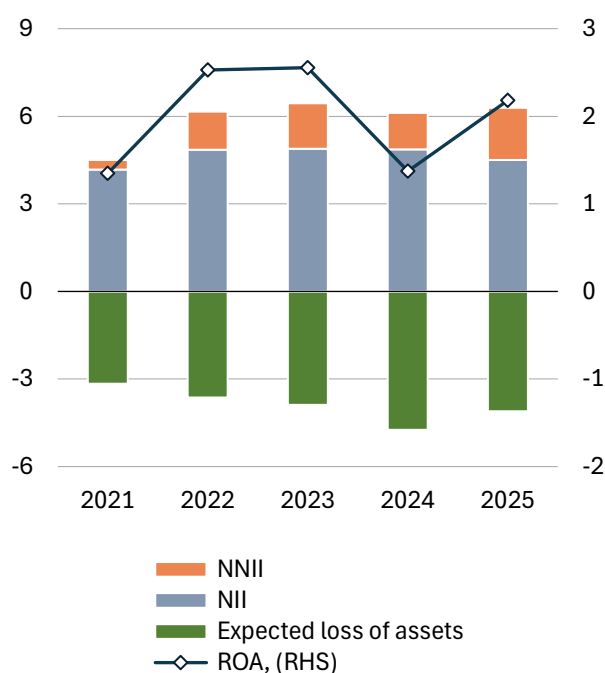
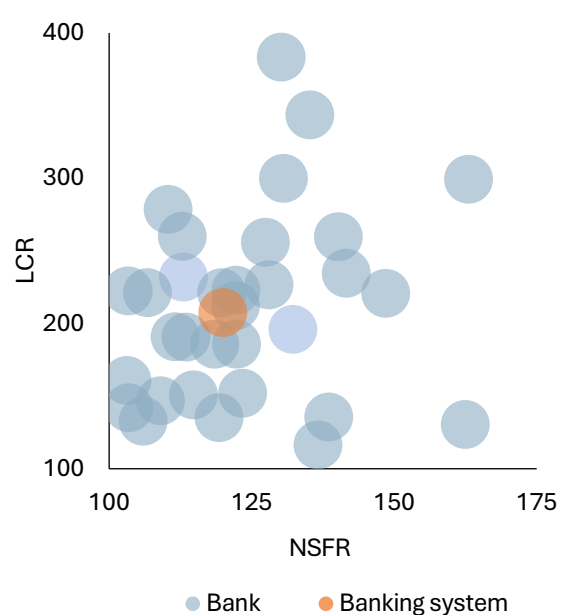


Figure 39. Liquidity Indicators, % (as of January 1, 2026)



Source: CBU.

Note: Banks with LCR and NSFR exceeding 400% and 180%, respectively, are excluded in the graph.

ROA⁶⁷ improved in banking system. At the end of 2025, ROA amounted to 2.2%, marking an increase of 0.8 p.p. compared with the same period of 2024. The rise of 4% in the expected loss on assets in 2025 compared with 2024 had a negative impact on ROA. ROA increased due to an 11% rise in NII and a 39% increase⁶⁸ in net non-interest income (NNII).

Loan portfolio quality improved across the banking system. As of January 1, 2026, the volume of NPLs decreased by 15% year-on-year, amounting to UZS 18.1 trillion⁶⁹. In 2025, the loan portfolio expanded, while the volume of NPLs reduced. As a result, the share of NPLs in total loans in the banking system declined by 1 p.p. in 2025, reaching 3%. In D-SIBs, NPLs accounted for 3% of the loan portfolio, decreasing by 1.3 p.p. In addition, the share of NPLs in Uzbekistan converged toward the median for the group of countries in Europe and Central Asia (ECA), excluding high-income countries. By the end of 2025, the share of loans classified as “non-satisfactory” and “doubtful” in NPLs accounted for 38% and 33%, respectively.

The impact of loan losses on banks’ solvency reduced. At the end of 2025, the NPLs net of provisions to CAR of the banking system amounted to 6%, declining by 4 p.p. compared with 2024. The NPL coverage ratio⁷⁰ increased by 7 p.p., reaching 53%. This indicates that the banking system’s resilience to expected loan losses strengthened. Also, the exchange rate had a negligible impact on the annual change in the share of NPLs.

Banks’ HQLA grew. As of January 1, 2026, the share of HQLA in total bank assets stood at 21%, increasing by 4 p.p. compared to the beginning of 2025. During 2025, the HQLA grew by 42%. In this context, the main contributing factors were a 27% increase⁷¹ in claims on the CBU and a 81% rise in the volume of treasury bonds within the bank assets.

⁶⁷ ROA is determined by the ratio of annualized PBT to the average amount of total assets of the banking system.

⁶⁸ The Central Bank of the Republic of Uzbekistan. (2026). Statistical Bulletin for 2025.

⁶⁹ The Central Bank of the Republic of Uzbekistan. (2026). Statistical Bulletin for 2025.

⁷⁰ The NPL coverage ratio is calculated as the ratio of provisions for NPLs to the total volume of NPLs.

⁷¹ The Central Bank of the Republic of Uzbekistan. (2026). Statistical Bulletin for 2025.

Figure 40. Total volume of NPLs and Outstanding Loans

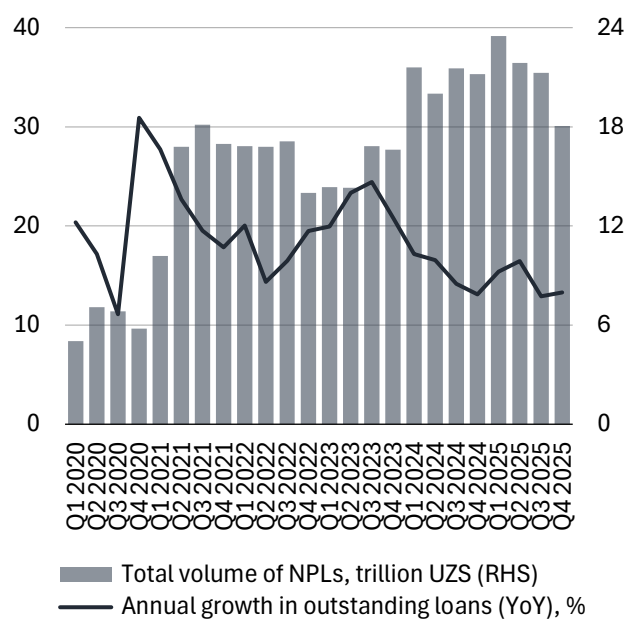


Figure 41. Share of NPLs in Total Loans, %

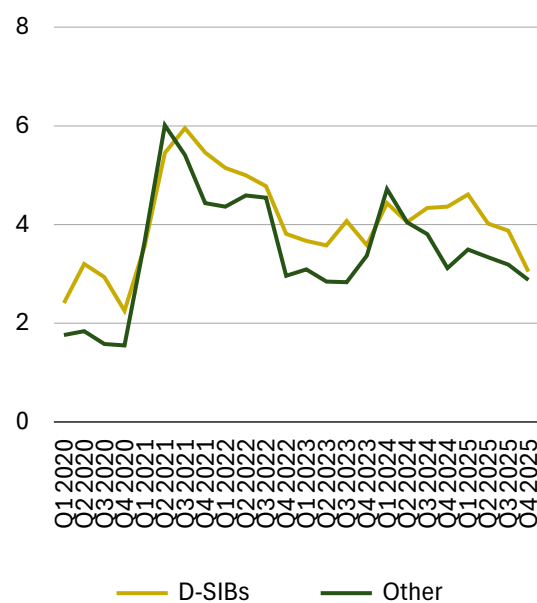


Figure 42. NPL Ratio in ECA Countries⁷², %

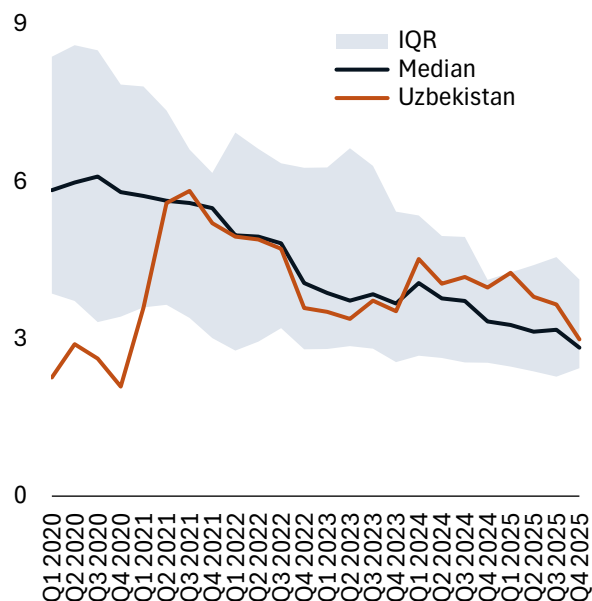
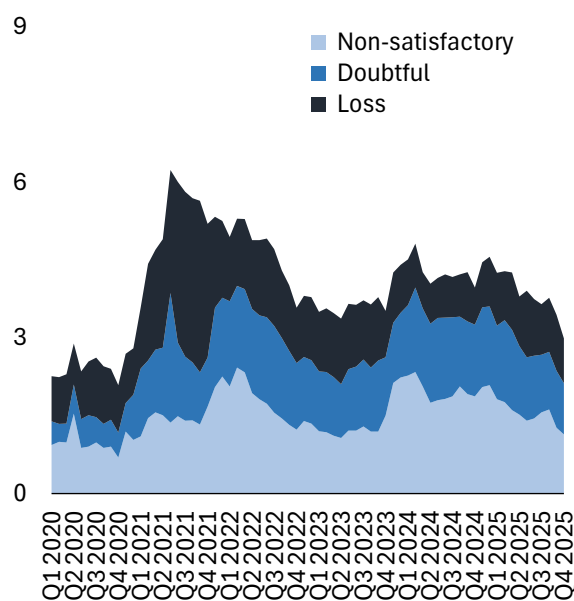


Figure 43. NPL Composition, %



Sources: IMF, national authorities and CBU staff calculations.

⁷² According to the World Bank classification, the Europe and Central Asia country group (excluding high-income countries) includes Albania, Armenia, Bosnia and Herzegovina, Georgia, Kosovo, Moldova, Tajikistan, Türkiye, Ukraine, Montenegro, North Macedonia, Uzbekistan, Kazakhstan and the Kyrgyz Republic.

Figure 44. NPLs and Provisions, %

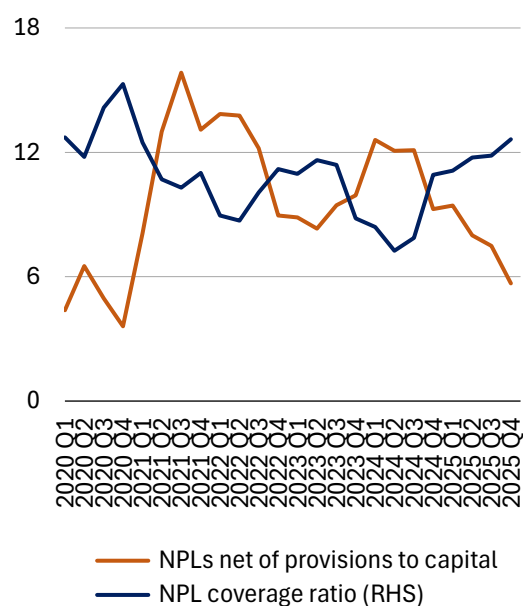


Figure 45. Decomposition of Annual Change in NPL Ratio, %

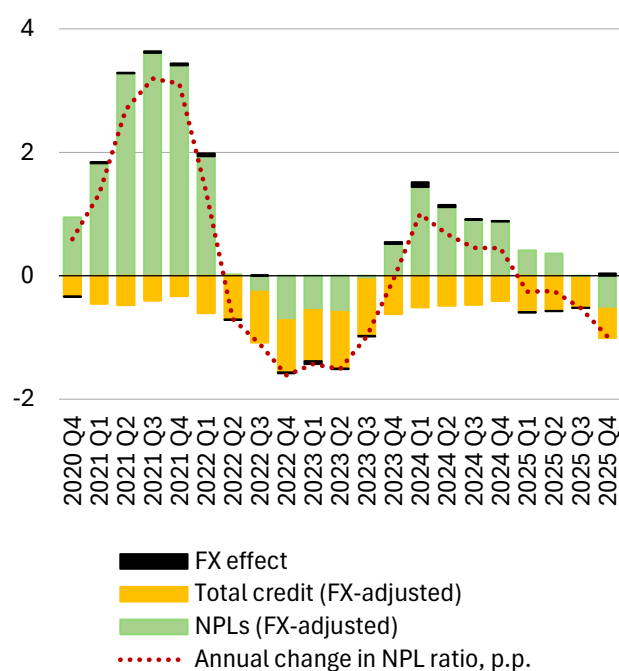


Figure 46. HQLA-to-Total Assets Ratio, %

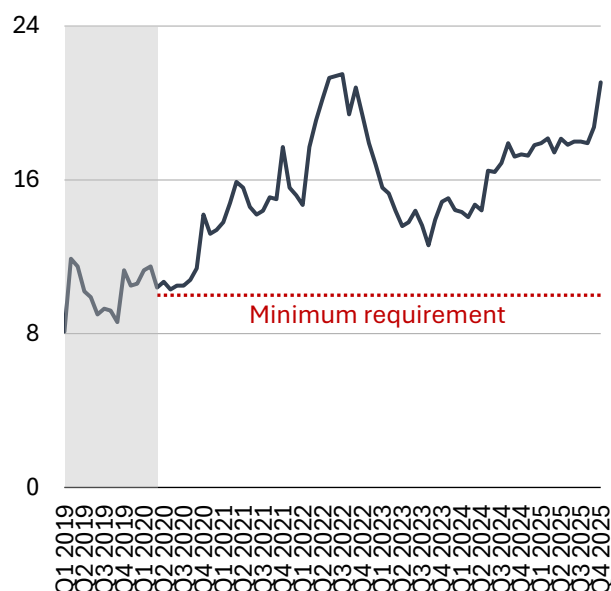
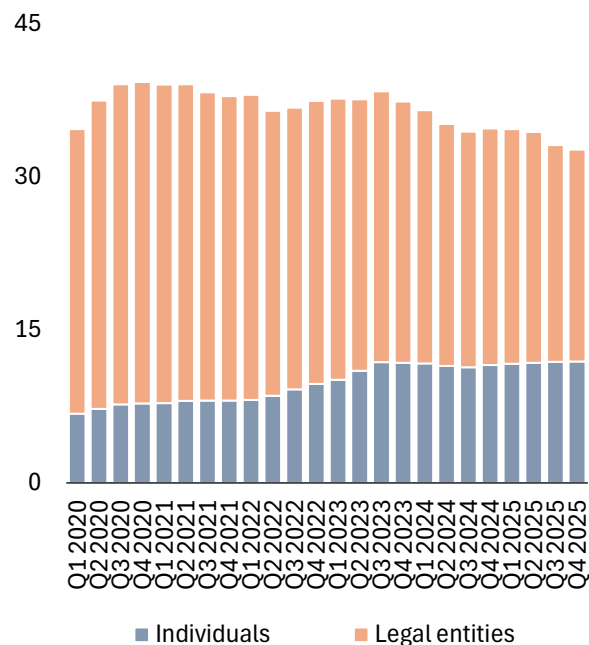


Figure 47. Loans to individuals and Legal Entities-to-GDP Ratio, %



Source: CBU.

Note: As of June 1, 2020, the CBU has set a minimum requirement of 10% for the ratio of HQLA of banks to total assets.

Retail lending remains highly active. As of January 1, 2026, outstanding loans to individuals increased by 24% year-on-year, reaching UZS 220.3 trillion. Outstanding loans to legal entities amounted to UZS 383.7 trillion, representing an increase of 8%. In 2025, the share of loans to individuals in the banking system's loan portfolio grew from 33% to 36%. Additionally, by the end of 2025, the ratio of outstanding loans to individuals and legal entities to GDP stood at 12% and 21%, respectively⁷³.

Dollarization of banks' loan and deposit portfolios continues to decline. As of January 1, 2026, loans in FX accounted for 39% of the total loan portfolio, dropping by nearly 4 p.p. in 2025. In addition, the share of FX deposits in the total deposit portfolio decreased from 25% to 21% during 2025. The decline in loan dollarization reduces credit risk arising from the negative impact of FX rate volatility on borrowers' debt-servicing capacity.

The credit-to-GDP ratio in Uzbekistan's banking system declined. As of January 1, 2026, the ratio of banks' loan portfolio in Uzbekistan to GDP stood at 33%, declining by 2 p.p. year-on-year. Uzbekistan's credit-to-GDP ratio remained at the lower bound of the IQR for ECA countries. In addition, Uzbekistan's credit-to-GDP ratio was 7 p.p. higher than the median for the Central Asia and Caucasus (CCA) countries. Overall, the downward trend in the credit-to-GDP ratio reflects a reduction in the economy's total debt burden.

⁷³ The Central Bank of the Republic of Uzbekistan. (2026). Statistical Bulletin for 2025.

Figure 48. Credit-to-GDP Ratio, %

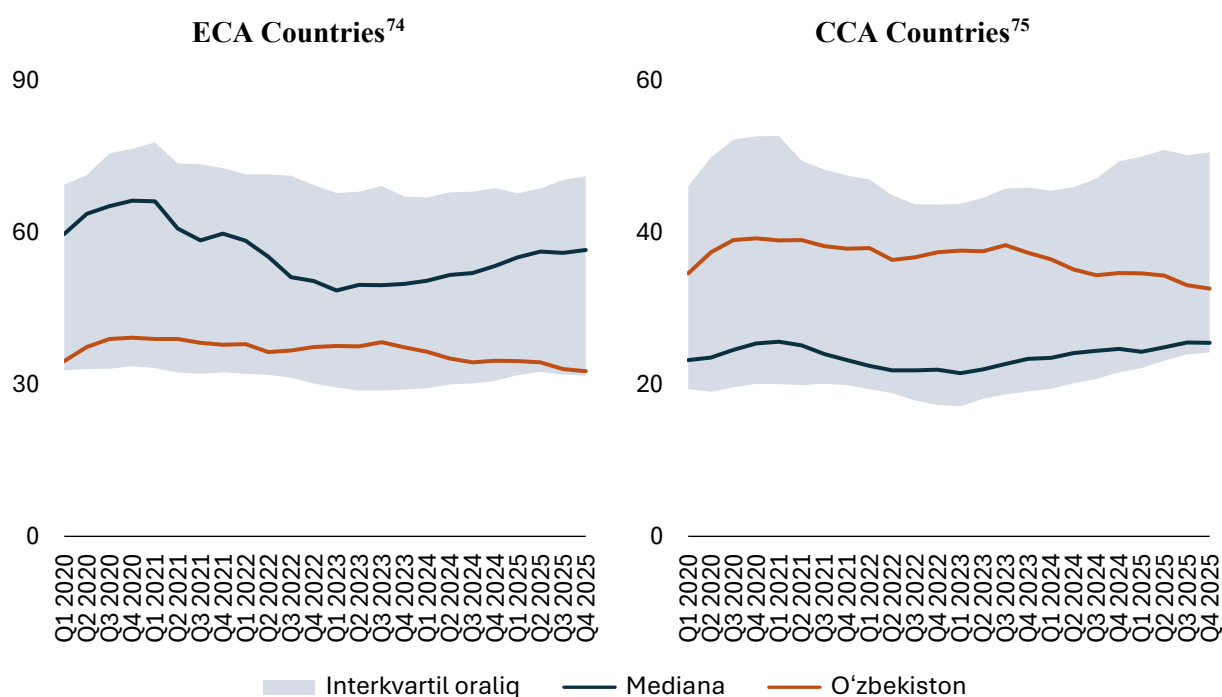
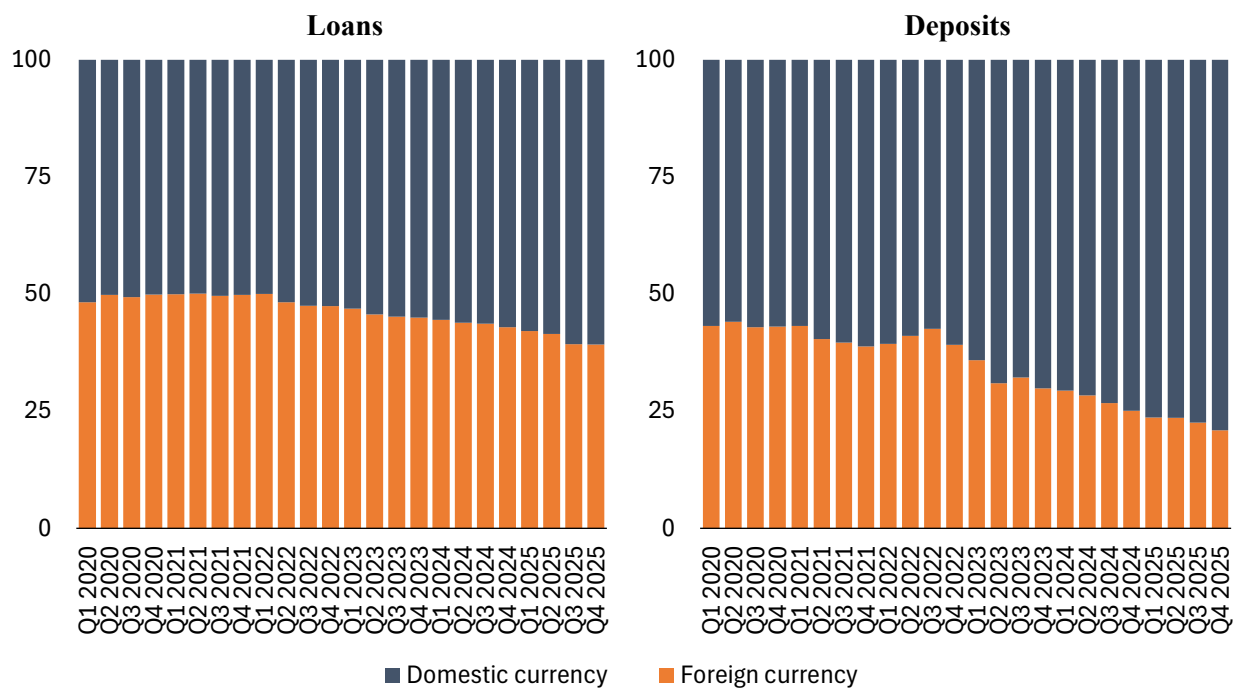


Figure 49. Dollarization, %



Sources: IMF, National authorities, National Statistics Committee and CBU staff calculations.

⁷⁴ According to the World Bank classification, the ECA country group includes Albania, Armenia, Bulgaria, Hungary, Germany, Georgia, Spain, Kosovo, Latvia, Moldova, Azerbaijan, Poland, Russia, Slovakia, Tajikistan, Türkiye, Ukraine, Croatia, Montenegro, Sweden, Estonia, Uzbekistan, Kazakhstan and the Kyrgyz Republic.

⁷⁵ According to the IMF classification, the CCA country group includes Armenia, Georgia, Azerbaijan, Tajikistan, Uzbekistan, the Kyrgyz Republic and Kazakhstan.

Figure 50. Annual Growth Rate of Deposits in FC, %

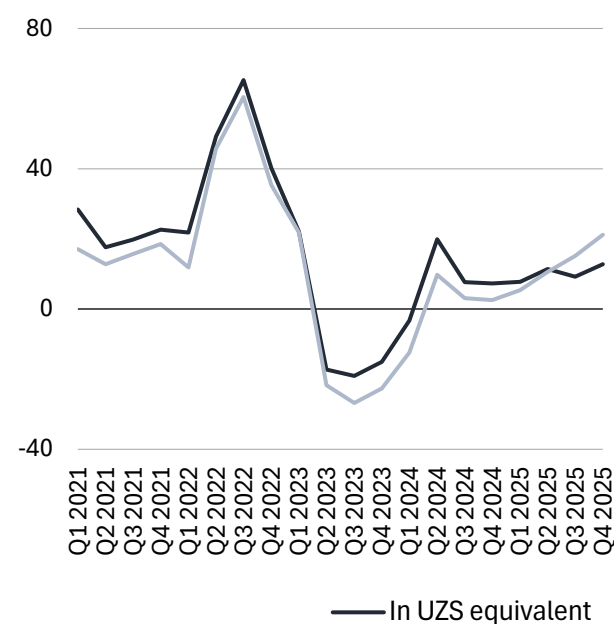


Figure 51. Annual Growth Rate of Loans in FC, %

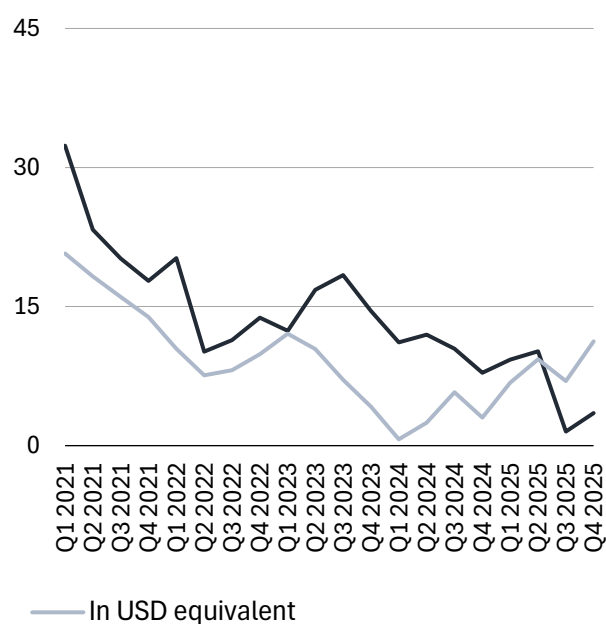


Figure 52. Net Open FX position, trillion UZS

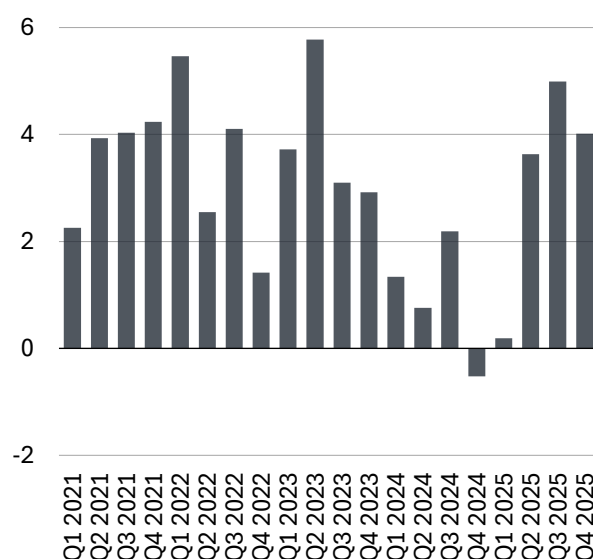
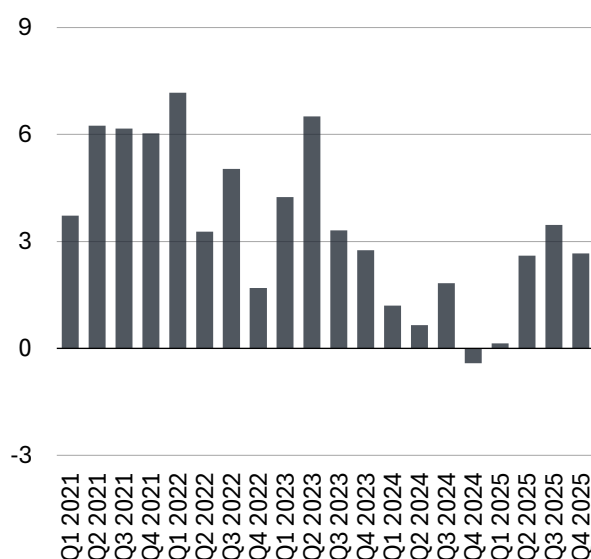


Figure 53. Net Open FX Position-to-Total Regulatory Capital Ratio, %



Source: CBU staff calculations.

Note: The annual growth rates of outstanding FX loans and deposits in USD are calculated by dividing outstanding balances of loans and deposits in UZS at the end of the period by the FX rate on the corresponding date.

The banking system's exposure to FX risks increased slightly. At the end of 2025, the outstanding amounts of FC loans and deposits in USD rose by 11% and 21% on an annual basis, respectively. In particular, the annual growth rate of outstanding FC loans in USD accelerated by 8 p.p. in 2025 compared with 2024, while that of FC deposits accelerated by 19 p.p. The increase in outstanding FC deposits on banks' balance sheets heightens liquidity risk, given the high likelihood that depositors may redirect their funds to foreign assets in an environment where residents of Uzbekistan are free to invest abroad⁷⁶. The rise in FC lending also raises the magnitude of credit risk arising from FX rate fluctuations. At the same time, the widening of the difference between the banking system's assets and liabilities in FC to UZS 4 trillion⁷⁷ at the end of 2025 indicates an increase in possible losses arising from FX risks. Meanwhile, as of January 1, 2026, the ratio of the net open FX position to total regulatory capital stood at 2.7%⁷⁸. The ratio remained below the regulatory requirement, indicating that the banking system has sufficient solvency to absorb possible losses arising from FX risks.

The difference between loans and deposits in the banking system continues to narrow. At the end of 2025, outstanding loans in the banking system grew by 13% year-on-year, while deposits grew by 35%. As a result, the loan-to-deposit ratio decreased by 28 p.p. in 2025, reaching 145%. Moreover, as of January 1, 2026, the difference between loans and deposits in the banking system amounted to UZS 186.7 trillion, declining by 17% compared with the beginning of 2025.

⁷⁶ O'zbekiston Respublikasi Markaziy banki boshqaruvining 2026 yil 2 iyundagi "Kapital harakati bilan bog'liq ayrim valyuta operatsiyalarini amalga oshirish tartibi to'g'risidagi nizomga o'zgartirishlar kiritish haqida"gi 15/1–sonli qarori.

⁷⁷ The Central Bank of the Republic of Uzbekistan (2025). Financial Soundness Indicators.

⁷⁸ The Central Bank of the Republic of Uzbekistan (2025). Financial Soundness Indicators.

Figure 54. Loan-to-Deposit Ratio and Difference between Loans and Deposits

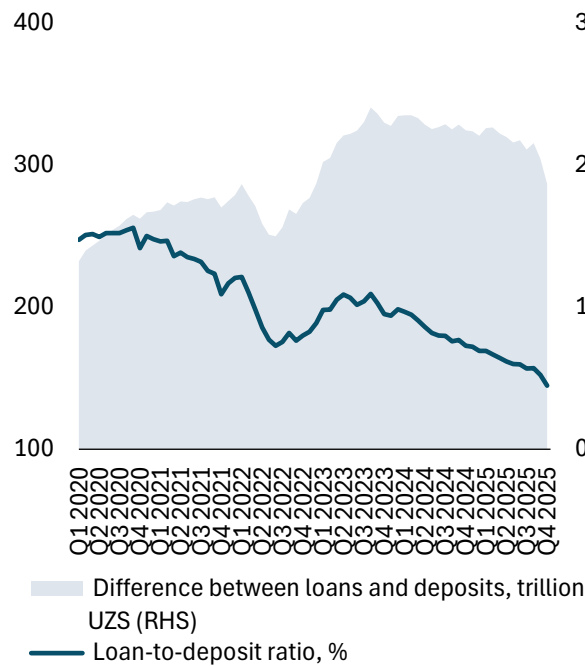


Figure 55. Concentration of Outstanding Loans and Deposits*, HHI

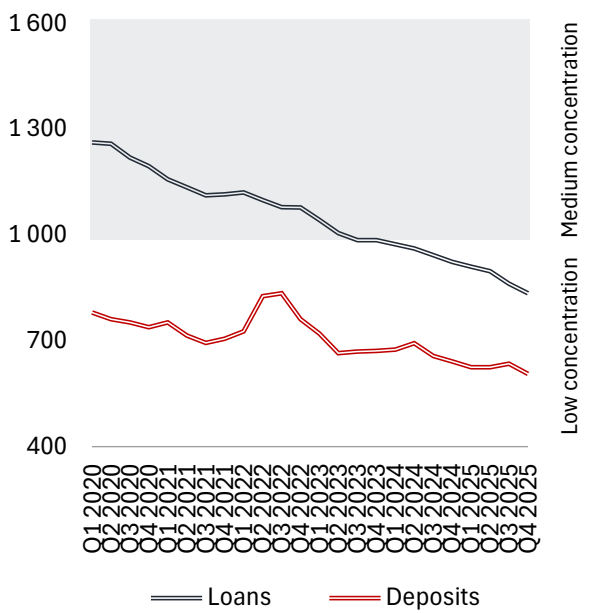


Figure 56. Bank-by-Bank Annual Growth Rates of Loans and Deposits, 2025, %**

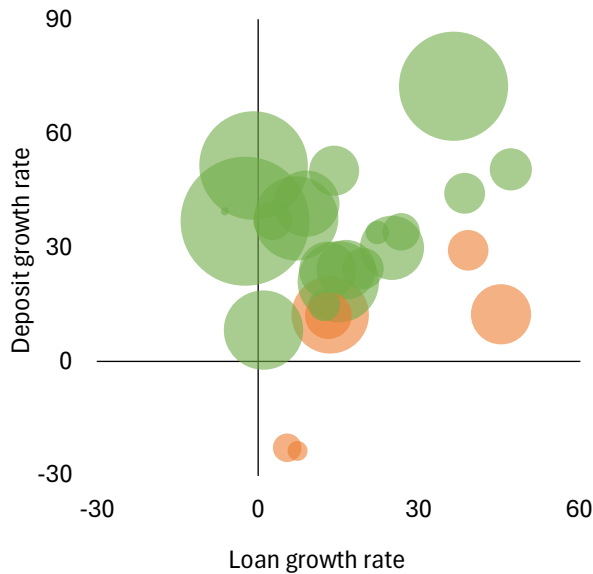
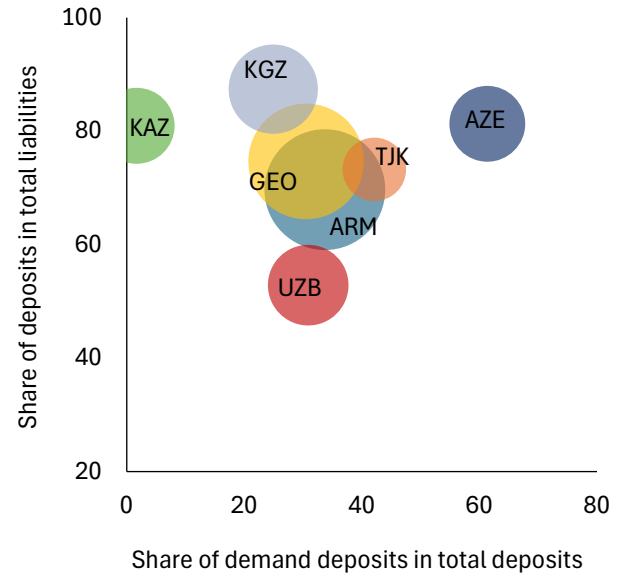


Figure 57. Share of Deposits in CCA Countries*, % (as of January 1, 2026)**



Sources: National authorities and CBU staff calculations.

Notes: *The Herfindahl-Hirschman Index (HHI) categorizes the level of competition in the banking services market into the low (below 1000), medium (from 1000 to 1800), and high concentration (above 1800) groups. The HHI is calculated as the sum of the squares of each bank's shares of deposit and loan balance in the total banking system deposit and loan balance.

**In the graph, the color green represents banks with a faster growth rate of deposits compared to loans, while light red indicates banks with a slower growth rate of deposits than loans. The bubble size represents the share of bank's assets in all banks' assets.

***The bubble size represents the share of total banking assets in the country's GDP.

A low concentration of outstanding loans and deposits persists. In 2025, the HHI for bank loans decreased by 89 units to 835. In this case, the HHI for outstanding loans to legal entities stood at 1,120, while that for individuals reached 703. In addition, as of January 1, 2026, the HHI for bank deposits declined to 606, remaining in the low concentration group.

Deposits account for a relatively small share of Uzbekistan's banking system liabilities. As of January 1, 2026, demand deposits accounted for 31% of total deposits, representing a decline of 3 p.p. compared to the beginning of 2025⁷⁹. The share of deposits in bank liabilities in Uzbekistan stood at 53%, increasing by 6 p.p. Despite the rise in the share of deposits in the total liabilities in the banking system of Uzbekistan, it remained below the values of the CCA countries at the end of 2025.

⁷⁹ The Central Bank of the Republic of Uzbekistan. (2026). Statistical Bulletin for 2025.

Box 2. Foreign Exchange Risk Assessment Approach Based on Extreme Value Theory

The reduction in foreign trade turnover resulting from disruptions to international logistics under the influence of geopolitical instability, particularly the persistence of a negative CAB, may create pressure on the domestic FX market. This, in turn, further increases the need to assess systemic risks that may arise from FX rate fluctuations. Traditional statistical approaches generally focus on the central part of a distribution and assess risks based on average dynamics. Financial crises are often associated with low-probability extreme fluctuations that lead to substantial losses.

The high share of assets in FX on banks' balance sheets increases their exposure to FX risk arising from exchange rate fluctuations. In particular, extreme changes in the exchange rate directly contribute to losses in conditions where banks maintain open FX positions. Moreover, high FX rate volatility may impair the quality of FX assets, resulting in higher credit risk, weaker solvency, and the emergence of default risk. Therefore, assessing the resilience of banks under conditions of macroeconomic instability and extreme shocks, as well as the contagion of these risks to the banking system, is of particular importance.

Approaches based on EVT⁸⁰ make it possible to assess extreme volatility that cannot be captured by simple distributional laws, as well as bank crises arising from chain reactions within the system (Appendix 2).

In the approach based on EVT, negative extreme values of FX rate volatility are modeled separately. Based on this, the expected shortfall of negative FX rate volatility is expressed as follows⁸¹:

$$ES_{q,t+1} = \mu_{t+1} + \sigma_{t+1}ES_q^{EVT}$$

Where:

$ES_{q,t+1}$ – the conditional expected shortfall of negative FX rate volatility at the q -quantile for period $t+1$;

μ_{t+1} – the conditional mean estimated using the Autoregressive Moving Average (ARMA) model;

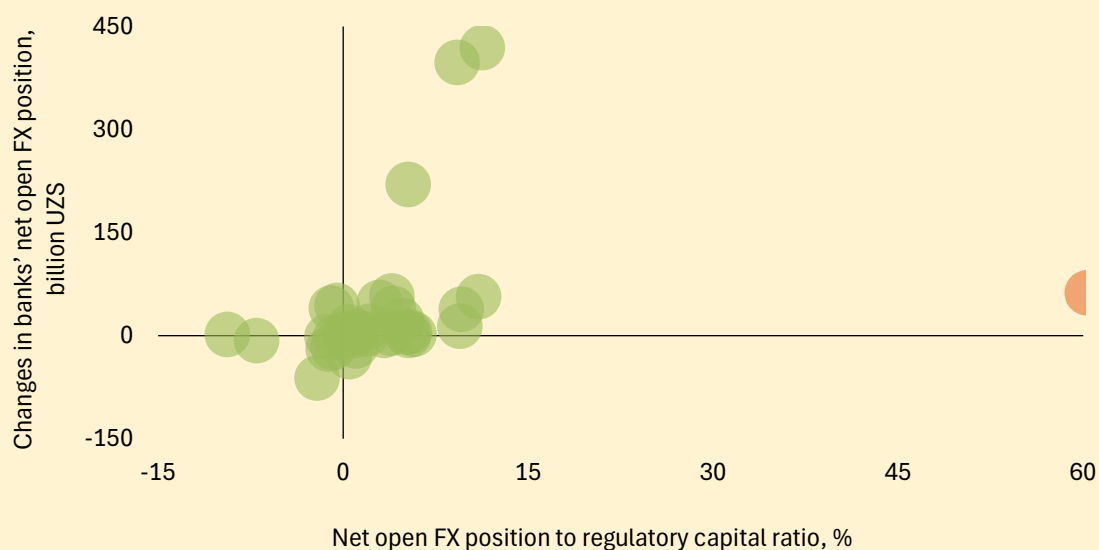
σ_{t+1} – the conditional SD estimated using the Generalized Autoregressive Conditional Heteroskedasticity (GARCH) model;

ES_q^{EVT} – the expected shortfall of FX rate at the q -quantile estimated for the standardized residuals using EVT.

⁸⁰ Nikzad, R. (2011). Extreme Value Theory with an Application to Bank Failures through Contagion. University of Ottawa.

⁸¹ Soltane, H., Karaa, A., & Bellalah, M. (2012) Conditional VaR using GARCH-EVT approach: Forecasting Volatility in Tunisian Financial Market. Journal of Computations & Modelling.

Figure 58. Changes in Banks' Net Open FX Position at the Extreme Value of the FX Rate and Its Ratio to Regulatory Capital



Source: CBU.

Note: Changes in the net open FX position at the extreme FX rate incorporate the change in its nominal UZS value attributable to the model-estimated FX rate. In the graph, green indicates banks whose net open FX position relative to total regulatory capital at the extreme FX rate remains compliant with the regulatory requirement, whereas brown indicates banks whose ratio falls outside the prescribed regulatory standard.

The expected extreme FX rate for the next period is estimated using data from the previous period, and its balance-sheet impact on banks is assessed to quantify potential losses.

Using the EVT approach, extreme FX rate realizations at the end of H1 2026 were estimated based on historical FX rate dynamics. The analysis then quantified potential changes in banks' FX-denominated assets and liabilities and the corresponding net open FX position-to-total regulatory capital ratios.

As FC-denominated assets exceed FC-denominated liabilities across the banking system, extreme FX rate movements could increase the banking system's net long FX position to as much as 3.3% of total regulatory capital. At the individual bank level, only one bank may breach the regulatory requirement for the net open FX position⁸².

For banks with FC-denominated assets below FC-denominated liabilities, the net open FX position could decline to as much as 1.8% of total regulatory capital. Despite these potential balance-sheet effects, contagion risk is not evident, as no bank defaults have been observed as a direct result of extreme FX rate movements.

⁸² O'zbekiston Respublikasi Markaziy banki boshqaruvining 2021 yil 30 apreldagi "Ochiq valyuta pozitsiyasini yuritish qoidalarini tasdiqlash to'g'risida"gi 8/1-son qarori.

Box 3. Systemic Risk Survey

In January 2026, the CBU conducted the latest survey⁸³ among all commercial banks (respondents) with the aim of assessing possible systemic risks in the country's financial system.

Geopolitical risks, rising household debt burden, exchange rate volatility, high inflation and credit risk remain the top risks that may negatively impact Uzbekistan's financial system. Respondents' concerns about the escalation of the geopolitical situation, exchange rate and the acceleration of inflation have eased. Concerns over credit risk have intensified, making it one of the main risks.

Figure 59. Systemic Risks in Uzbekistan's Financial Sector



Source: CBU Survey.

Note: The font size of systemic risks reflects their level of importance, determined by a weighting system of one to five.

Among the weighted shares of the top five systemic risks identified by each respondent, geopolitical risks accounted for 56%, rising household debt burden for 32%, exchange rate volatility for 31%, elevated inflation for 28% and credit risks for 28%⁸⁴. In addition, respondents identified cyberattacks, large borrower defaults, economic slowdown, liquidity risk and climate change as risks that could adversely affect the stability of Uzbekistan's financial system.

⁸³ The sample of Systemic Risk Survey is provided in the Financial Stability Report for 2023.

⁸⁴ In this question, each bank identifies five systemic risks. The proportion of respondents citing a particular risk as affecting the financial system does not necessarily correspond to the perceived severity of that risk as a systemic risk. Furthermore, the systemic risks identified by banks are not mutually exclusive, meaning a single bank can designate multiple risks. Consequently, the combined percentage of risks mentioned by respondents does not equal 100%.

Figure 60. Probability of Materialization of Systemic Risks, %

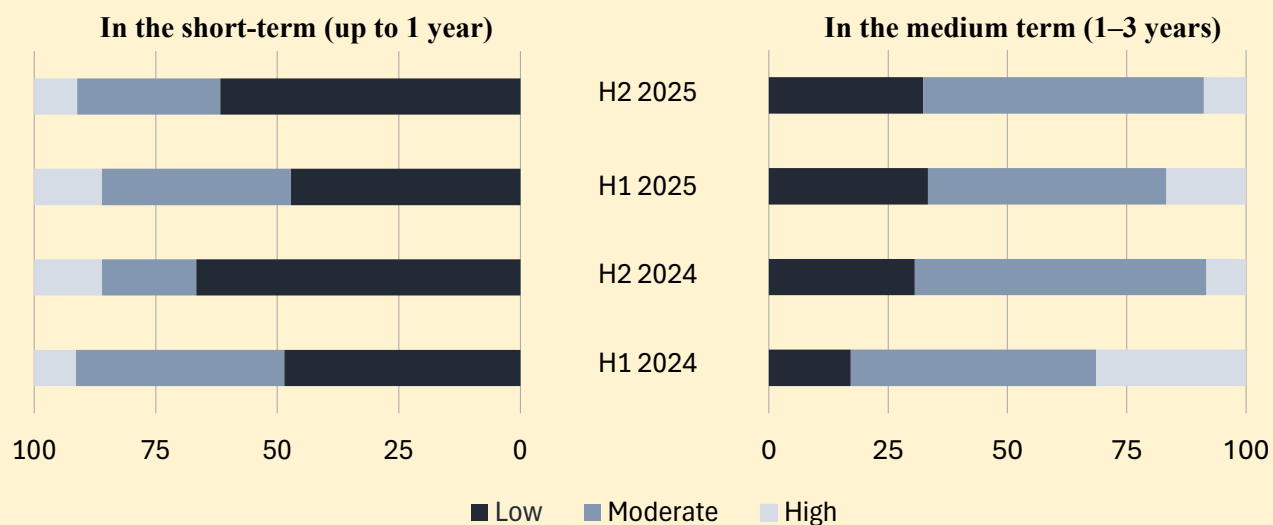
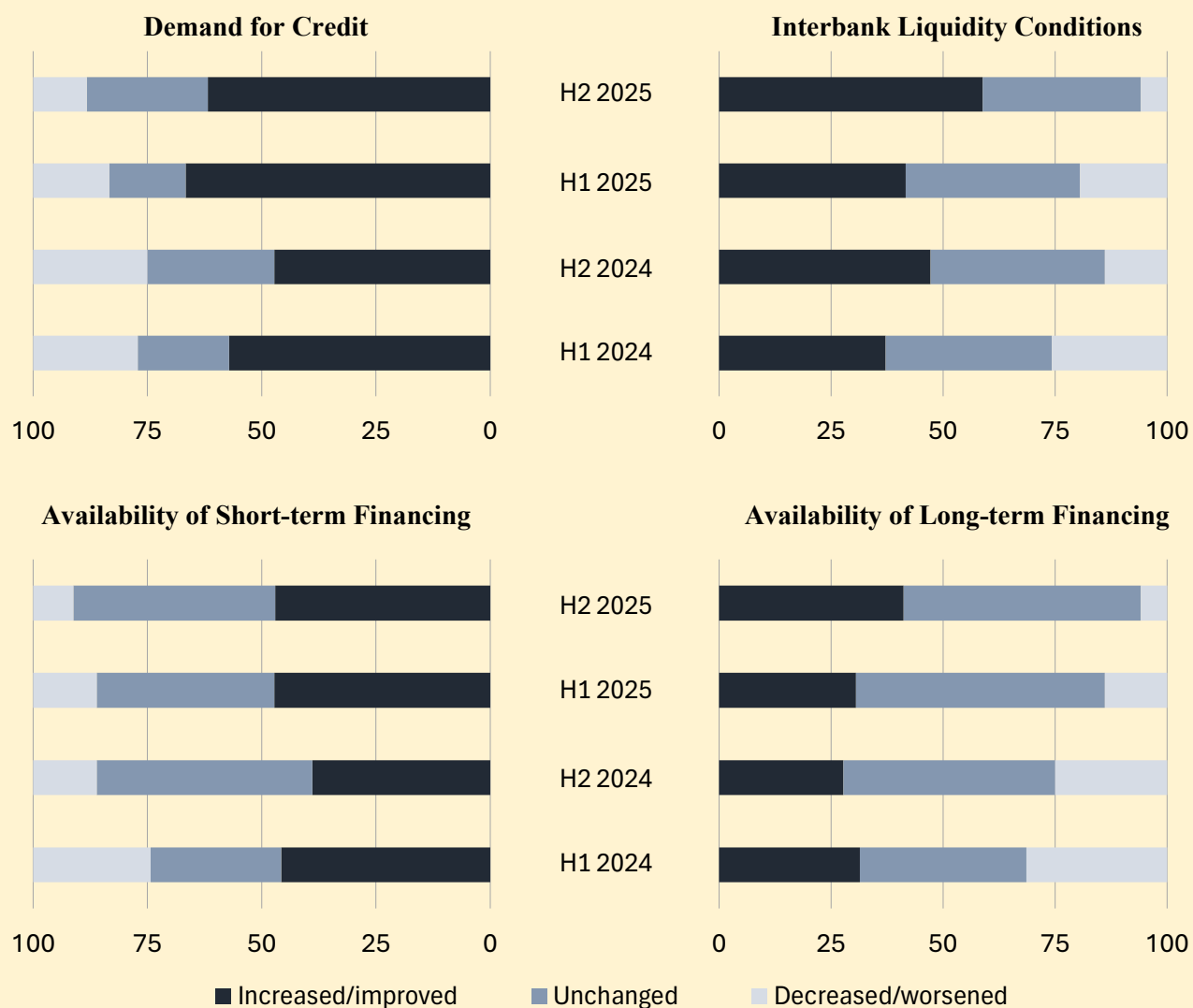


Figure 61. Changes in Financial Stability Conditions Over the Past Six Months, %



Source: CBU Survey.

According to the survey results, 62% of respondents assessed the probability of systemic risks materializing as low in the short-term, increasing by 15 p.p. compared to the results of the survey conducted in July 2025. At the same time, the share of respondents who noted the probability of risk occurrence as high declined by 5 p.p. compared with the results of the previous survey.

Moreover, the respondents' expectations regarding the probability of systemic risks occurring in the medium term remain moderate. In particular, the share of respondents who noted the probability of systemic risks materializing as moderate rose by 9 p.p. to 59% compared to the results of the survey conducted in July 2025. In addition, the share of participants who assessed the probability of systemic risks occurring in the medium term as high fell by 5 p.p. to 9%. The share of respondents who assessed the probability of systemic risks materializing as low dropped to 29%.

Over the past 6 months, 62% of respondents reported an increase in credit demand, representing a 15 p.p. rise compared to the results of the survey conducted in the corresponding period of 2025.

Furthermore, respondents reported an improvement in financial stability conditions. In particular, the share of respondents indicating improved interbank liquidity stood at 59%, which was 17 p.p. higher than the results of the survey conducted in July 2025.

47% of banks reported an increase in short-term financing sources, growing by 8 p.p. compared to the results of the survey in the corresponding period of 2025. The share of respondents who noted an improvement in long-term financing sources rose to 41%.

2.2. Non-Bank Financial Sector

The non-bank financial sector is expanding at a steady pace. The high growth of microfinance organizations' assets, together with CAR remaining above the minimum requirements, reduces solvency risks. In addition, the assets of the mortgage refinancing company are growing while maintaining high profitability.

Although the non-bank financial sector⁸⁵ continues to expand, its share in the economy remains relatively low. The ratio of non-bank financial sector assets to GDP increased from 1.7% to 1.9% in 2025. In particular, the assets of the non-bank financial sector increased by 36% year-on-year, amounting to UZS 34.9 trillion as of January 1, 2026. At the same time, 43% of non-bank financial sector assets were held by insurance companies.

Loan portfolio growth of non-bank credit organizations⁸⁶ slowed due to the high-base effect. At the end of 2025, outstanding loans extended by non-bank credit organizations reached UZS 16.8 trillion, representing an annual increase of 39%. One-third of these loans were extended by the mortgage refinancing company. During 2025, the loan portfolio of microfinance organizations and pawnshops grew by 45%⁸⁷, while outstanding loans extended by the mortgage refinancing company increased by 29%⁸⁸.

The ROA of insurance companies remained relatively lower. As of the end of Q3 2025, the PBT of insurance companies remained almost unchanged compared with the corresponding period of 2024, while total assets increased by 34% year-on-year, resulting in a decline in ROA. In particular, the overall ROA of insurance companies decreased from 8.4% at the end of Q3 2024 to 6.9% at the end of the first nine months of 2025. In 2025, the assets of life insurance companies grew faster than those of general insurance companies. At the end of 2025, the share of general insurance companies' assets reached 95% of the total assets of insurance companies.

Insurance companies are diversifying their investment portfolios. As of January 1, 2026, the total investment volume of insurance companies increased by 46% year-on-year to UZS 9.6 trillion. Deposits accounted for 63% of the investment portfolio, while investments in real estate accounted for 17%. At the same time, during 2025, the volume of deposits increased by 32%, and the volume of investments in real estate grew by 266%⁸⁹.

⁸⁵ In analyzing the non-bank financial sector, non-bank credit organizations and insurance companies were considered.

⁸⁶ Non-bank credit organizations include microfinance organizations, pawnshops and mortgage refinancing company.

⁸⁷ The Central Bank of the Republic of Uzbekistan. (2026). Indicators of non-bank credit organizations.

⁸⁸ Mortgage refinancing company of Uzbekistan. (2026). Financial reports.

⁸⁹ The National Agency of Perspective Projects of the Republic of Uzbekistan. (2025). Insurance Market Indicators of Uzbekistan for 2025.

Figure 62. Non-bank Financial Sector Assets, trillion UZS

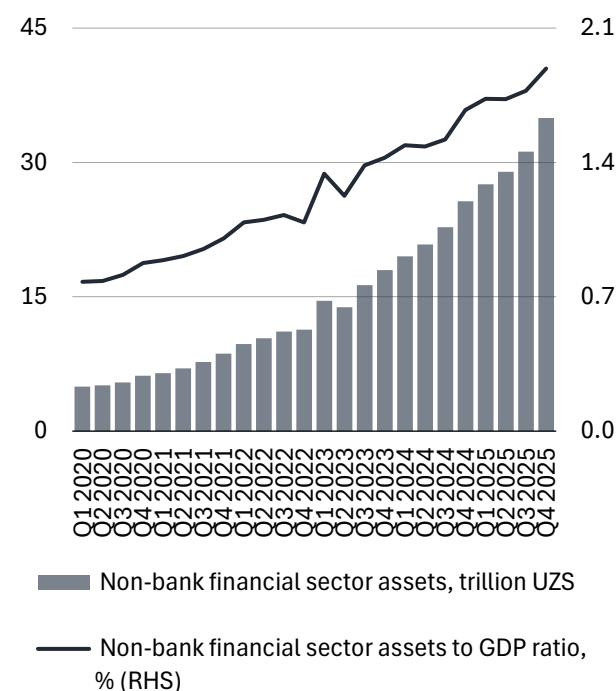


Figure 63. Annual Growth Rates of Stock of Loans of Non-bank Credit Organizations, %

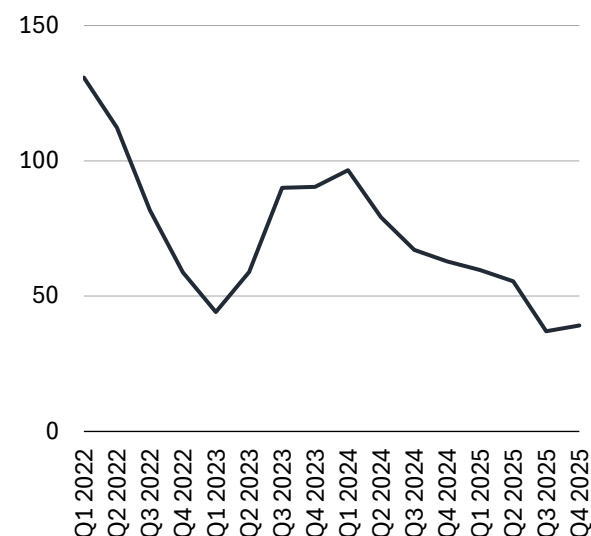
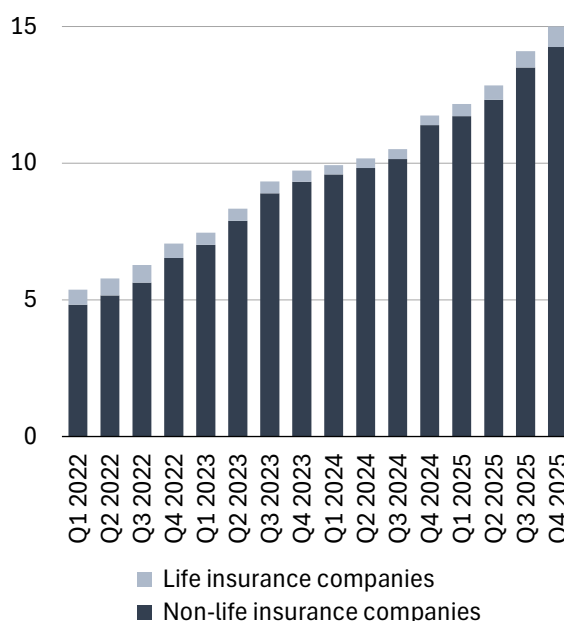


Figure 64. ROA of Insurance Companies⁹⁰, %



Figure 65. Assets of Insurance Companies, trillion UZS



Sources: National Statistics Committee, National Agency of Prospective Projects, Unified Corporate Information Portal and CBU staff calculations.

Note: ROA of the insurance sector is determined by aggregating the balance sheet data of all insurance companies.

⁹⁰ ROA is calculated by dividing annual PBT by average total assets.

Figure 66. Investments of Insurance Companies, trillion UZS

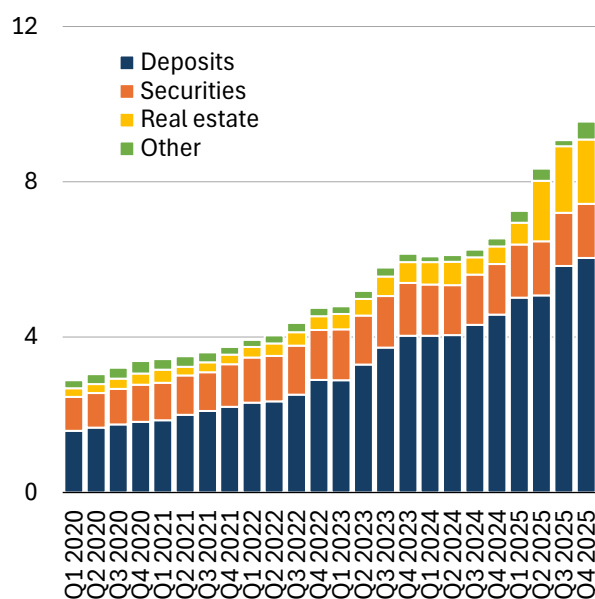


Figure 67. Insurance Payments-to-Insurance Premiums Ratio, %

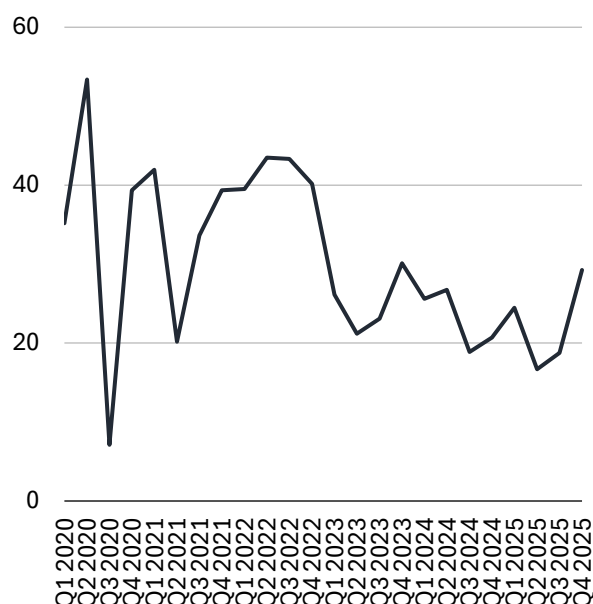


Figure 68. Quarterly Insurance Payments, trillion UZS

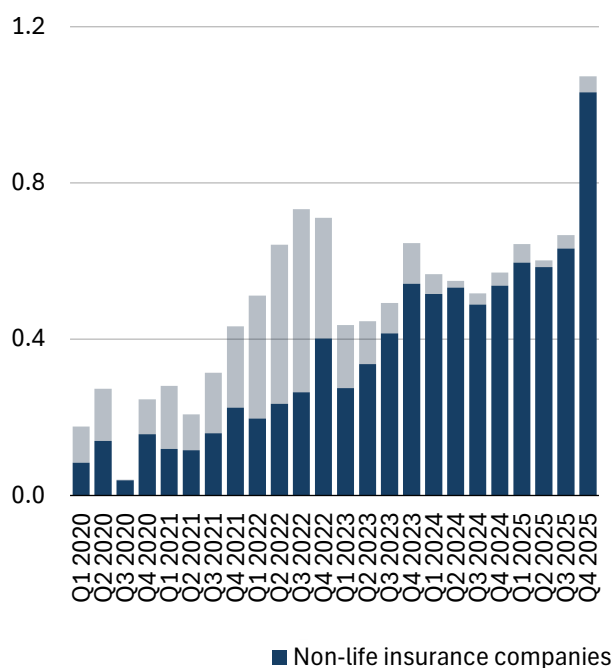
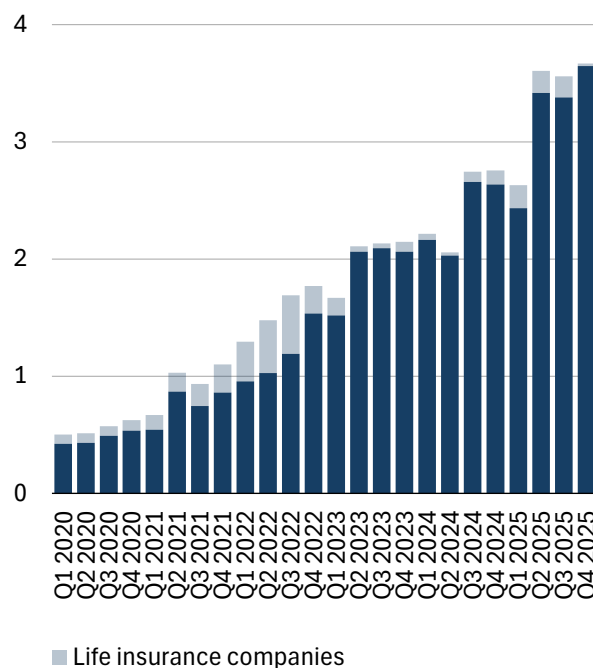


Figure 69. Quarterly Insurance Premiums, trillion UZS



Sources: National Agency of Prospective Projects and CBU staff calculations.

Voluntary insurance is gaining popularity in the insurance market. In 2025, the volume of total insurance premiums⁹¹ amounted to UZS 13.5 trillion, while total insurance payments⁹² reached UZS 3 trillion. General insurance companies accounted for 96% of total insurance premiums and 95% of total insurance payments. The share of voluntary insurance premiums in total insurance premiums during 2025 reached 93%. Moreover, 86% of total insurance payments were made by insurance companies for insured events occurring under voluntary insurance contracts. In 2025, total insurance premiums of credit insurance policies under voluntary insurance amounted to UZS 3.6 trillion, marking an increase of 63% compared to 2024⁹³.

Insurance premiums grew faster than insurance payments. In 2025, insurance premiums increased by 38% compared to 2024, while insurance payments rose by 35%. As a result, the ratio of insurance payments to insurance premiums decreased from 23% in 2024 to 22% in 2025. In particular, in 2025, a significant gap was observed in the life insurance sector, with insurance premiums growing by 105% year-on-year and insurance payments by 7%.

The concentration of insurance premiums remained at a medium level. In 2025, the HHI for insurance premiums of all insurance companies increased by 96 units compared to 2024, amounting to 1,277. The share of life insurance premiums in total insurance premiums stood at 4% in 2025, reducing concerns about concentration risk in the country's insurance market.

Insurance penetration in Uzbekistan remains lower than in many peer countries. At the end of 2025, insurance penetration in Uzbekistan increased from 6.4 per mille at the end of 2024 to 7.3 per mille. At the end of 2025, insurance penetration in Uzbekistan remained at the lower bound of the IQR⁹⁴ for the ECA countries. Insurance density in Uzbekistan increased by 45% year-on-year to USD 29.3 at the end of 2025. The rise in these indicators reflects growing demand for insurance services in the country, as well as the expanding coverage and increasing importance of the insurance market in the economy.

⁹¹ An insurance premium is the amount a policyholder pays an insurer according to the terms specified in the insurance contract and can be paid in DC or FC.

⁹² An insurance payment refers to the money paid to the policyholder or beneficiary in the event of an insurance claim. It is typically within the sum insured for each insured person as specified in the insurance contract.

⁹³ The National Agency of Perspective Projects of the Republic of Uzbekistan. (2025). Insurance Market Indicators of Uzbekistan for 2025.

⁹⁴ The IQR is the interval between the 25th and 75th quantile boundaries.

Figure 70. Insurance Density, USD

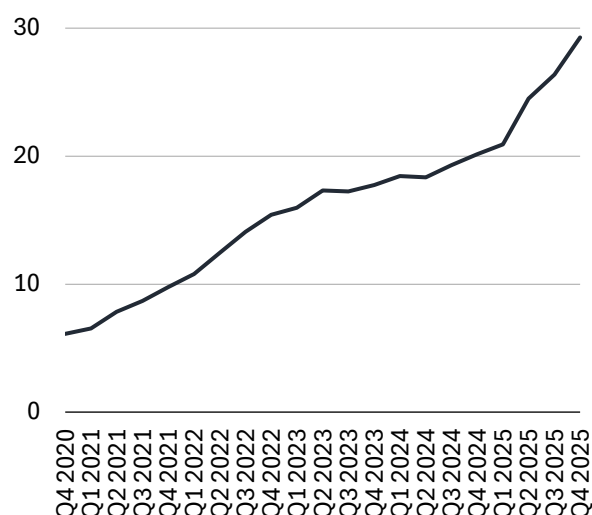


Figure 71. Insurance Penetration, ‰

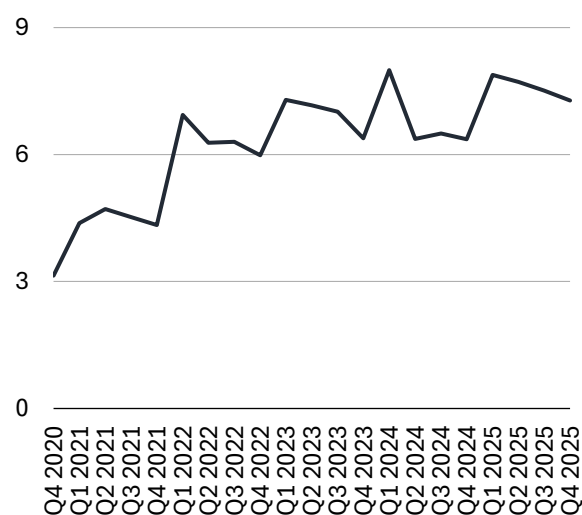


Figure 72. Insurance Premiums Concentration, HHI⁹⁵

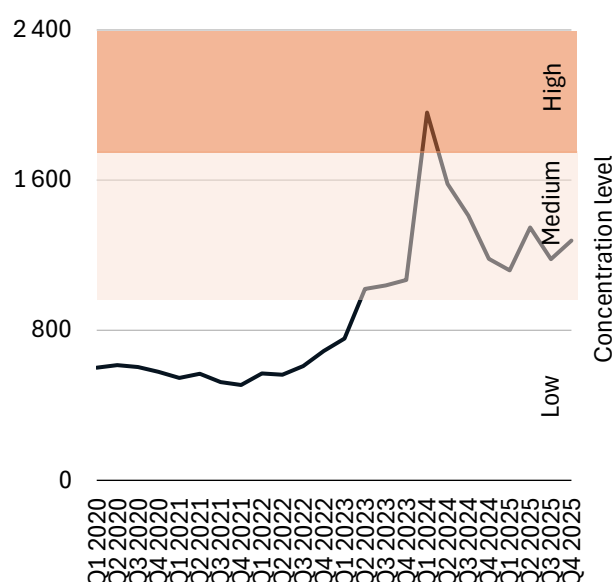
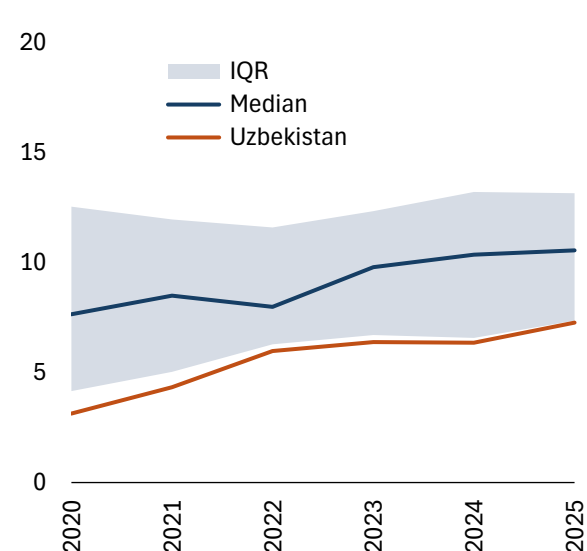


Figure 73. Insurance Penetration in ECA Countries⁹⁶, ‰



Sources: National authorities, National Agency of Prospective Projects, National Statistics Committee and CBU staff calculations.

Notes: Per mille (‰) represents one-thousandth of a number or one-tenth of a percent.

Insurance density is calculated by dividing annual total insurance premiums by the population.

Insurance penetration is calculated by dividing the total insurance premiums by the nominal GDP. The values of insurance premiums and the nominal GDP in the corresponding periods are used for this purpose.

⁹⁵ The HHI categorizes industries into low concentration (HHI below 1000), medium concentration (HHI between 1000 and 1800), and high concentration (HHI above 1800).

⁹⁶ According to the World Bank classification, the Europe and Central Asia country group (excluding high-income countries) includes Armenia, Bosnia and Herzegovina, Georgia, Kosovo, Moldova, Azerbaijan, Ukraine, Uzbekistan, the Kyrgyz Republic and Kazakhstan.

Figure 74. CAR of Microfinance Organizations, %

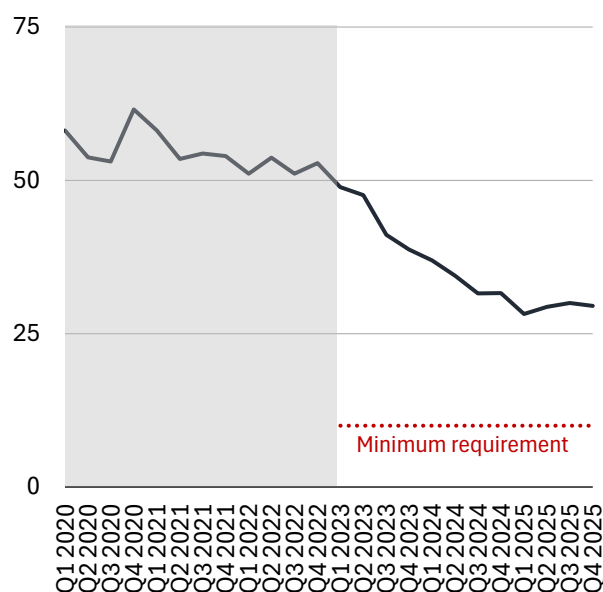
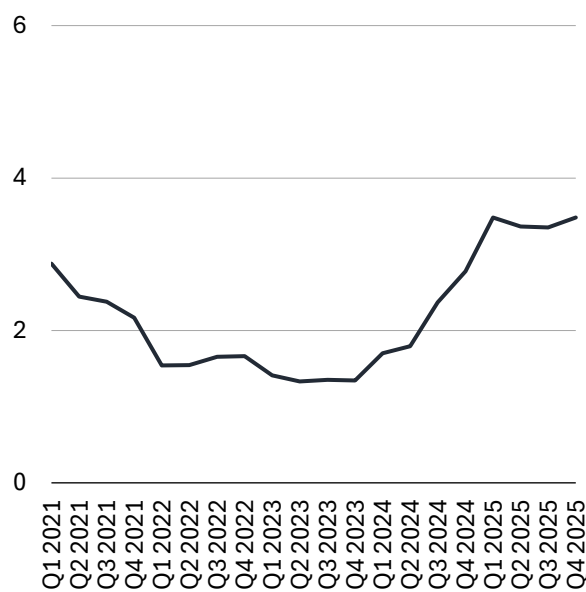


Figure 75. ROA of Mortgage Refinancing Company, %



Sources: Mortgage Refinancing Company of Uzbekistan and CBU staff calculations.

Note: As of April 14, 2023, a minimum CAR requirement for microfinance organizations has been established.

The CAR of microfinance organizations⁹⁷ stands at three times the minimum requirement. At the end of 2025, the CAR of microfinance organizations stood at 30%, decreasing by 2 p.p. year-on-year. This indicator remained well above the minimum requirement. In 2025, due to the rapid growth of the loan portfolio, microfinance organizations' assets increased by 50% on an annual basis, while total equity expanded by 40%. In particular, the main factors contributing to the growth of the total equity of microfinance organizations in 2025 were a 51% year-on-year increase in the share capital and a 10% rise⁹⁸ in the current year profit.

The ROA of the mortgage refinancing company reached its historical high. As of January 1, 2026, the mortgage refinancing company's ROA⁹⁹ reached 3.5%, representing an increase of 0.7 p.p. year-on-year. Despite the 33% year-on-year increase in total assets at the end of 2025, a 73% increase in PBT led to positive changes in ROA. The 74% year-on-year increase in NII in 2025 to UZS 257.4 billion¹⁰⁰ contributed to the improvement of the company's profitability.

⁹⁷ The CAR of microfinance organization is calculated by the ratio of total equity of microfinance organization to total assets.

⁹⁸ The Central Bank of the Republic of Uzbekistan. (2026). Indicators of non-bank credit organizations.

⁹⁹ ROA is calculated by dividing annual PBT by average total assets.

¹⁰⁰ Mortgage refinancing company of Uzbekistan. (2026). Financial reports.

III. Non-Financial Sector

3.1. Household Sector

The household sector strengthened following MPP tightening and rising household incomes. The introduction of direct LTV caps for mortgages and car loans to individuals¹⁰¹ improved the collateralization of these loans. The tightening of BBMs for household lending¹⁰² contributed to a decline in the household debt burden.

Non-banks' share of aggregate borrower indebtedness is increasing. As of January 1, 2026, 62% of total indebted individuals had debt obligations to banks, while 20% to non-bank organizations. In turn, in 2025, the share of bank borrowers decreased by 19 p.p. The share of borrowers of non-bank organizations increased by 9 p.p. 18% of borrowers had financial obligations to both banks and non-bank organizations, which was 10 p.p. higher than in 2024.

The banking sector constitutes the predominant share of households' total debt obligations. As of the end of 2025, 94% of individuals' debt obligations were extended by banks, while 6% by non-bank organizations. In the corresponding period of 2024, these indicators stood at 96% and 4%, respectively. At the same time, the share of non-bank organizations in the total debt obligations of households remains relatively low.

¹⁰¹ O'zbekiston Respublikasi Markaziy banki boshqaruvining 2025 yil 8 apreldagi "Banklarga o'rnatiladigan makroprudensial normativlar hamda ular tomonidan beriladigan kreditlar (mikroqarzarlar) bo'yicha to'lovlarning eng yuqori qiymatlariga doir talablar to'g'risidagi nizomni tasdiqlash haqida"gi 7/3-sonli qarori.

¹⁰² O'zbekiston Respublikasi Markaziy banki boshqaruvining 2024 yil 26 yanvardagi "Qarz oluvchi jismoniy shaxslarning qarz yukini tartibga solish to'g'risidagi nizomga o'zgartirish va qo'shimchalar kiritish to'g'risida"gi 42/16-sonli qarori.

Figure 76. Distribution by Number of Borrowers*

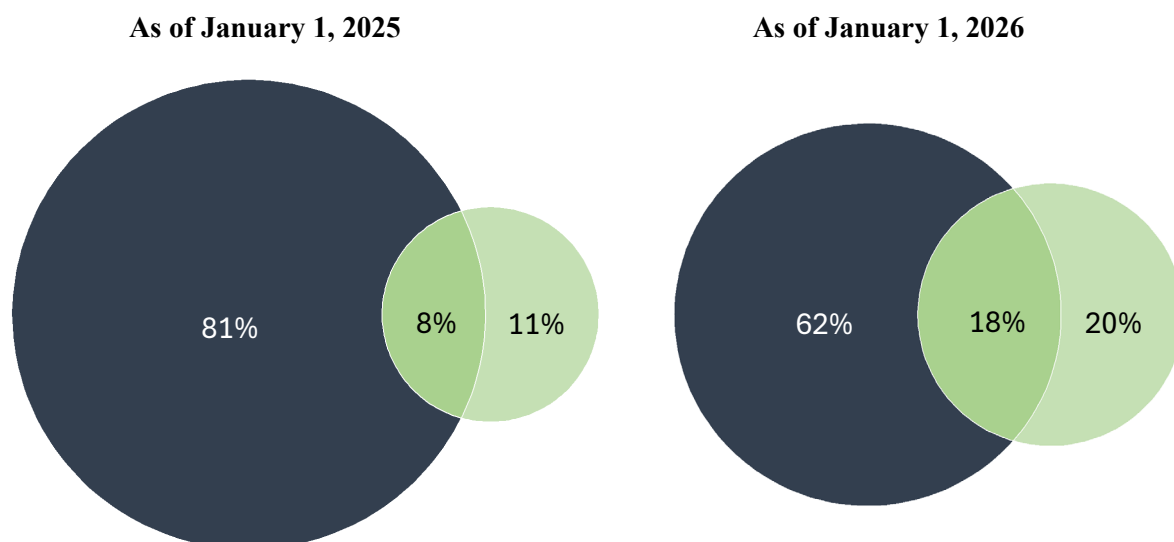
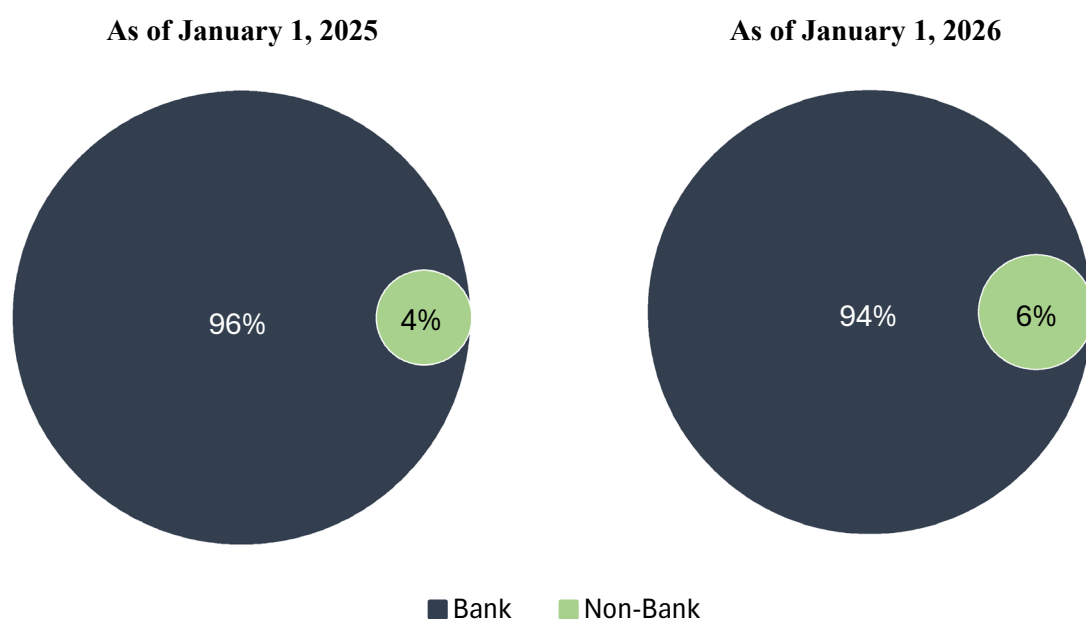


Figure 77. Distribution by Loan Volume**



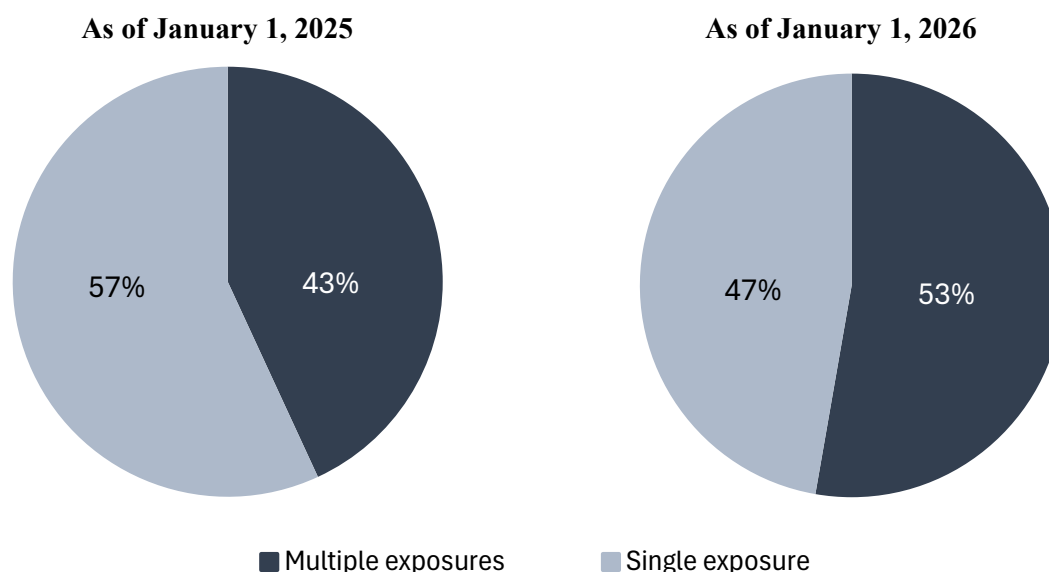
Source: CBU staff calculations.

Note: In the analysis of non-bank organizations, non-bank credit organizations and non-financial organizations were taken into account.

*The size of the circles in the diagram is determined proportionally to the number of individuals with loan or debt obligations. The Personal Identification Number of an Individual was used to determine the number of individuals with loans or debts. The calculations were performed based on the number of borrowers, multiple loan or debt contracts held by a single borrower from banks and non-bank organizations were disregarded.

**The distribution of loans and debts to individuals by banks and non-bank organizations is presented by respective share of funds allocated to the households by these organizations. The area of the circles is determined proportionally to the volume of funds allocated by the organization.

Figure 78. Indebtedness of Individuals, %



Source: CBU staff calculations.

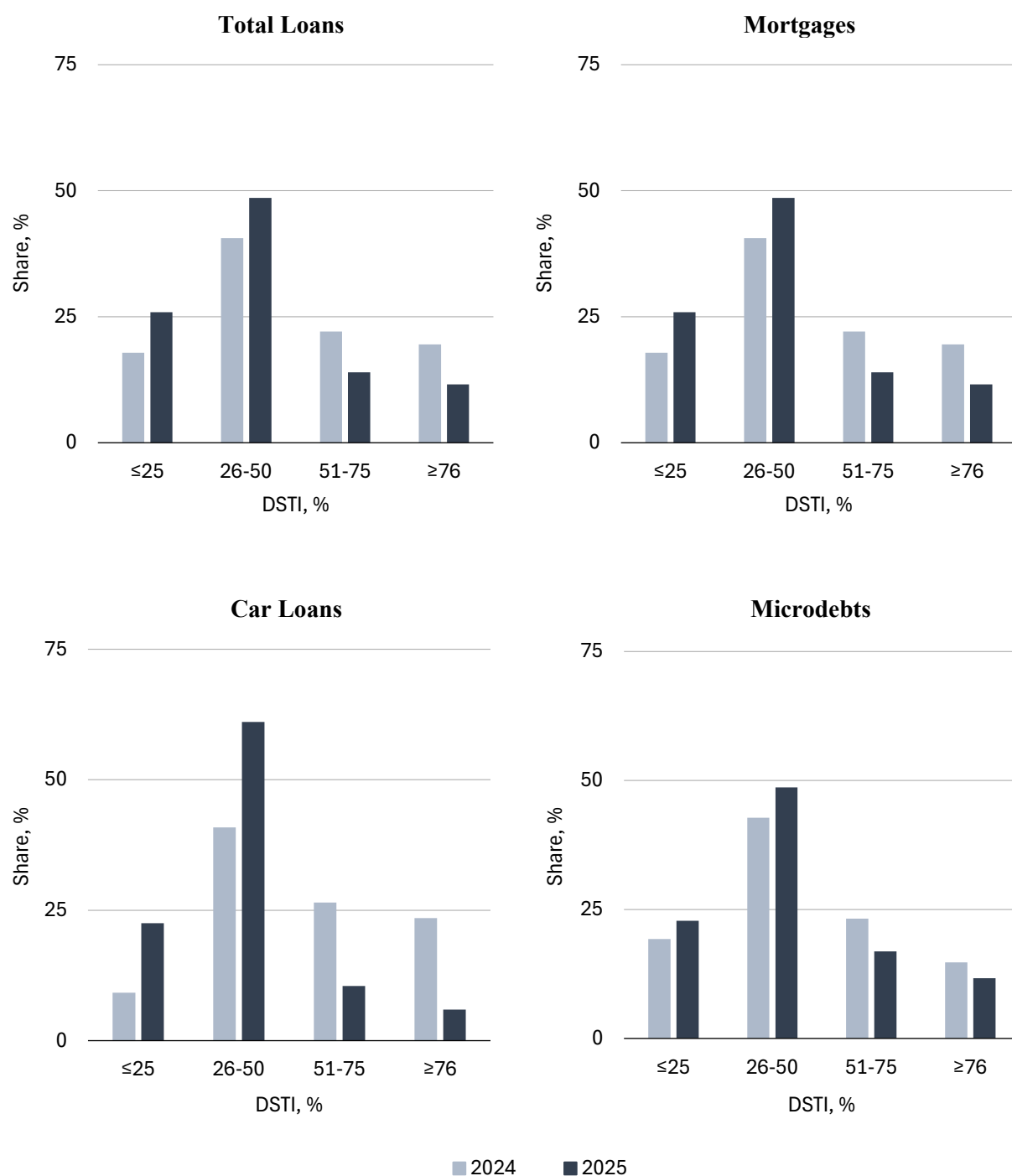
The prevalence of multiple loan obligations among borrowers is increasing. In 2025, 53% of bank borrowers had multiple debt obligations to banks and non-bank organizations. In this context, the need to service multiple loans simultaneously may weaken the solvency capacity of borrowers.

The overall debt burden of individuals with banks loans declined. In 2025, the average DSTI ratio¹⁰³ for bank borrowers decreased from 38% in 2024 to 37%, taking into account both bank and non-bank liabilities. In addition, loans extended to borrowers with DSTI ratio of 50% or below accounted for 74% of the total loan volume, while this share stood at 58% in 2024.

The debt burden in mortgages and car loans exhibited a downward trend. In 2025, the average DSTI ratio for mortgage borrowers of banks, including all debts, stood at 49%, falling by 22 p.p. compared to 2024. At the same time, the share of loans to borrowers with DSTI ratio exceeding 50% in the total loan volume decreased, reaching 30%. The average DSTI ratio for car loans declined from 60% to 37%. Also, the share of the loan volume for borrowers with DSTI ratio of 50% or below reached 84%.

¹⁰³ The DSTI methodology is presented in the Debt Service Ratio Analysis for Individuals of CBU.

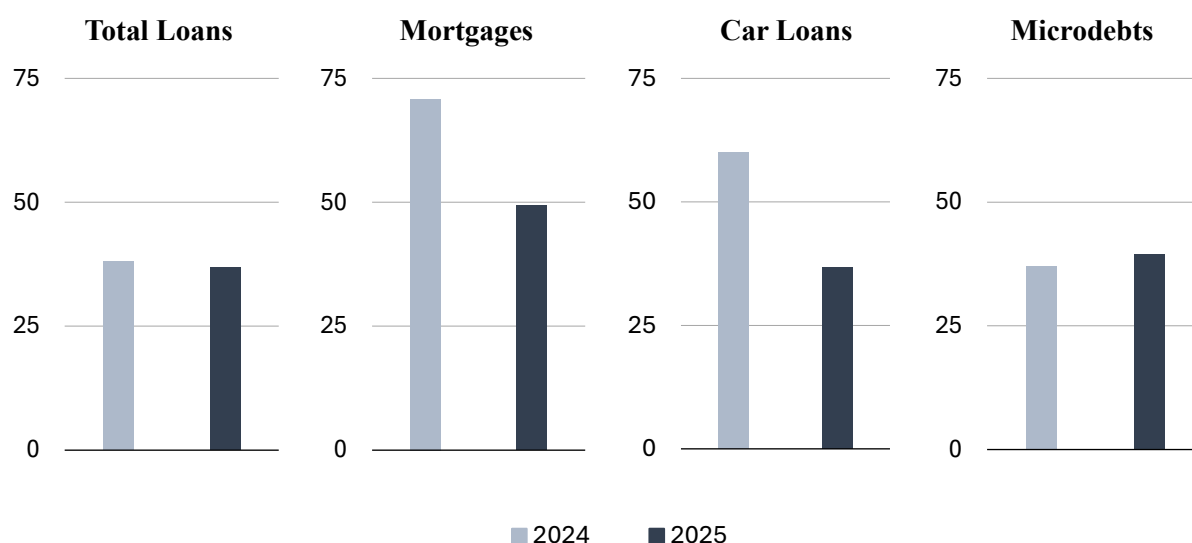
Figure 79. Distribution of DSTI Ratio



Source: CBU staff calculations.

Note: The DSTI ratio is calculated for borrowers with income whose monthly income is not less than the average household's minimum monthly living expenses. To calculate the DSTI ratio for individuals who obtained loans from banks during the analysis period, all outstanding obligations under loan and debt contracts concluded with banks, non-bank, and non-financial organizations are taken into account.

Figure 80. Average DSTI Ratio¹⁰⁴



Source: CBU staff calculations.

Note: The average DSTI ratio is determined by calculating the arithmetic mean of the ratio of total monthly payment of the existing debt obligations of individuals to their monthly income.

Microdebt conditions deteriorated marginally. In 2025, 71% of the total loan volume of individuals who obtained microdebts had a DSTI ratio below 50%. The average DSTI ratio for microdebts increased from 37% in 2024 to 40% in 2025. The absence of requirements for clearly defined purposes and collateral in the issuance of microdebts contributes to the rapid expansion in the number of borrowers in this market and to a relatively higher debt burden.

Mortgages and car loans shifted to lower LTV ranges. The share of mortgages with an LTV ratio below 80% constituted 67%, marking an increase of 6 p.p. compared to 2024. The share of car loans with an LTV ratio above 75% decreased by 9 p.p. compared with 2024, reaching 66%. In 2025, the weighted average LTV ratios for mortgages and car loans extended by banks to households stood at 76% and 73%, respectively.

¹⁰⁴ In calculating the DSTI ratio for individuals, borrowers with income whose monthly income is not less than the minimum monthly living expenses of the average household are included. In 2025, 49% of all bank borrowers were included in determining the household debt burden. The coverage rate was 80% for mortgages, 39% for car loans, and 52% for microdebts.

Figure 81. LTV¹⁰⁵ Ratios for Mortgages, %

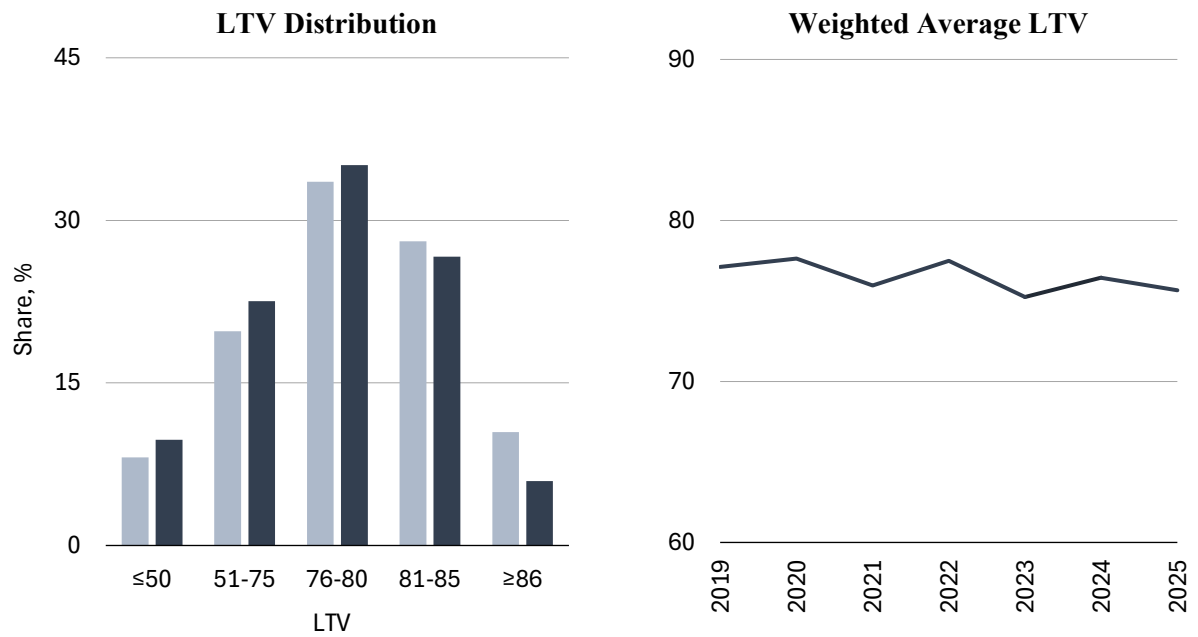
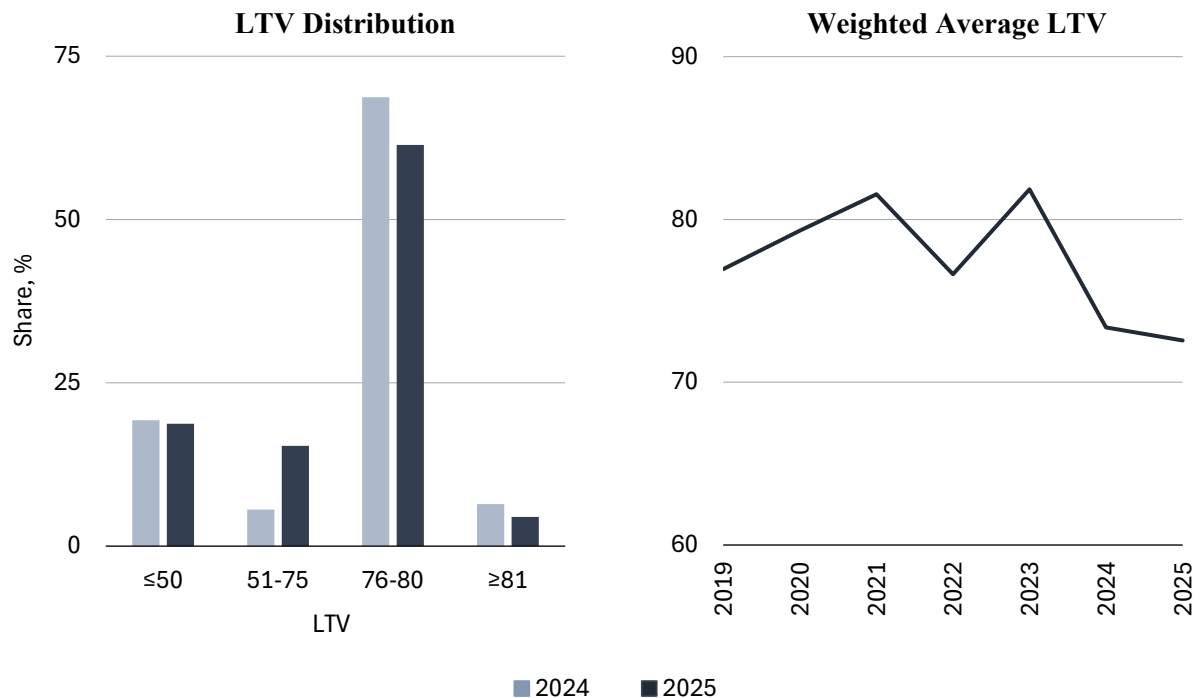


Figure 82. LTV Ratios for Car Loans, %



Source: CBU staff calculations.

Note: The weighted average LTV ratio is calculated by the weighted average value based on the LTV level and loan amount of each loan.

¹⁰⁵ From July 24, 2025, direct LTV caps were introduced for mortgages and car loans. Under these requirements, the LTV ratio was set not to exceed 80% for mortgages financed from banks' own funds and 85% for mortgages refinanced with funds provided by the Ministry of Economy and Finance. In addition, the maximum LTV ratio for car loans was set at 75%.

Figure 83. Loans of Individuals-to-GDP Gap¹⁰⁶, p.p

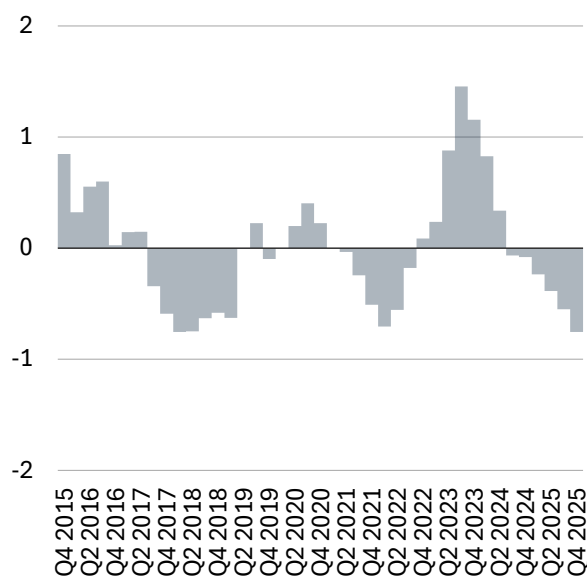


Figure 84. Loans of Individuals by Types, % of GDP

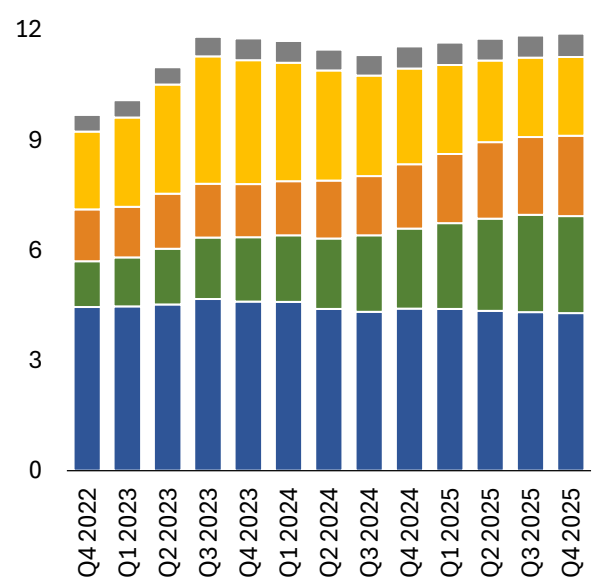


Figure 85. Annual Growth* (YoY) of Outstanding Loans of Individuals, %

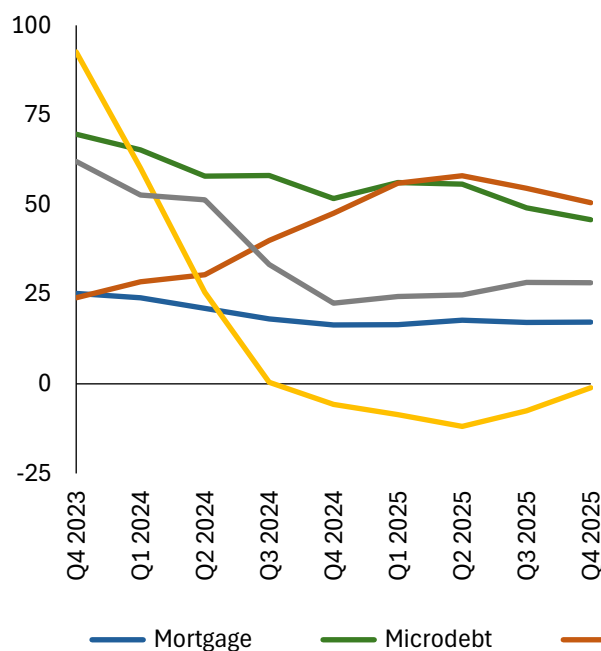
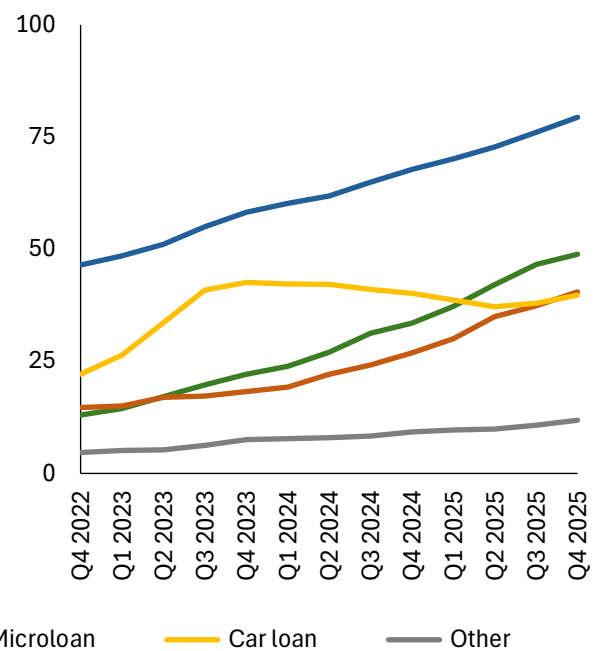


Figure 86. Outstanding Loans of Individuals, trillion UZS



Source: CBU staff calculations.

Note: *Within the loans extended to individuals, microdebt were reclassified into credit cards, overdrafts and microloans. In this context, microloans include funds of up to UZS 300 million extended to self-employed individuals on the basis of terms of payment, maturity and repayment, as well as for specific purposes stipulated in the contract.

¹⁰⁶ The long-term trend of the loans of individuals-to-GDP ratio is calculated according to the BCBS approach, using a one-sided HP filter with a smoothing parameter of 400,000 for quarterly data.

Individuals' outstanding indebtedness continues to represent an increasing share of aggregate loan exposures. As of January 1, 2026, the loan portfolio of individuals amounted to UZS 220.3 trillion, and its share in the banking system's loan portfolio increased by 3 p.p. compared with the corresponding period of 2025, standing at 36%. High annual growths were observed in microdebts and microloans within the banking system's retail loan portfolio, reaching 46% and 51%, respectively. In addition, outstanding mortgages recorded annual growth of 17%¹⁰⁷.

A persistent negative deviation of the individuals' loans-to-GDP ratio from its long-term trend remains. As of January 1, 2026, the ratio of outstanding retail loans issued by banks to GDP was 12%, forming a negative gap of 0.8 p.p. relative to the long-term trend. The ratios of mortgages and microdebts to GDP, which account for a large share in the loan portfolio of individuals, amounted to 4% and 3%, respectively. For both microloans and car loans, this indicator stood at 2%.

Nominal GDP per capita in USD rose significantly. As of the end of 2025, the nominal GDP per capita amounted to USD 3,879, marking an increase of USD 614 compared to the previous year. In this regard, the increase in nominal GDP and changes in FX rate had a positive contribution of USD 677 to the growth in GDP per capita. At the same time, the dampening effect of the increase in the permanent population amounted to USD 63.

Nominal GDP per capita growth in USD accelerated. In 2025, the annual growth rate of GDP per capita in USD amounted to 19%, rising by 8 p.p. compared to 2024. This change was mainly due to the increase in nominal GDP, which made a positive contribution of 20%. In addition, changes in the FX rate made an additional positive contribution of 1%, while the increase in the population had a negative impact of 2% on the growth rate.

The number of borrowers continues to grow. Household incomes continue to grow, and the demand for credit remains. At the end of 2025, the number of individuals with bank loans reached 5.2 million, recording 11% annual growth. At the same time, the number of borrowers per 1,000 working-age population climbed by 20, reaching 244 individuals. As of January 1, 2026, the average nominal wage increased by 19%¹⁰⁸ annually, while the real wage grew by 9%.

Households car affordability improved. As a result of rising household incomes and a contraction in the weighted average interest rates on car loans, households' capacity to acquire vehicles through car loans improved in 2025. The weighted average interest rate on car loans issued in 2025 decreased by 3 p.p. compared to 2024, reaching 24%. At the same time, the weighted average maturity for car loans amounted to 3.3 years, 0.6 years shorter than in 2024.

¹⁰⁷ The Central Bank of the Republic of Uzbekistan. (2026). Indicators of the banking system.

¹⁰⁸ National Statistics Committee. (2026). Average monthly nominal accrued wages in the Republic of Uzbekistan, January-December 2025.

Figure 87. Decomposition of Nominal GDP Per Capita*, USD

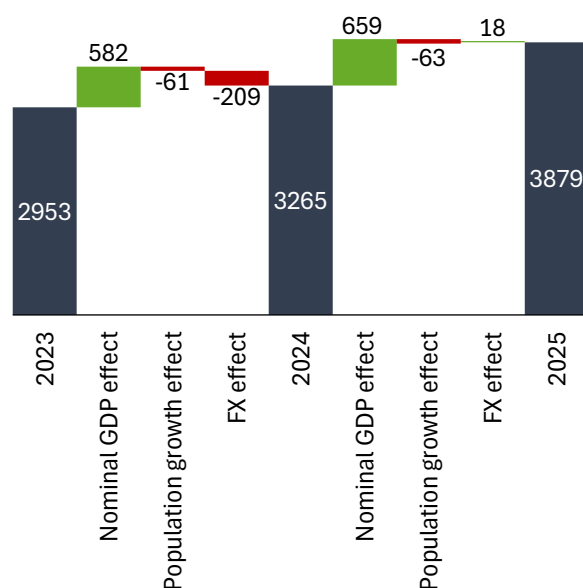


Figure 88. Decomposition of Annual Change in Nominal GDP Per Capita in USD, %

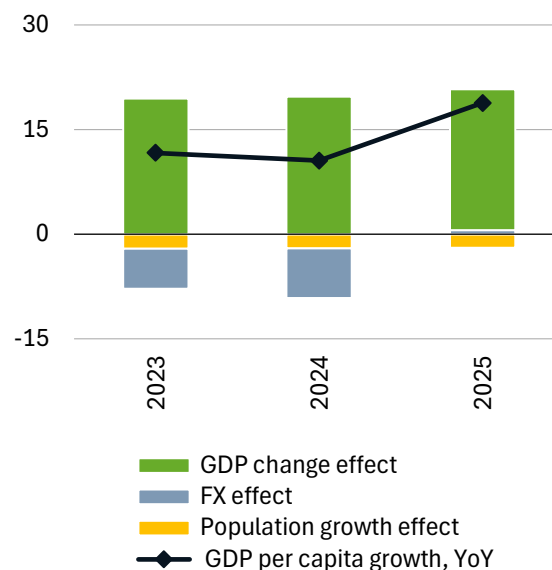


Figure 89. Bank Borrowers and Borrowers per 1,000 Individuals**

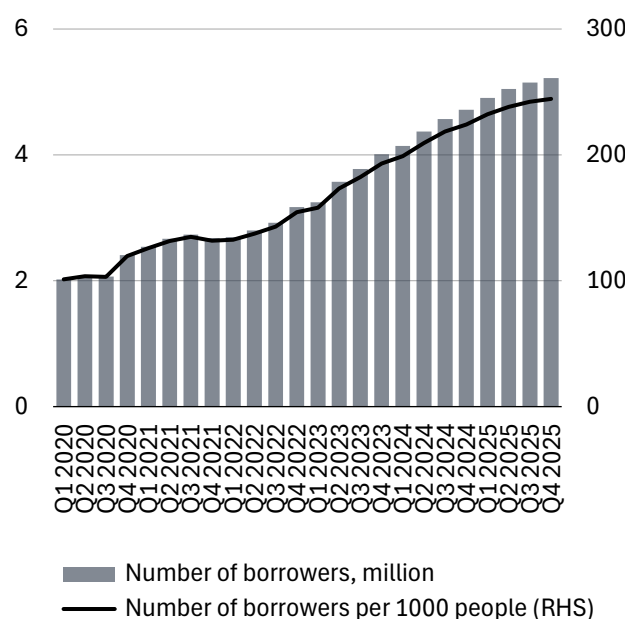
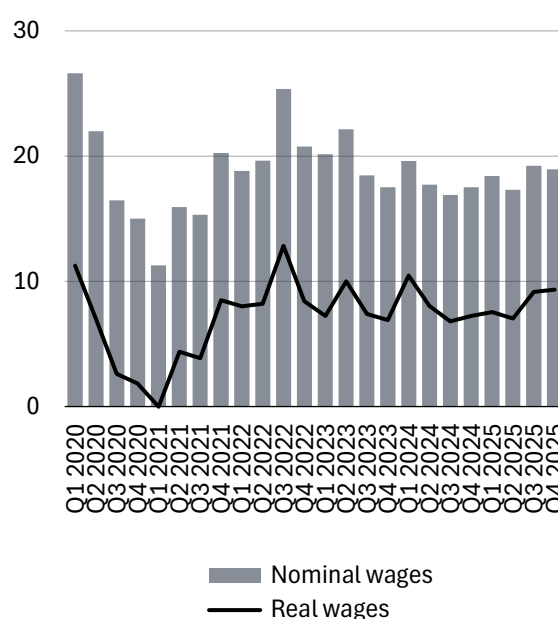


Figure 90. Annual Growth of Wages (YoY), %



Sources: National Statistics Committee and CBU staff calculations.

Notes: *GDP per capita is calculated by dividing the GDP at current prices by the country's average population in a certain period. The nominal GDP per capita in USD is obtained by converting the nominal GDP per capita in UZS using the average FX rate of the USD against the UZS during the same period.

**The calculation takes into account individuals who are both residents and within the working age group. The working age population refers to the total number of men aged 16 to 60 and women aged 16 to 55 who permanently reside in a particular settlement or region.

Figure 91. Car Affordability Index

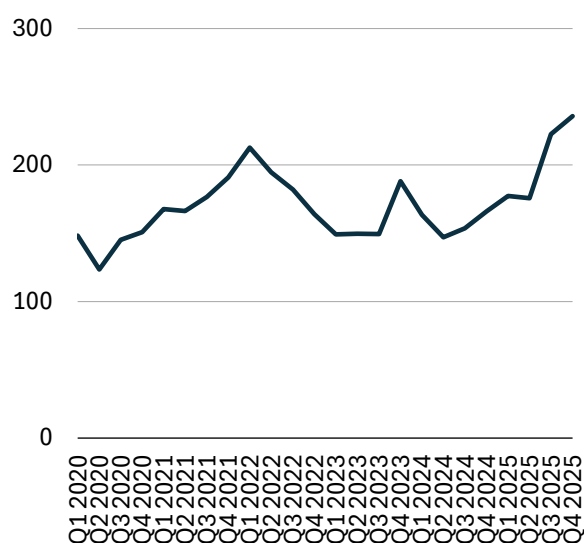


Figure 92. Weighted Average Maturity and Interest Rates of Car Loans

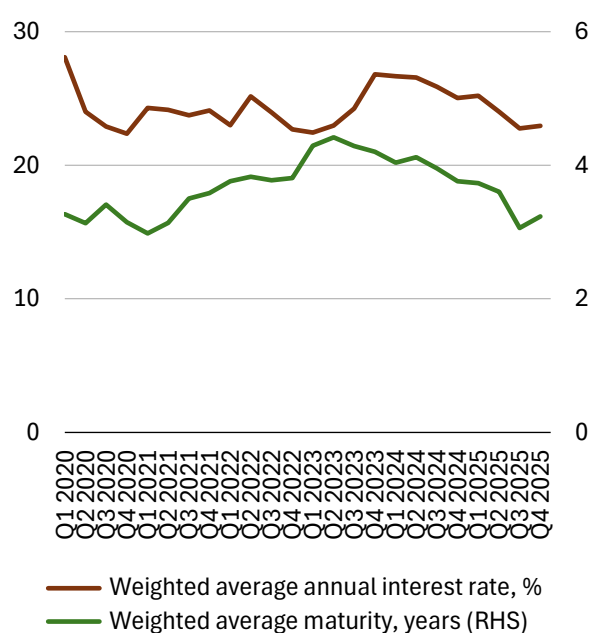


Figure 93. Car Sales Contracts, thousand

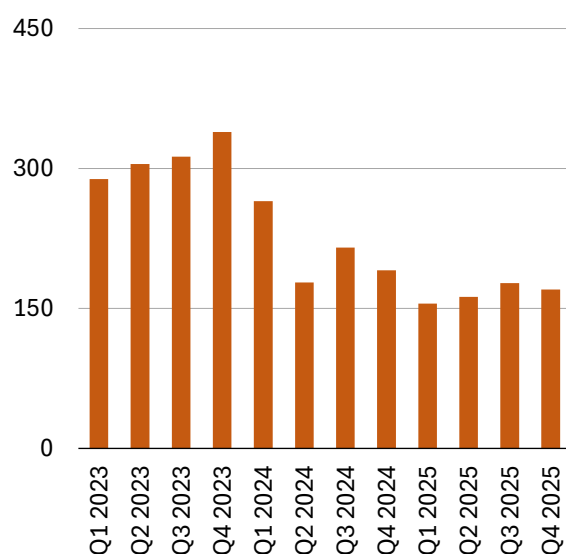
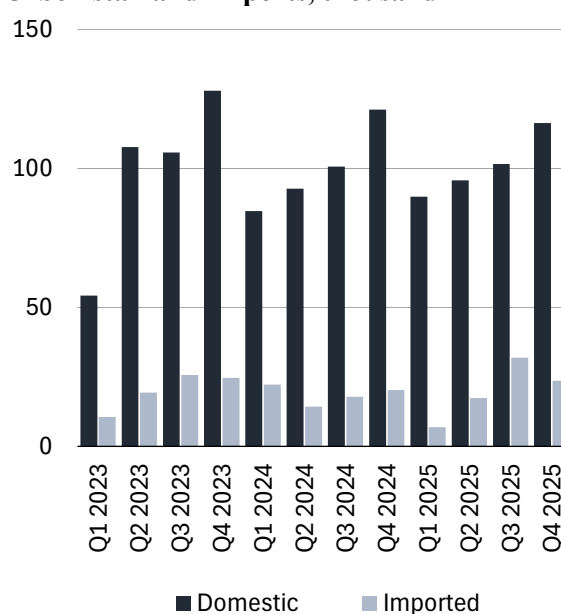


Figure 94. Passenger Cars Manufactured in Uzbekistan and Imports, thousand



Sources: Ministry of Justice, National Statistics Committee, Customs Committee and CBU staff calculations.

Notes: A decline in the Car Affordability Index signifies a reduced capacity of the population to purchase a vehicle, whereas a rise indicates an enhanced ability to do so.

Special vehicles are excluded from the composition of passenger cars manufactured in Uzbekistan.

Car market activity has moderated. In 2025, supply in the car market expanded. In Uzbekistan, about 403,600 passenger cars, excluding special vehicles, were produced during 2025, and the production volume remained almost unchanged compared to 2024¹⁰⁹. Passenger car imports totaled 79,800, an increase of 7% year-on-year¹¹⁰. Moreover, as a result of the growing share of lower-priced cars in imports, their average price dropped to USD 14,700, 14% lower than in 2024. At the same time, the number of car sales contracts in 2025 amounted to 665,000, declining by 22% compared to 2024.

Concentration in the car lending market continues to decline. At the end of 2025, the HHI for outstanding car loans stood at 1,038. This indicator fell by 191 units compared to 2024, bringing it closer to the low concentration group. As of January 1, 2026, outstanding car loans of all banks amounted to UZS 39.7 trillion, accounting for 7% of the total loan portfolio¹¹¹. At the same time, the annual growth rates of outstanding car loans accelerated in some banks with a high share of car loans in the retail loan portfolio. In accordance with the current MPP requirements, the share of car loans in a bank's loan portfolio must not exceed 25%¹¹².

NPL coverage ratio for microdebts remained high. As of January 1, 2026, the NPL coverage ratio for microdebts amounted to 50%, 11 p.p. higher relative to the corresponding period of 2025. Furthermore, the share of NPLs in total microdebts stood at 4% at the end of 2025, remaining almost unchanged compared with the corresponding period of 2024.

The composition of NPLs in microdebts slightly deteriorated. As of the end of 2025, 49% of NPLs in microdebts were classified as “doubtful” and “loss” loans. This indicator increased by 2 p.p. compared with 2024. The deterioration in the quality of microdebts indicates concerns about credit risk in this segment.

¹⁰⁹ National Statistics Committee. (2026). Industrial production of the Republic of Uzbekistan.

¹¹⁰ Customs Committee under the Ministry of Economy and Finance. (2026). Information on the import of consumer goods (Vehicles).

¹¹¹ The Central Bank of the Republic of Uzbekistan. (2026). Indicators of the banking system.

¹¹² O'zbekiston Respublikasi Markaziy banki boshqaruvining 2025 yil 8 apreldagi “Banklarga o'rnatiladigan makroprudensial normativlar hamda ular tomonidan beriladigan kreditlar (mikroqarzlar) bo'yicha to'lovlarning eng yuqori qiymatlariga doir talablar to'g'risidagi nizomni tasdiqlash haqida”gi 7/3–sonli qarori.

Figure 95. Concentration in Bank Car Loan Portfolio, HHI*

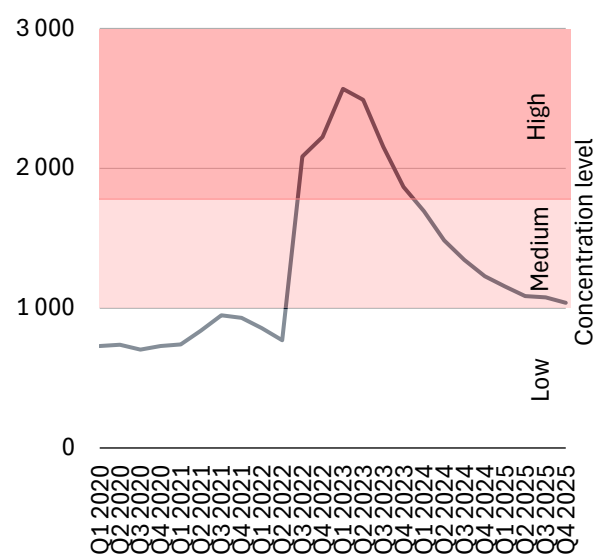


Figure 96. Bank-by-Bank Car Loans Issued to Individuals, % (as of January 1, 2026)**

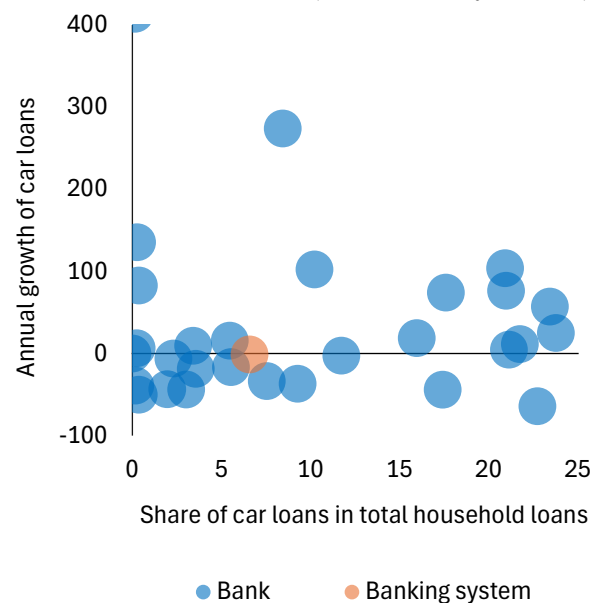


Figure 97. NPLs in Microdebts, %

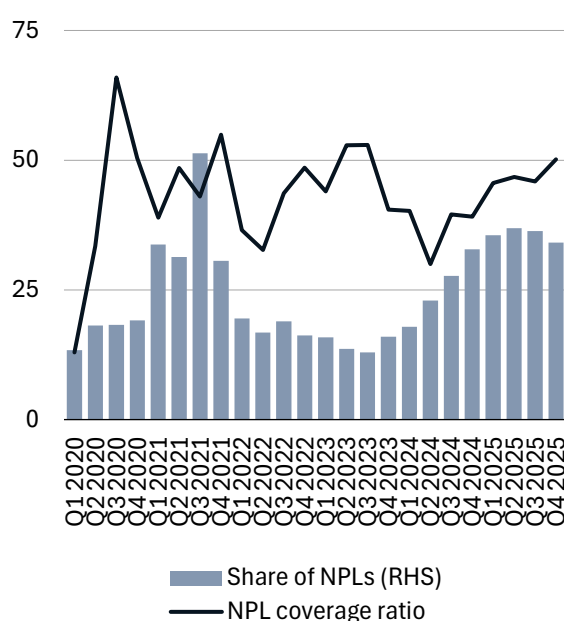
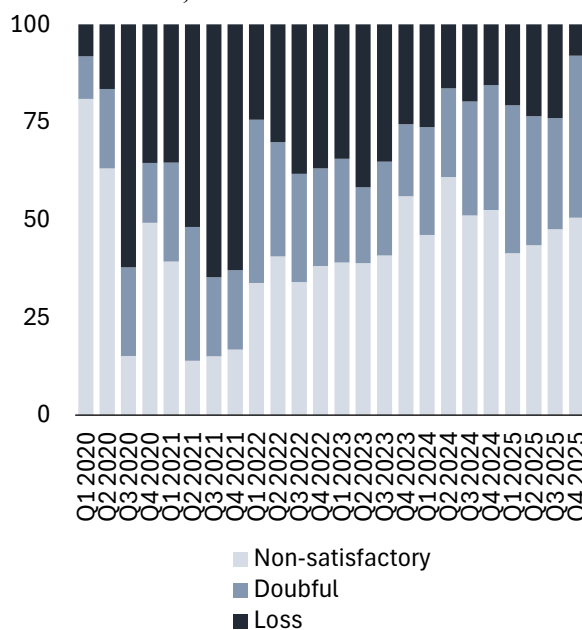


Figure 98. NPL Composition of Microdebts, %



Source: CBU staff calculations.

Notes: *The HHI categorizes the level of competition into low concentration (below 1000), medium concentration (from 1000 to 1800), and high concentration (above 1800) groups.

**Banks with an annual growth rate in outstanding car loans exceeding 400% are excluded. The dashed straight lines represent the average values of indicators for the banking system as of January 1, 2026.

Figure 99. Microdebt Borrowers, million people

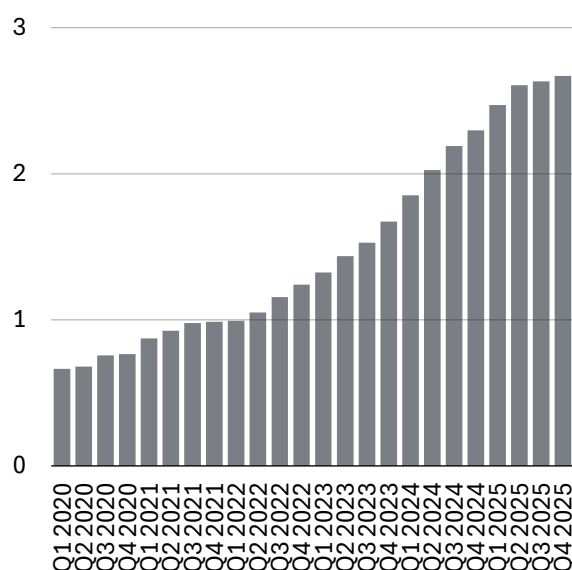


Figure 100. Microdebt Contracts per Borrower, units

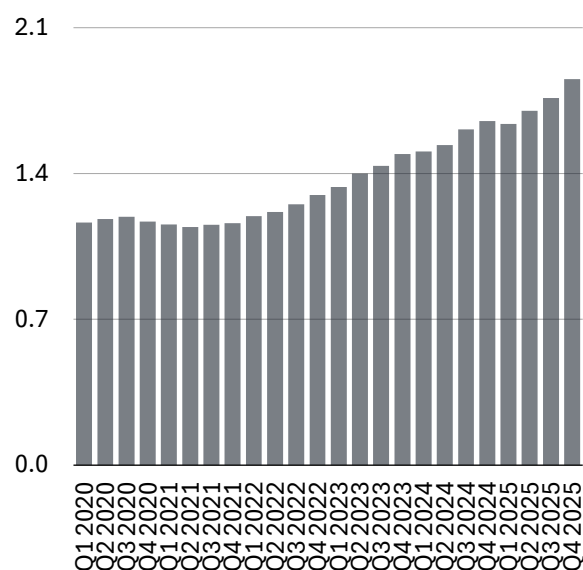


Figure 101. Bank-by-Bank Microdebt Conditions*, % (as of January 1, 2026)

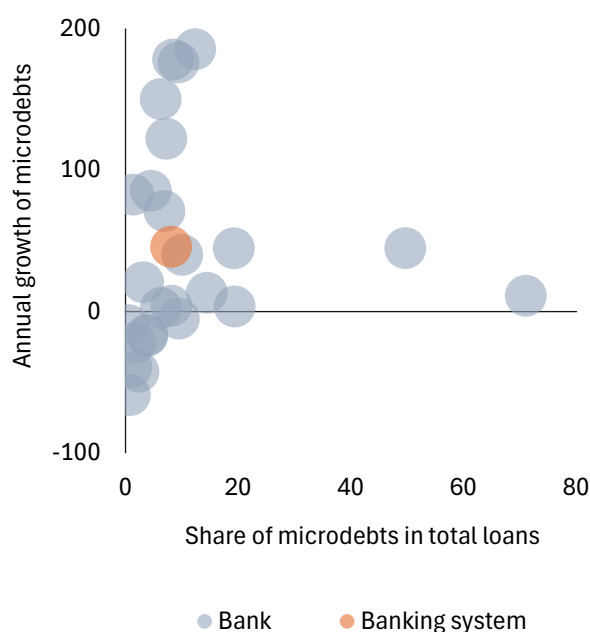
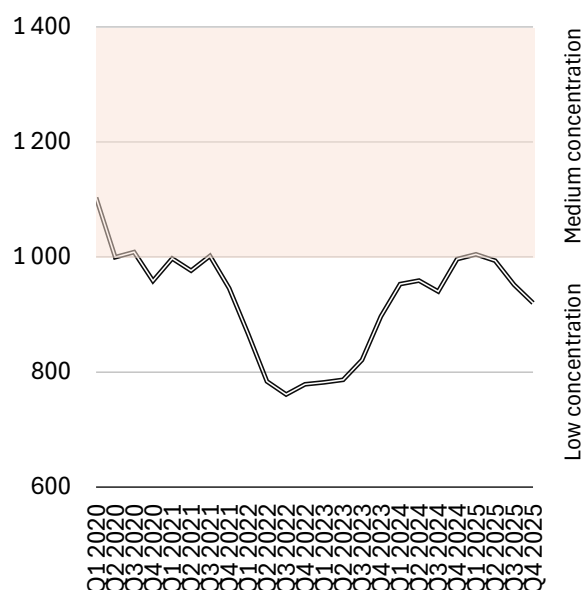


Figure 102. Concentration of Outstanding Microdebt, HHI**



Source: CBU staff calculations.

Notes: *Banks with annual growth rates of microdebt exceeding 200% were excluded. The dashed straight lines represent the average values of indicators for the banking system as of January 1, 2026.

**The HHI categorizes the level of competition into low concentration (below 1000), medium concentration (from 1000 to 1800), and high concentration (above 1800) groups.

The number of microdebt contracts per borrower is on the rise. As of January 1, 2026, the number of microdebt borrowers from banks amounted to almost 2.7 million, reflecting a 16% increase compared with the same period in 2025. Moreover, the average number of contracts per microdebt borrower also rose from 1.7 to 1.9. This situation may lead to an increase in the debt burden of individuals with multiple microdebt obligations and a heightened risk of loan losses for banks.

The concentration in microdebts is declining. As of January 1, 2026, the HHI for outstanding microdebts reached 920. This indicator decreased by 76 units compared to the corresponding period in 2025, remaining within the low concentration group. At the same time, outstanding microdebts reached UZS 48.9 trillion, accounting for 8% of the total loan portfolio. Despite the decline in the concentration of microdebts in the banking system, the share of microdebts in certain banks' loan portfolios remains high.

Box 4. Debt Burden Survey

The CBU conducted its next round of survey¹¹³ to determine the debt burden of individuals for H1 2026 with the participation of 5,800 respondents from all regions of Uzbekistan. In assessing the debt burden of individuals, the respondents' obligations to banks and non-bank organizations were taken into account.

Among the survey participants, respondents with households consisting of five members had the largest share at 28%. Furthermore, the majority of respondents reported average monthly income of up to UZS 12 million from their primary employment.

In addition, 19% of total respondents reported having an additional source of income. In particular, 58% of these respondents had extra monthly income of up to UZS 4 million.

77% of all respondents reported that either they or one of their household members had bank and non-bank debt obligations. At the same time, 68% of respondents had bank debt liabilities, and one in five of these respondents also had non-bank debt obligations.

20% of borrowed funds were obtained for housing purchase or renovation, and 18% for the purpose of vehicle purchases. Additionally, 8% of respondents with debt liabilities reported obtaining new loans for the purpose of repaying existing debts.

68% of total respondents had monthly payments of less than UZS 6 million on total debt obligations. At the same time, 48% of respondents noted the remaining maturity of debt obligations was less than 3 years. The share of respondents who reported the remaining maturity of their total debt obligations as 5 years or more amounted to 27%.

61% of respondents reported experiencing difficulties in servicing their debt obligations on time. Moreover, 47% of respondents with debt obligations expect their debt-servicing capacity to improve over the next 6 months, while 42% expect no change.

15% of total respondents reported that either they or their household members will need to take out additional loans over the next 6 months. In particular, a quarter of these respondents plan to purchase or renovate housing using borrowed funds.

¹¹³ The Central Bank conducted this survey from 20 to 27 January 2026.

A sample of the Debt Burden Survey is provided in the Financial Stability Report for H1 2024.

Figure 103. Number of Household Members, %

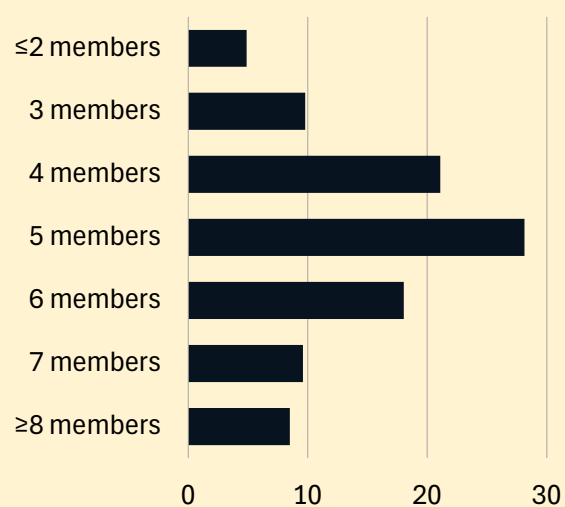


Figure 104. Breakdown of Monthly Primary Income by Household, %

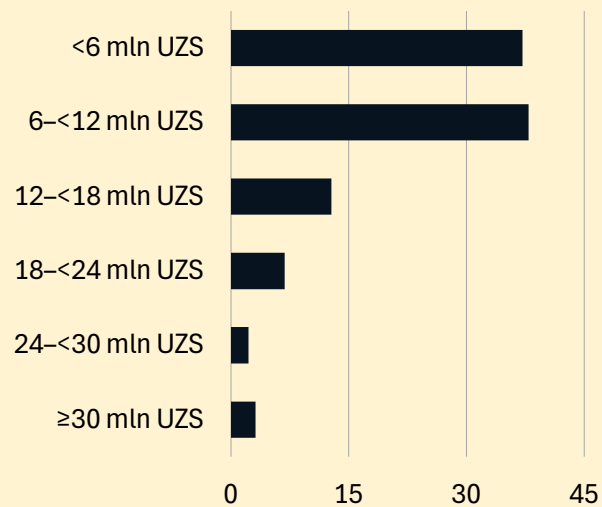


Figure 105. Share of Households with Secondary Income

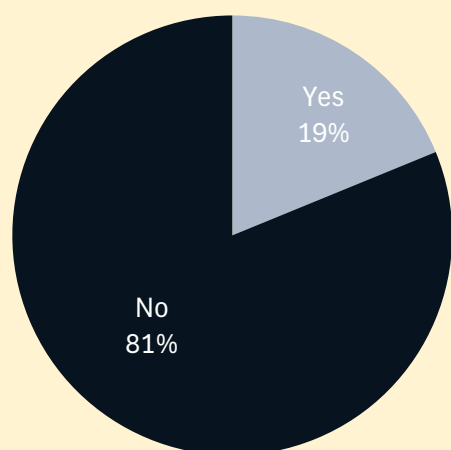


Figure 106. Breakdown of Monthly Secondary Income by Household, %

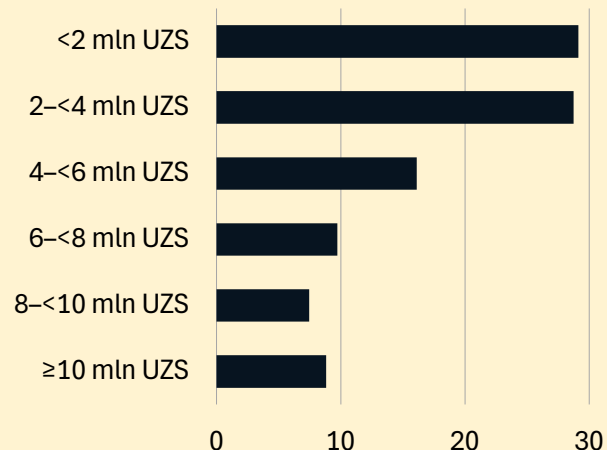


Figure 107. Existence of Bank and Non-Bank Debt Obligations

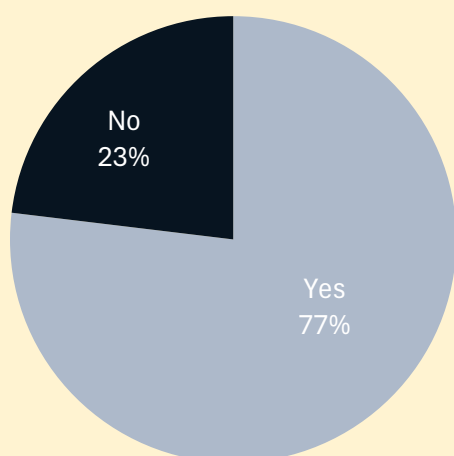
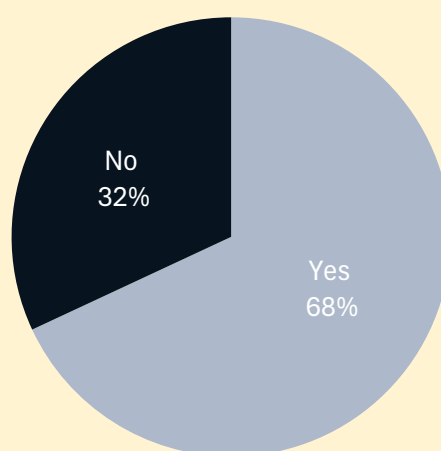


Figure 108. Share of Households Indebted to Banks



Source: CBU Survey.

Figure 109. Existence of Non-Bank Liabilities Among Bank Borrowers

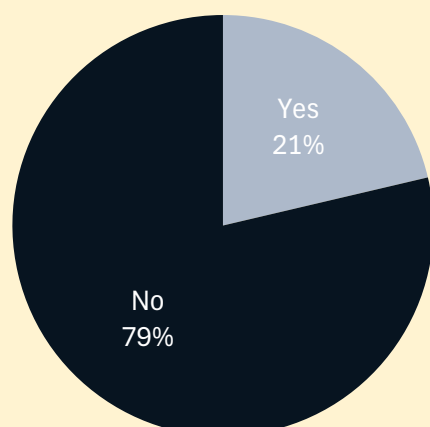


Figure 110. Objectives of Bank and Non-Bank Credit Borrowing, %

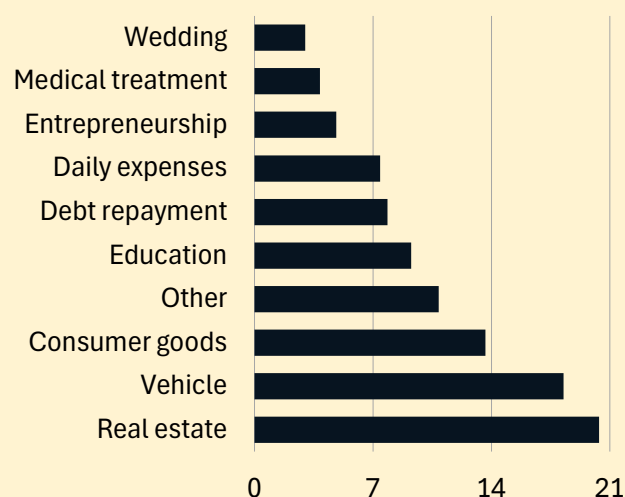


Figure 111. Monthly Payment for Total Debt Obligations, %

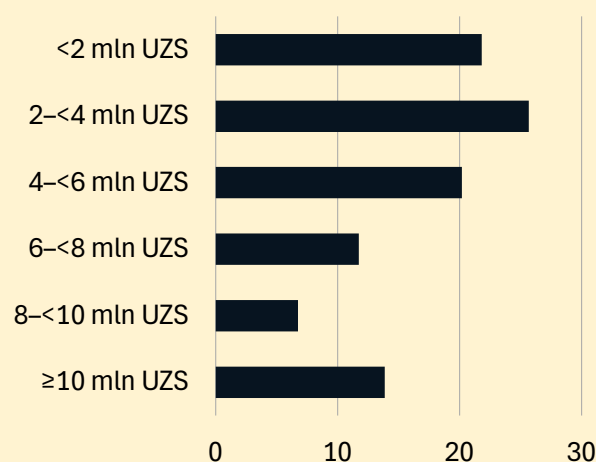


Figure 112. Remaining Maturity of Total Debt Obligations, %

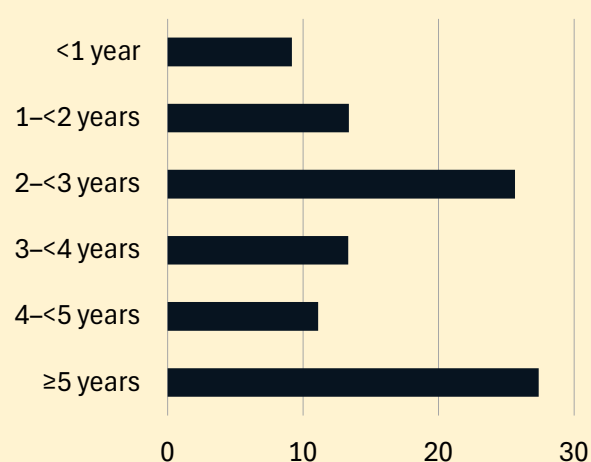


Figure 113. Challenges with On Time Repayment of Debt Obligations

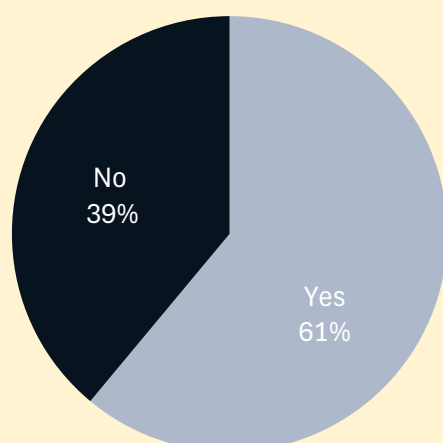
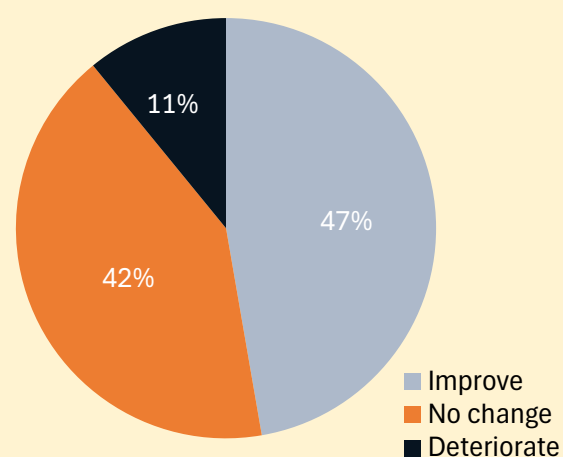


Figure 114. Solvency Outlook for the Next 6 Months



Source: CBU Survey.

Figure 115. Intentions for Credit and Debt Over the Next 6 Months

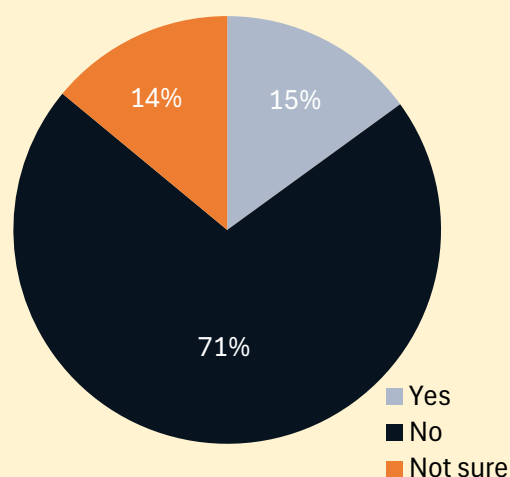


Figure 116. Borrowing Objectives for the Next 6 Months, %

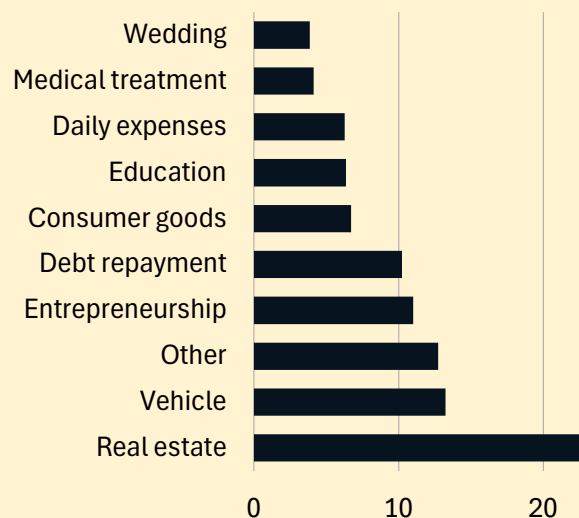
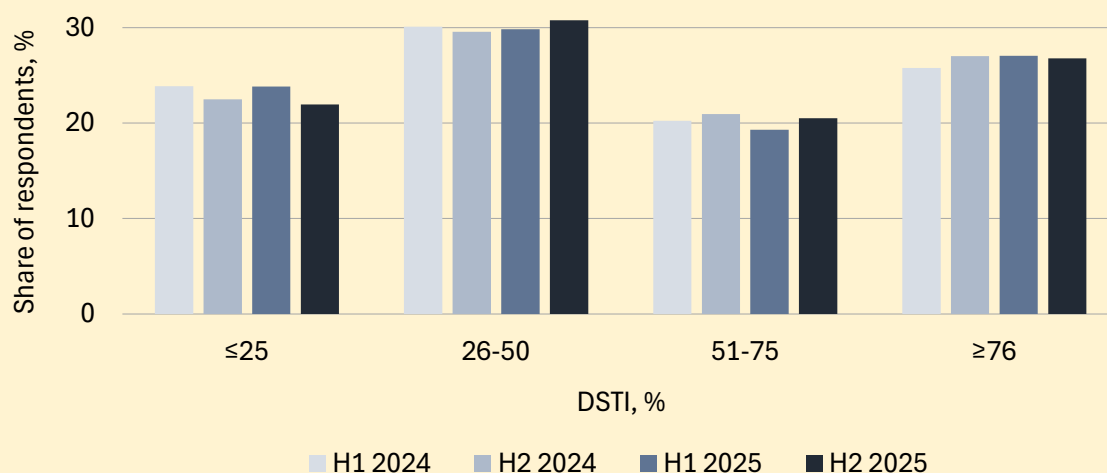


Figure 117. Distribution of DSTI Ratios for Bank Loan Borrowers



Source: CBU Survey.

The average DSTI ratio of respondents indebted to banks, including all debt obligations¹¹⁴, was 51%¹¹⁵, while the median DSTI stood at 47%. Additionally, according to the distribution of DSTI ratios, 47% of the respondents had a DSTI ratio exceeding 50 percent. The indicator decreased by 1 p.p. compared with the results of the survey conducted in the corresponding period of 2024, indicating a slight improvement in the debt burden of households.

¹¹⁴ The total average debt burden of respondents with bank loans was calculated by dividing their total monthly payments on bank and non-bank debt obligations by their total monthly income from primary and additional sources.

¹¹⁵ To determine households' basic and additional monthly income, expenses, and monthly payments on loans and debts, the average of the upper and lower limits of the intervals given by respondents was used. The conditional upper limit of an unbounded interval was found by adding the previous interval size (the difference between its upper and lower limits) to the lower limit of the current interval.

3.2. Corporate Sector

Corporate sector vulnerabilities have moderated. The appreciation of the UZS and the growing share of loans denominated in UZS in corporate loans have contributed to a certain reduction in FX risks in this sector. In addition, higher profitability and improved financial soundness indicators among the enterprises analyzed in the corporate sector indicate stronger financial conditions and a lower likelihood of being unable to meet their obligations.

FX-denominated outstanding loan exposures are increasing in USD equivalent. As of January 1, 2026, corporate loans rose by 8% year-on-year, reaching UZS 383.7 trillion. In this regard, the slowdown in the growth of corporate loans was influenced by slower growth in outstanding FX loans in UZS equivalent. In particular, at the end of 2025, outstanding FX loans in UZS equivalent reached UZS 236.8 trillion, marking a 4 p.p. increase. The volume of FX loans increased by 11% in USD equivalent. During 2025, the weighted average interest rate on corporate FX loans stood at around 10%. At the same time, the annual growth of the volume of corporate loans extended in UZS reached 16%, amounting to UZS 146.9 trillion as of January 1, 2026.

The corporate loans-to-GDP ratio exhibited a negative deviation from its long-term trend. As of January 1, 2026, the corporate loans-to-GDP ratio was 21%, forming a negative gap relative to its long-term trend. Moreover, outstanding loans to the industrial sector, which constitutes the largest share in the corporate loan portfolio, decreased by 7% year-on-year, reaching UZS 143 trillion. At the end of 2025, the loans-to-GDP ratio in the industrial sector stood at 8%. At the same time, outstanding loans to the construction sector recorded a high growth of 46%.

Figure 118. Corporate Loan Stocks and Annual Growth Rate

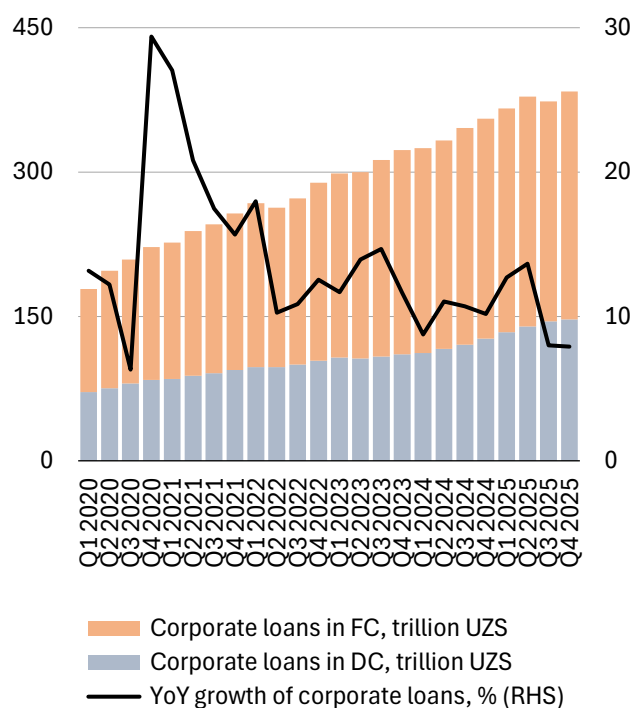


Figure 119. Weighted Average Interest Rate on FX Corporate Loans, %

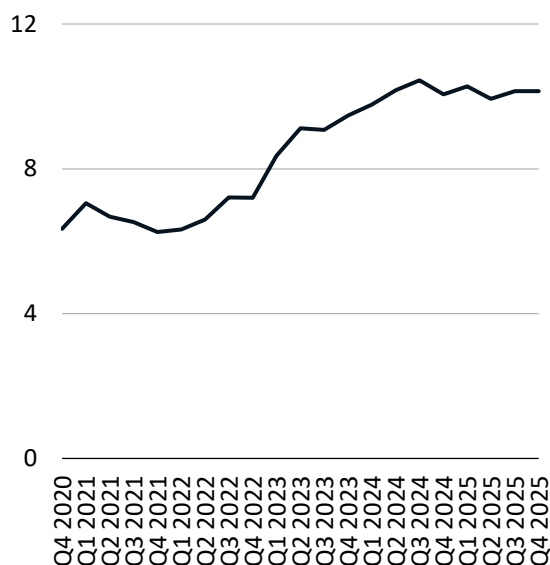


Figure 120. Corporate Loans-to-GDP by Sector, %

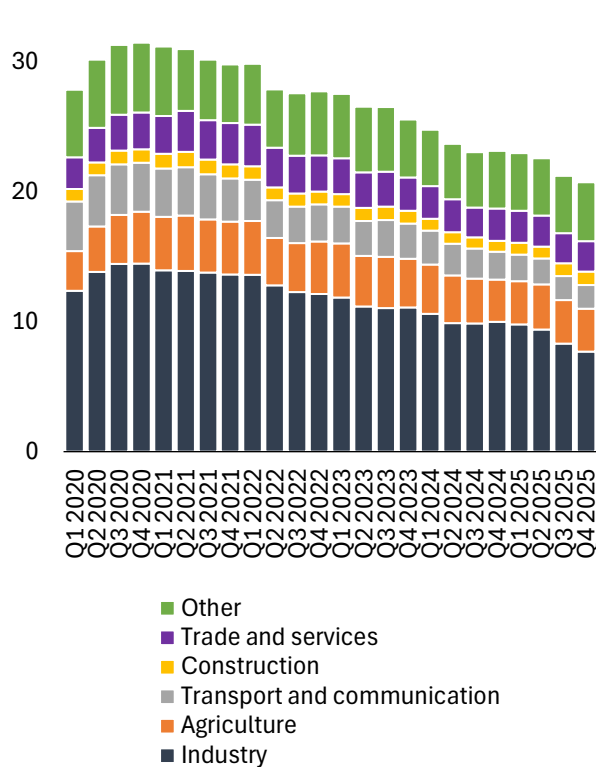
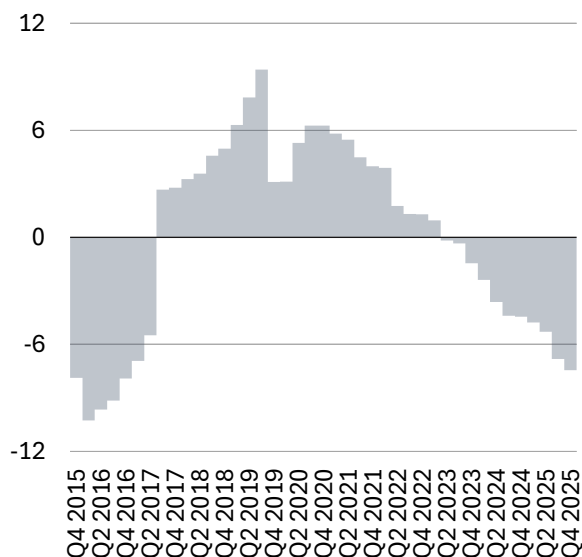


Figure 121. Corporate Loans-to-GDP Gap, p.p.



Sources: National Statistics Committee and CBU staff calculations.

Figure 122. Liabilities-to-Capital Ratio and Share of Loss-making Enterprises, %

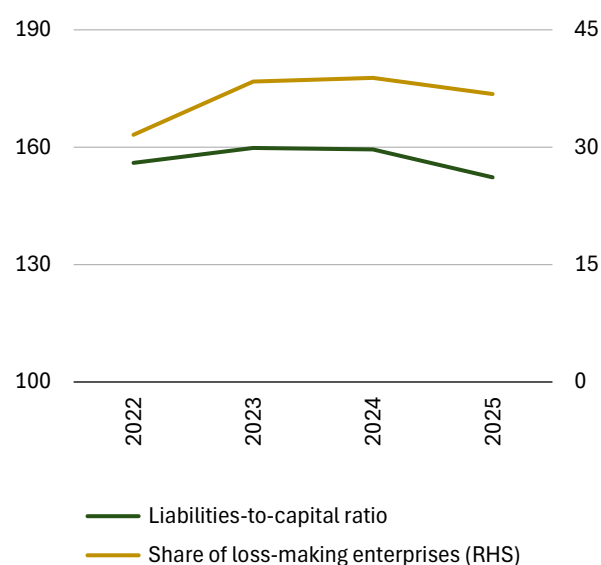


Figure 123. ICR, %

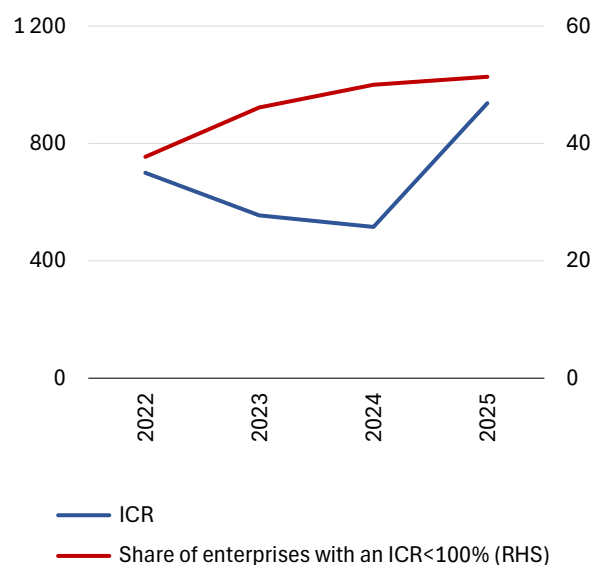


Figure 124. Cash and Current Ratios, %

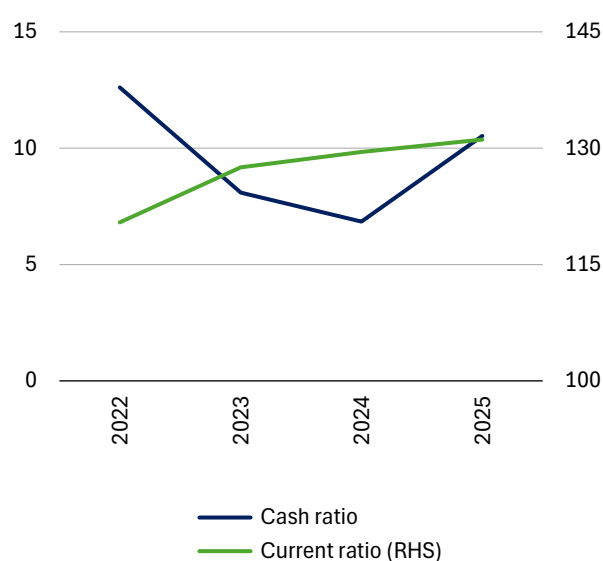
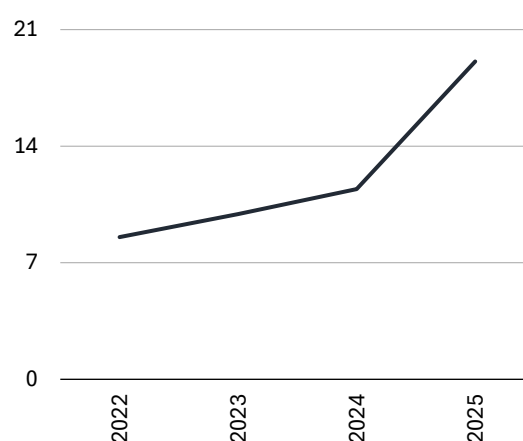


Figure 125. ROA, %



Sources: Unified Corporate Information Portal, financial reports of companies, and CBU staff calculations.

Note: The analysis covered 440 enterprises identified as large taxpayers and/or top borrowers.

The ICR is defined as the ratio of PBT to interest expenses, measuring the extent of interest-service coverage provided by a company's PBT. An ICR below 100% indicates insufficient current income to service interest obligations, implying elevated default risk.

The leverage ratio of the analyzed corporate-sector enterprises¹¹⁶ declined. At the end of 2025, the total liabilities-to-capital ratio amounted to 152%, declining by 7 p.p. compared with 2024. Additionally, the share of loss-making enterprises fell by 2 p.p., accounting for 37% of the total number of enterprises. This, in turn, indicates an improvement in the financial condition of enterprises and their solvency to meet their obligations.

The ICR of enterprises improved. As of January 1, 2026, the ICR of enterprises rose to 937%. In this context, this indicator improved due to the growth in the income of enterprises and the decline in the share of loss-making enterprises. At the same time, 51% of enterprises had the ICR below 100%, which remained almost unchanged compared to the corresponding period of 2024.

The liquidity of enterprises strengthened. At the end of 2025, the absolute liquidity ratio¹¹⁷ of enterprises was 11%, rising by 4 p.p. compared with the corresponding period of 2024. At the same time, the current liquidity ratio¹¹⁸ increased by 2 p.p. annually, reaching 131% as of January 1, 2026. This indicates a strengthening of enterprises' ability to cover short-term liabilities on time.

The profitability of enterprises is increasing. The ROA of enterprises stood at 19% as of the end of 2025. This indicator increased by 8 p.p. on an annual basis compared to the beginning of 2025.

¹¹⁶ In the corporate sector analysis, 440 enterprises were selected from top borrowers and taxpayers based on data availability.

¹¹⁷ The cash ratio indicates the amount of cash covering current liabilities. This ratio is calculated by dividing the company's most liquid funds by current liabilities.

¹¹⁸ The current ratio is determined by dividing current assets by current liabilities. A ratio of more than 100% indicates a stable financial condition of a company. In the Financial Stability Reports, the list of enterprises analyzed in the corporate sector may change due to updates in the composition of large borrowers and the availability of data.

IV. Asset Markets

4.1. Real Estate Market

The market price of residential property remained close to its estimated average fundamental value. Positive developments in factors stimulating demand in the real estate market were reflected in an increase in the fundamental price of housing. In particular, rising household incomes and eased mortgage lending conditions, together with an increase in housing supply and corrections in market prices, improved households' housing affordability. This, in turn, contributed to increased activity in the real estate market and stimulated demand.

Housing market prices have returned to the SD range of the fundamental prices. In 2025, the market price of residential property was within one SD of the average fundamental price estimated by the price-to-income, Bayesian state space model, Quantile regression, and Potential demand models. This indicates that the influence of fundamental factors in the formation of market prices in the real estate market has increased.

The appreciation of the DC eased corrections in housing prices in FC. At the end of 2025, the market price of housing decreased by 4.8% year-on-year¹¹⁹. In 2025, due to the appreciation of the UZS against the USD, housing prices increased by 1.5% year-on-year in FC.

The annual growth rate of construction and assembly work prices slightly accelerated. At the end of 2025, construction and assembly work prices increased by 5.6% annually, 2 p.p. higher than in the corresponding period of 2024¹²⁰. In particular, the decline in housing prices in the real estate market, under conditions of increasing construction and assembly costs, can be explained by corrections in previously overestimated prices.

Real estate market supply increased. In 2025, the ratio of construction to GDP amounted to 17%, recording an increase of 1.7 p.p. compared with 2024. The rise in the volume of construction work created additional supply in the real estate market. In particular, the number of new apartments commissioned in 2025 grew by 3.6% compared to 2024, reaching 69.1 thousand¹²¹. In addition, as of January 1, 2026, there were 7.7 million residential apartments in Uzbekistan¹²².

¹¹⁹ National Statistics Committee. (2026). Dynamics of the price index in the housing market (compared to the corresponding quarter of the previous year).

¹²⁰ National Statistics Committee. (2026). Dynamics of the price index for investments in fixed capital and construction works (compared to the previous month).

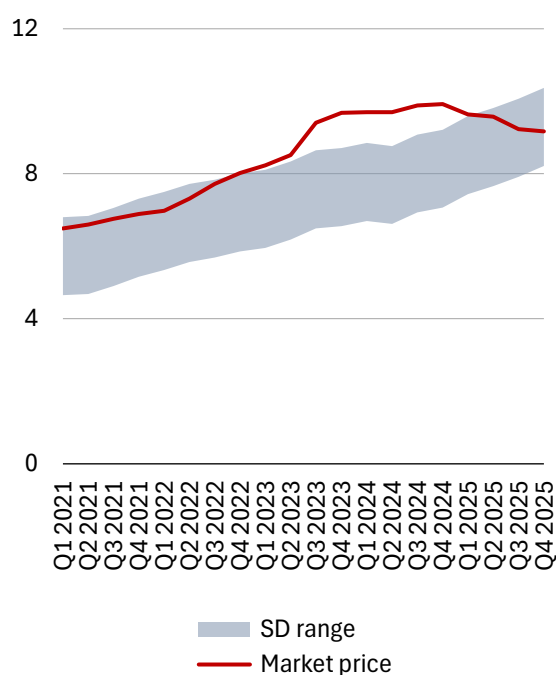
¹²¹ National Statistics Committee. (2026). Number of commissioned apartments (quarterly).

¹²² National Statistics Committee. (2026). Number of residential apartments (houses).

Figure 126. Market and Fundamental Prices of Houses, million UZS per square meter



Figure 127. Market Price and SD Range of Average Fundamental Prices of Houses, million UZS per square meter



Source: CBU staff calculations.

Note: The average fundamental price of housing is found by calculating the simple arithmetic mean of the fundamental prices determined by Price and income¹²³, Bayesian state space¹²⁴, Quantile regression¹²⁵ and Potential demand models.

The rectangular shape in the diagram illustrates the difference between the market price and the average fundamental price of housing. When the market price exceeds the average fundamental price, the interior of the rectangle is completely filled with dark color; when it is lower, the rectangle is white.

The market prices per square meter are average prices calculated from online advertisements and may not reflect the actual sales prices.

The average market price of housing in Uzbekistan is determined by the weighted average of prices based on the average housing prices in the region and the number of sales contracts. The average market price of housing by region is calculated by the weighted average of prices based on the average prices of private houses and apartments in multi-story residential buildings and the number of sales contracts.

The lower bound of the SD range for the average of fundamental prices is determined by subtracting the SD of the average fundamental price, calculated across all periods, from the average value of the model results. The upper bound of the SD range for the average of fundamental prices is calculated by the sum of the average value of the model results and the SD of this average fundamental price, calculated for all periods.

¹²³ Price and income model methodology is presented in the Financial Stability Report for 2022.

¹²⁴ Bayesian state space model methodology is presented in the Financial Stability Report for H1 2024.

¹²⁵ Quantile regression model methodology is presented in Financial Stability Report for 2024

Figure 128. Housing Market Price Indexes (2020 Q1=100)

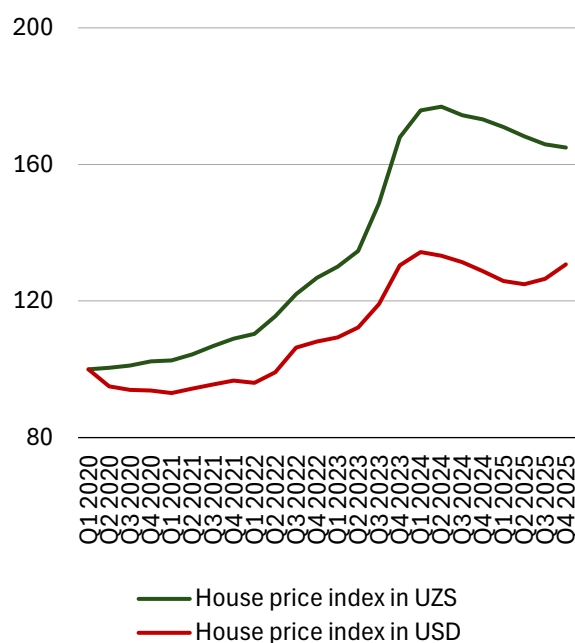


Figure 129. Construction and Assembly Works Prices, (YoY change) %

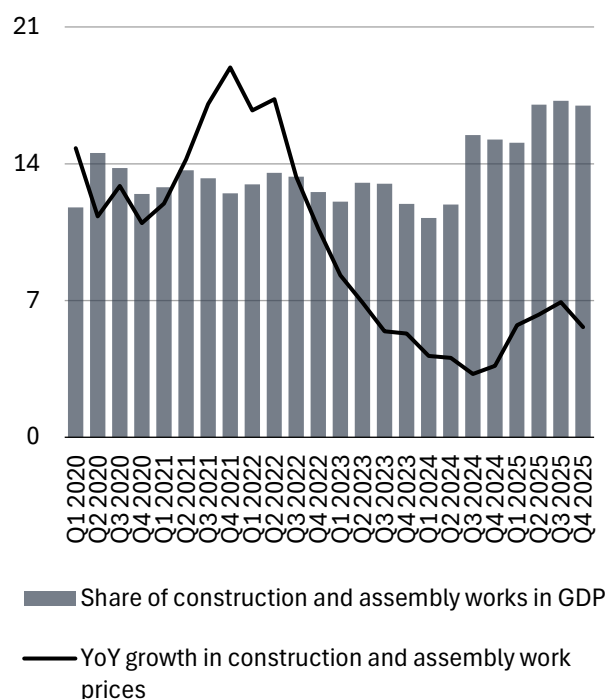


Figure 130. Number of Newly Commissioned Apartments, thousand units

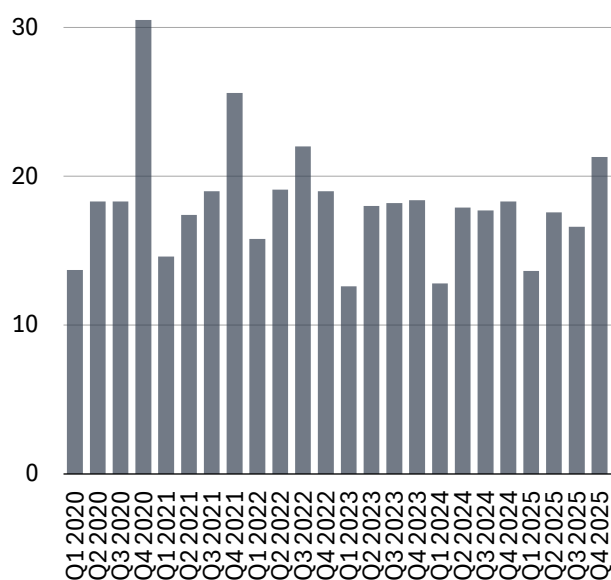
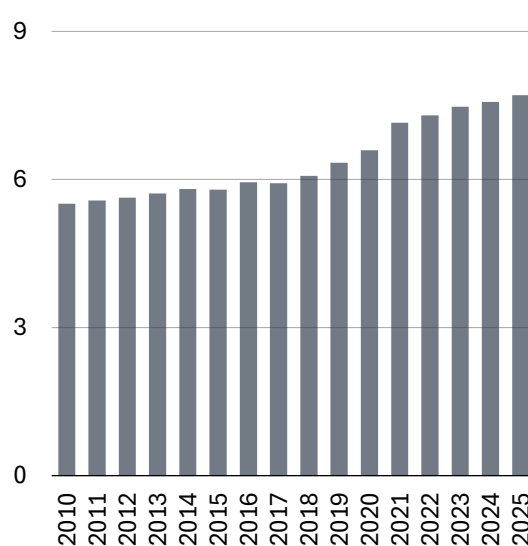


Figure 131. Number of Residential Apartments, million units



Sources: National Statistics Committee and CBU staff calculations.

The housing affordability of households through mortgages has begun to strengthen. A relative decrease in interest rates on mortgages issued by banks and an extension of mortgage maturities have led to a drop in monthly payments on mortgages. In 2025, the relative easing of mortgage lending conditions and a 19% increase in the average monthly nominal wage¹²⁶ improved households' housing affordability through mortgages. In particular, the housing affordability index rose from 115% to 126% during 2025. The improvement in housing affordability was reflected in a decrease of 34.7 thousand in the number of households without their own residential property in 2025 compared with 2024.

Total household incomes grew significantly faster than residential property prices. In 2025, nominal GDP per capita amounted to UZS 48.8 million¹²⁷, up 18% from 2024. The ratio of housing prices to GDP per capita fell to 19% by the end of 2025 due to the increase in GDP per capita and the decline in housing prices.

Market participants are shifting toward prudent investments that rely on stable rental income rather than asset price growth. Annual housing price growth was lower than rental growth. The ratio of the growth rate of housing prices to the growth rate of rents fell below one in 2025, indicating a shift in the nature of investments in the real estate market. In particular, the weakening of speculative interest in residential property on the demand side was one of the factors contributing to price corrections. Residential rents in the real estate market rose by almost 3%¹²⁸.

Residential property prices are undergoing corrections amid rising household incomes in Uzbekistan. By the end of 2025, the annual growth rate of the average monthly wage in Uzbekistan was 24 p.p. higher than the growth rate of housing prices. By the end of 2025, the ratio of the annual growth rate of housing prices to the annual growth rate of the average monthly wage in Uzbekistan was below the lower bound of the IQR for ECA countries.

¹²⁶ National Statistics Committee. (2026). Average monthly wage (quarterly).

¹²⁷ National Statistics Committee. (2026). Gross domestic product of the Republic of Uzbekistan.

¹²⁸ National Statistics Committee. (2026). Price index of all goods and services in the Republic of Uzbekistan, compared to last month.

Figure 132. Housing Affordability Index*, %

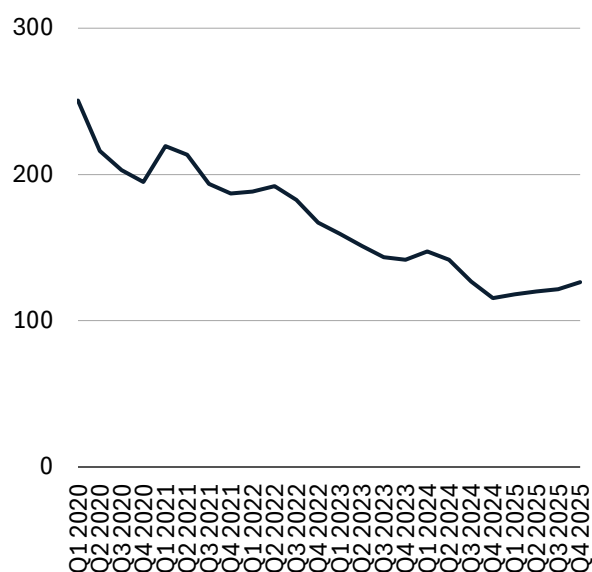


Figure 133. Households without Private Residential Property: Number and Share of Total Households

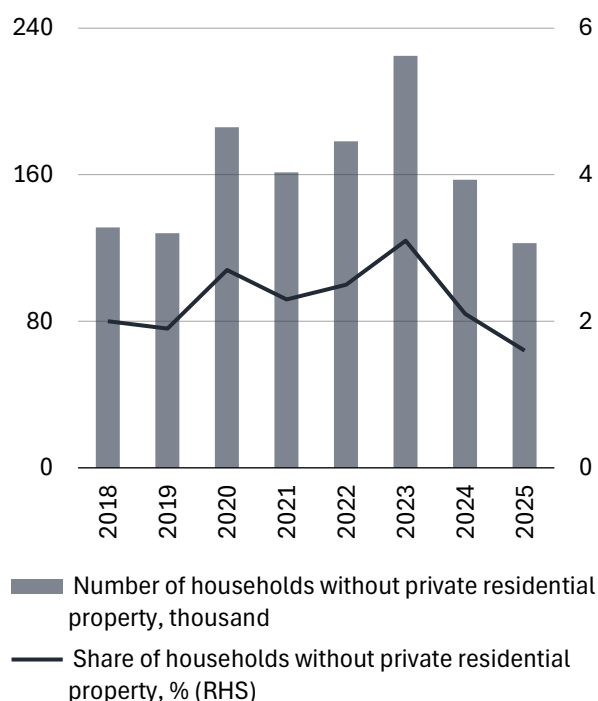


Figure 134. Ratio of Housing Prices to Nominal GDP Per Capita, %**

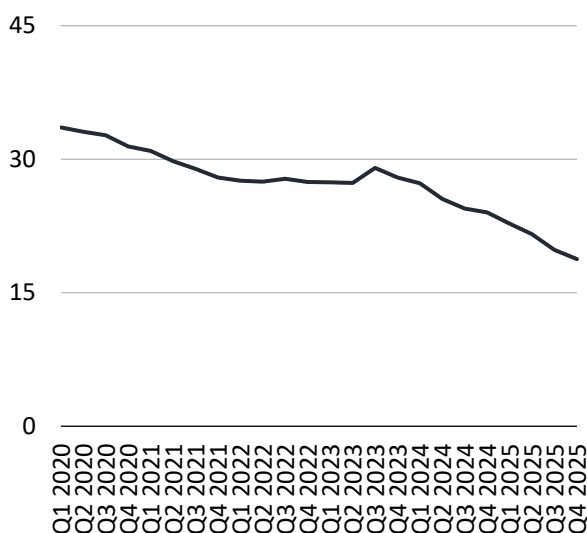
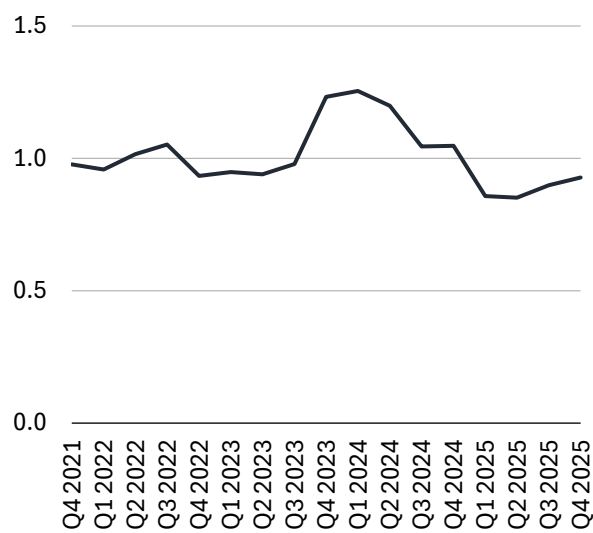


Figure 135. Ratio of Housing Prices to Rents*, index**



Sources: National Statistics Committee and CBU staff calculations.

Note: *A decrease in the housing affordability index indicates a decline in the population's ability to purchase housing, while an increase reflects an improvement in their purchasing ability.

**The market prices per square meter are average prices calculated from online advertisements and may not reflect the actual sales prices.

***The ratio of the annual growth rate of housing prices to the annual growth rate of rents is taken into account.

Figure 136. Ratio of Housing Prices to Average Wage*, index

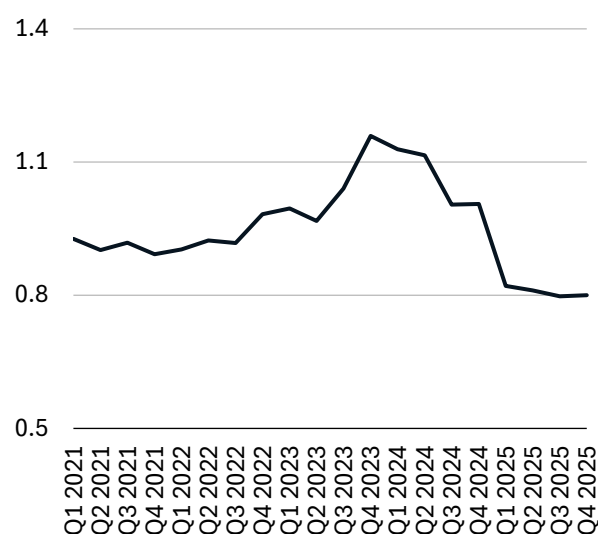


Figure 137. Annual Growth Rate of the Population in Uzbekistan, %

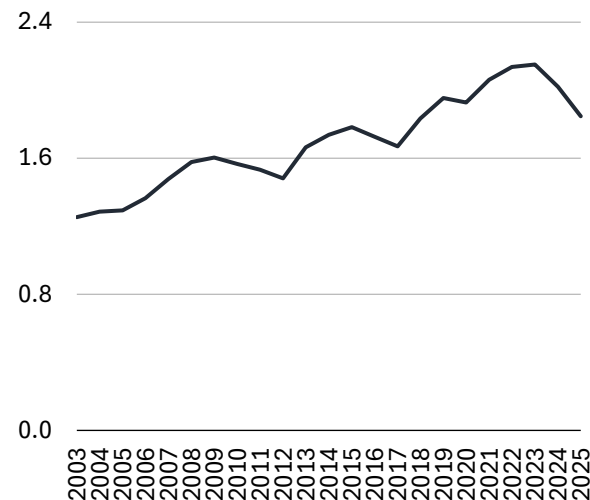


Figure 138. Population Density in CCA Countries¹²⁹, people per square kilometer

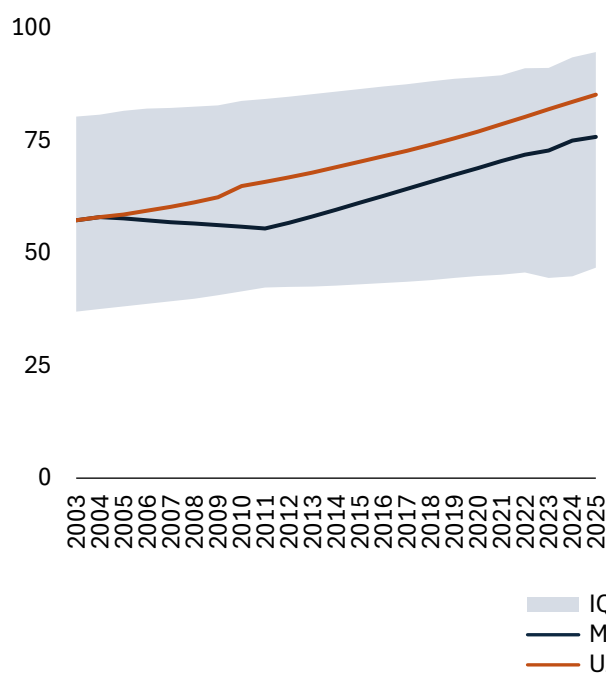
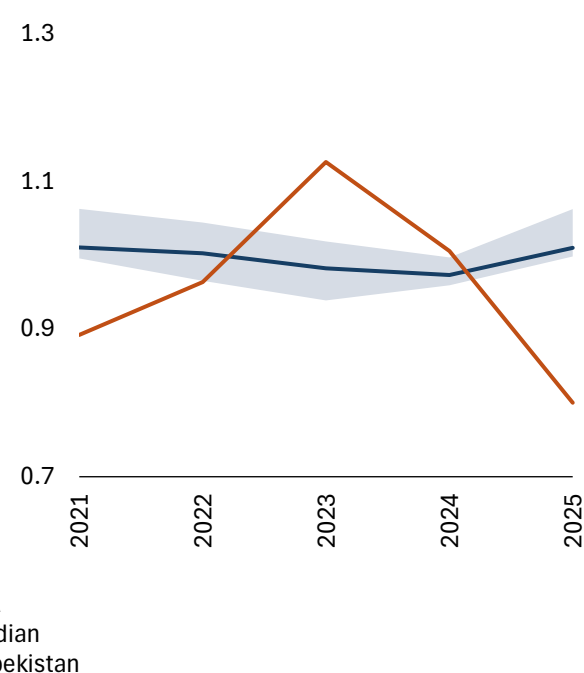


Figure 139. Ratio of Housing Prices to Average Wage in ECA Countries¹³⁰, index



Sources: United Nations, National authorities, National Statistics Committee and CBU staff calculations.

Note: *The ratio of the annual growth rate of housing prices to the annual growth rate of the average monthly wage is taken into account.

¹²⁹ According to the IMF classification, the CCA country group includes Armenia, Georgia, Azerbaijan, Tajikistan, Uzbekistan, the Kyrgyz Republic and Kazakhstan.

¹³⁰ According to the World Bank classification, the ECA country group includes Armenia, Bulgaria, Hungary, Germany, Georgia, Cyprus, Latvia, Norway, Azerbaijan, the Faroe Islands, North Macedonia and Uzbekistan.

The influence of demographic factors on Uzbekistan's real estate market is diminishing.

The annual growth rate of Uzbekistan's population decreased from 2% in 2024 to 1.8% by the end of 2025. In particular, as of January 1, 2026, the population of Uzbekistan amounted to 38.2 million people, with an average population density of 85 people per square kilometer of the country's territory.¹³¹ The population density in Uzbekistan at the end of 2025 was below the upper bound of the IQR for CCA countries.

Real estate market activity began to recover. During 2025, the number of notarized housing sales contracts grew by 15% compared with 2024, reaching 295,400. In particular, the 9.2% real growth in aggregate household incomes in 2025¹³², as well as an increase of 207,300 in the number of households with private residential property compared with 2024, contributed to increased activity in the real estate market. In addition, mortgage lending to households expanded in 2025. In this case, mortgages accounted for 24% of residential property sales contracts.

The exposure of the majority of banks to potential real estate market risks has diminished.

As of January 1, 2026, mortgages accounted for 13% of the total loan portfolio of the banking system¹³³, while the ratio of Tier I capital to total loans stood at 21%. In some banks with a relatively higher share of mortgages in their loan portfolios, corrections in the real estate market may negatively affect their solvency due to a low level of Tier I capital relative to total loans.

¹³¹ National Statistics Committee. (2026). Demographic situation in the Republic of Uzbekistan.

¹³² National Statistics Committee. (2026). Growth rates of real aggregate income of the population (quarterly).

¹³³ The Central Bank of the Republic of Uzbekistan. (2026). Information on the types of loans.

Figure 140. Ratios of Tier I Capital to Total Loans and Mortgages to Total Loans* (as of January 1, 2026)

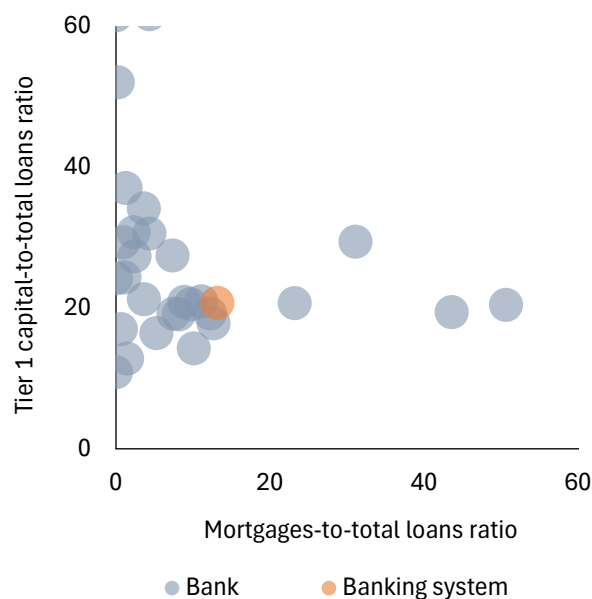


Figure 141. Average Amount of Mortgages, million UZS

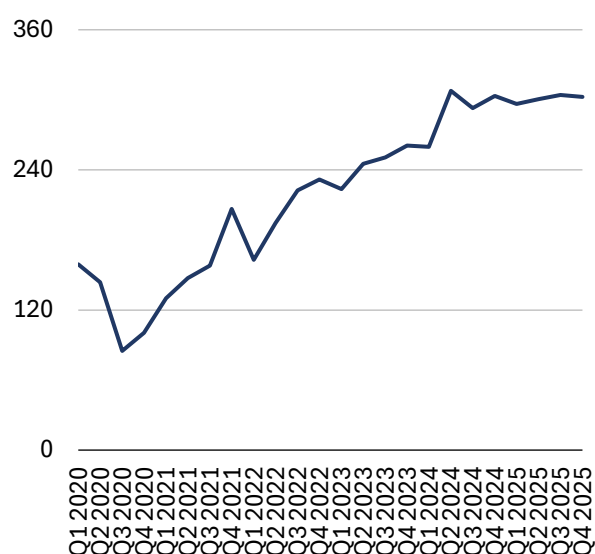


Figure 142. Number of Mortgages, thousand

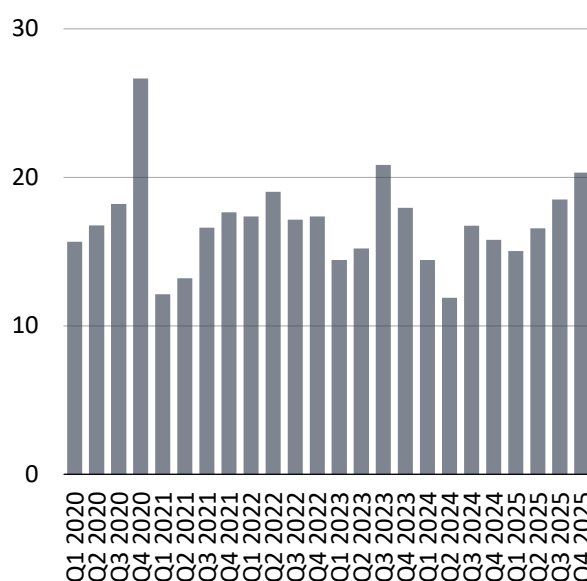
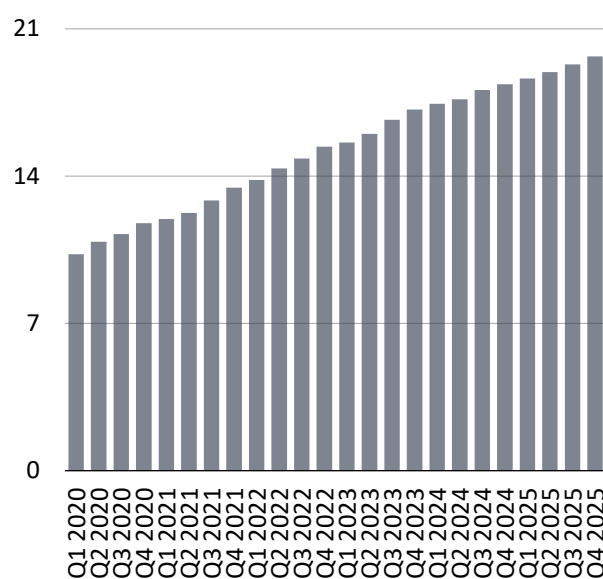


Figure 143. Number of Mortgage Borrowers per 1,000 Individuals**



Sources: National Statistics Committee, Ministry of Justice and CBU staff calculations

Note: *Banks with a Tier I capital to total loans ratio exceeding 60% were excluded from the analysis.

**The calculation is based on the number of people who are residents and of working age. The working age population refers to the total number of men aged 16 to 60 and women aged 16 to 55 who permanently reside in a particular settlement or region.

Figure 144. Ratio of Number of Mortgages to Number of Housing Sales Contracts, %

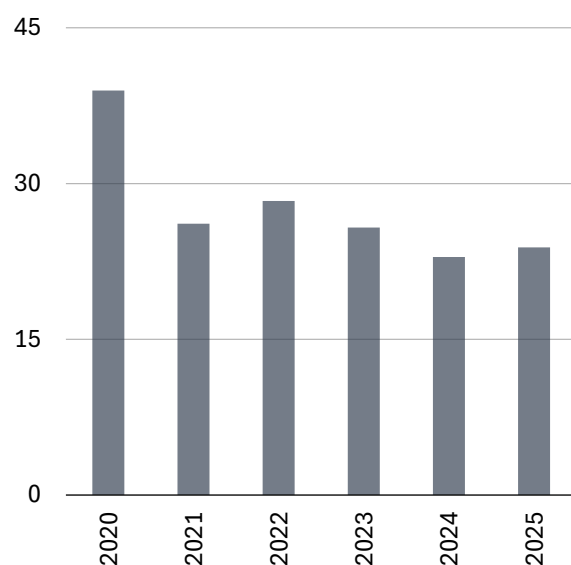


Figure 145. Number of Housing Sales Contracts*, thousand

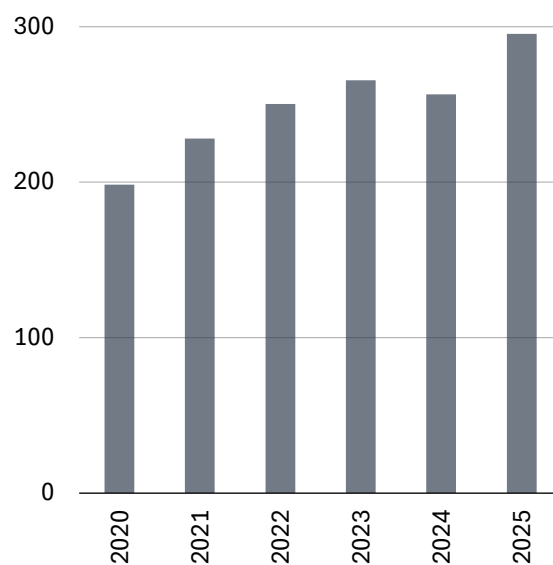


Figure 146. Weighted Average Interest Rate of Mortgages, %

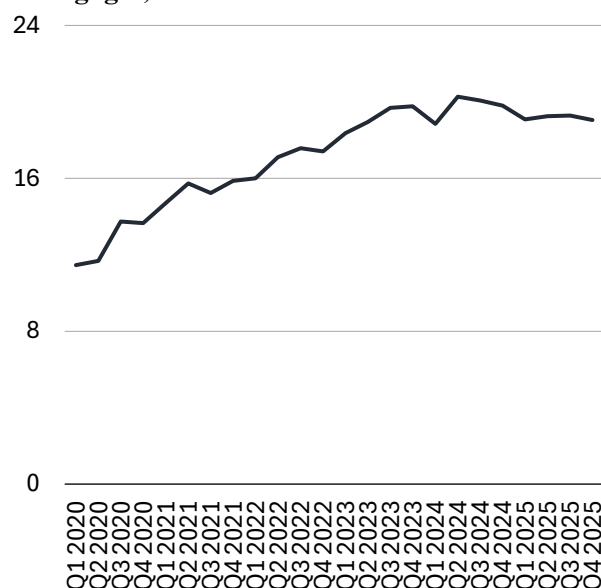
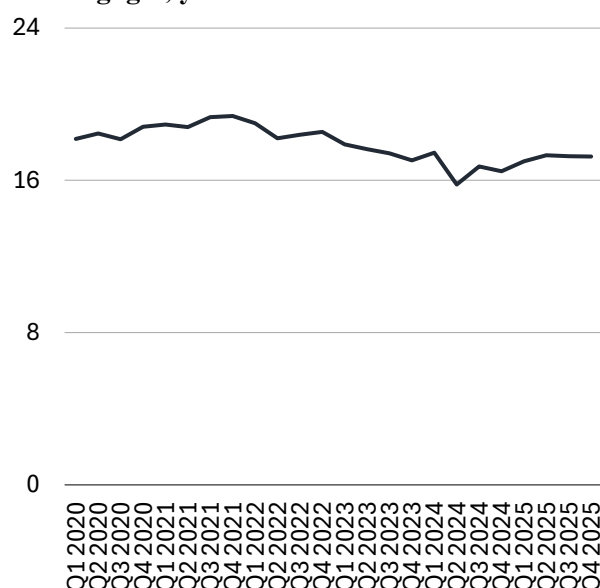


Figure 147. Weighted Average Term of Mortgages, years



Source: CBU staff calculations.

Note: *The number of notarized housing sales contracts for private houses and apartments in multi-story residential buildings is considered.

Mortgage lending by banks has expanded. During 2025, banks issued 70,400 mortgages to households, 20% more than in 2024¹³⁴. In addition, the number of mortgage borrowers per 1,000 working age individuals increased from 18 to 20 in 2025. The average amount of mortgages extended to households rose from UZS 290.5 million in 2024 to UZS 301.3 million in 2025. This, in turn, reflects rising household incomes and easing mortgage lending conditions, with mortgages contributing to increased demand in the real estate market.

Mortgage lending standards at banks have eased. In 2025, the weighted average maturity of mortgages was 17.2 years, increasing by 0.6 years relative to 2024. Moreover, the weighted average interest rate on mortgages stood at 19.2% in 2025, 0.6 p.p. lower than in 2024. In this regard, the easing of mortgage lending standards increases the opportunities for households to purchase housing, contributing to higher demand in the real estate market.

¹³⁴ The Central Bank of the Republic of Uzbekistan. (2026). Statistical Bulletin for 2025.

Box 5. Potential Demand Model for Fundamental Property Prices

A potential demand model¹³⁵ was developed with the aim of assessing the fundamental price of residential property more accurately in the real estate market and expanding the possibilities for analyzing price formation from the demand side (Appendix 3).

This model estimates the fundamental price based on the demand that can be created by employed individuals in the real estate market. In particular, the potential demand for housing is estimated based on the total purchasing capacity that can be generated by the employed individuals in the real estate market.

The assessment of potential demand for residential property based on household income, outstanding loans to individuals, the interest rate and maturity of mortgages, as well as the determination of the fundamental price of housing formed under the influence of potential demand, is carried out in several stages.

Stage one. To calculate total monthly disposable income, the total number of employed individuals is multiplied by the average monthly wage after taxes and mandatory payments.

Stage two. The amount of monthly payments on existing bank loans of individuals is determined. In this case, the average monthly loan payment is calculated based on outstanding loans extended to households by banks, as well as their weighted average interest rate and maturity.

Stage three. Households' purchasing capacity for housing is determined by subtracting monthly payments on bank loans of individuals from the disposable income of employed population.

Stage four. The potential demand is determined based on households' housing purchasing capacity, together with the weighted average interest rate and maturity of mortgages. In this regard, the ability of the working-age population to obtain mortgages is assessed based on the monthly income remaining after taxes, mandatory payments and monthly loan payments.

Stage five. The fundamental price is calculated using potential demand and coefficients estimated by the model as follows:

$$FP_t = e^{\alpha \cdot \ln(D_t) + \beta}$$

Where,

FP – fundamental price;

D – potential demand;

α, β – unknown coefficients;

t – quarters.

¹³⁵ Cesnak, M., Klasco, J., Kupkovič, P., Moravčík, A., Rychtárik, Š., & Vrbovský, R. (2024). Assessing residential real estate prices in Slovakia: possible approaches and indices. National Bank of Slovakia.

Stage six. The unknown coefficients are estimated using the Ordinary Least Squares (OLS) method based on the historical relationship between residential property prices and potential demand.

In assessing the fundamental price of residential property using the potential demand model, factors such as the total number of employed individuals, disposable income, outstanding loans to individuals, and the interest rate and maturity of mortgages are taken into account.

Figure 148. Decomposition of Annual Change in Housing Affordability

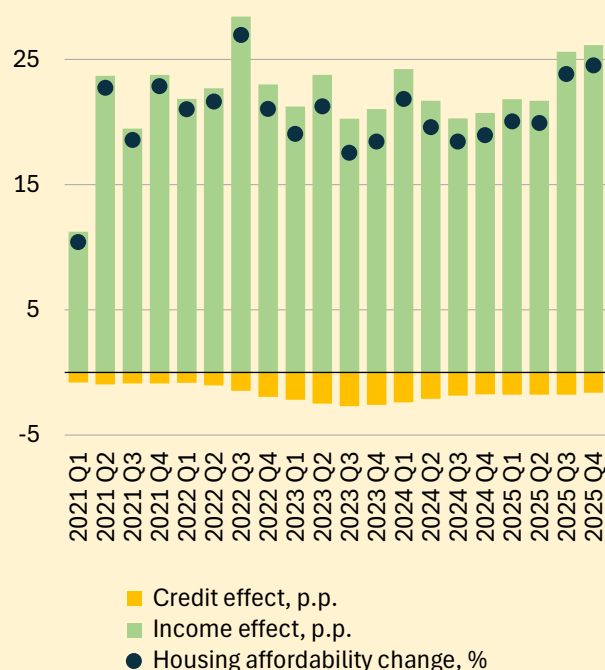
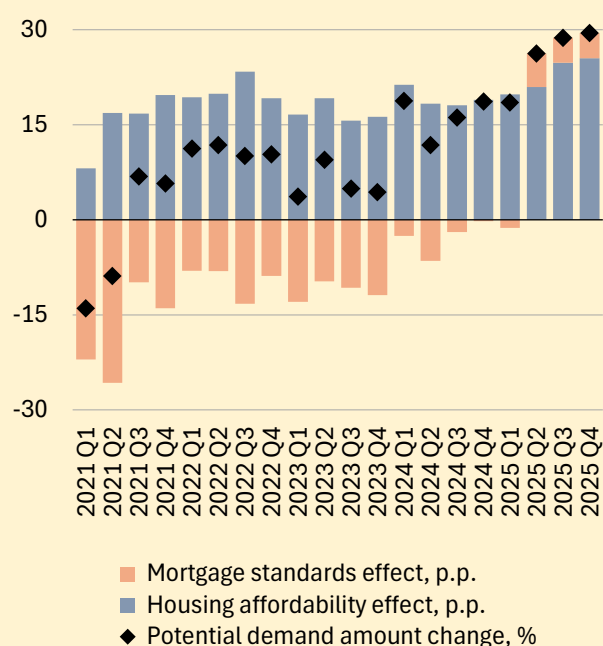


Figure 149. Decomposition of Annual Change in Potential Demand



Sources: National Statistics Committee and CBU staff calculations.

At the end of 2025, outstanding loans to individuals increased by 24% compared with 2024. The 5% growth in the total employed population and the nearly 19% increase in the average monthly wage improved housing purchasing capacity. As a result of the improvement in households' housing purchasing capacity, together with the easing of mortgage lending conditions by banks, potential demand in the real estate market grew by 29% during 2025.

Growth in the employed population and their average monthly income contributed to an increase in gross income. Rising incomes, together with declining mortgage interest rates and extended maturities, expanded households' housing purchasing capacity and increased potential demand in the real estate market. The increase in potential demand for housing, in turn, contributed to growth in the fundamental price of residential property in the real estate market.

4.2. Capital Market

Uzbekistan's capital market remained resilient amid global uncertainty. Along with the elevated activity in the stock and corporate bond markets, trading volume in the over-the-counter (OTC) market also grew. At the same time, banks' participation in the capital market and their impact on the banking system expanded. The high sovereign credit rating assigned to Uzbekistan by international rating agencies and declining yields on treasury bonds indicate a decrease in investors' risk expectations toward the country and increased demand for sovereign eurobonds.

Stock prices of listed issuers rose in stock exchange trading. At the end of 2025, the Uzbekistan Composite Index (UCI) increased by 89 units compared with 2024, reaching 744. Despite the reduction in the number of issuers included in the quotation list from 89 to 85, the increase in the UCI¹³⁶ was driven by higher market price of stocks¹³⁷.

Corporate bond market activity continues to deepen. The volume of sales in the corporate bond market in 2025 amounted to UZS 1.7 trillion, 4.5 times higher than in 2024. Of this, trading volume in bank bonds amounted to UZS 0.9 billion. In 2025, about 11,800 transactions were concluded in the corporate bond market involving 26 instruments of issuers in the quotation list, with each transaction averaging UZS 144.5 million.

The OTC market is expanding. In 2025, trades in the volume of almost UZS 8 trillion were executed on the OTC market, which accounted for 45% of the total stock exchange trades. The increase in the number of issuers on the OTC market from 180 to 228 in 2025 was reflected in a 3.3-fold rise in the trading volume compared with 2024. In addition, the number of transactions concluded on this market in 2025 grew by 25% compared with 2024, amounting to 64,200¹³⁸.

¹³⁶ UCI is determined by the following formula:

$$UCI = \frac{Market\ Cap_{current\ date}}{Market\ Cap_{base\ date}} * Base\ Index$$

Where,

Market Cap_{current date} — is the total capitalization of issuers included in the exchange quotation list, which was calculated by the system on the last transaction on the current trading date;

Market Cap_{base date} — is the total capitalization of issuers included in the exchange quotation list, which was calculated by the system on the last transaction on the date the index was created (29.08.2016);

Base Index is the specified value for the index, which is equal to 1,000.

¹³⁷ Republican Stock Exchange. (2026). Trading results.

¹³⁸ Republican Stock Exchange. (2026). Press release: 2025.

Figure 150. Uzbekistan Composite Index

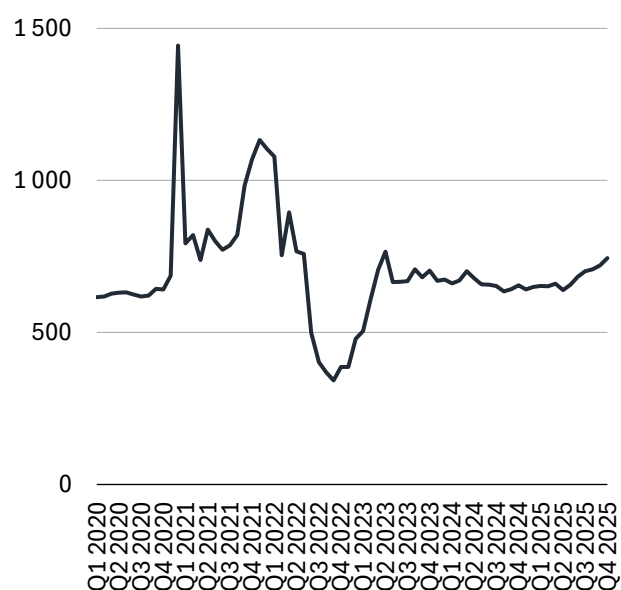


Figure 151. Number of Issuers on the Republican Stock Exchange, unit

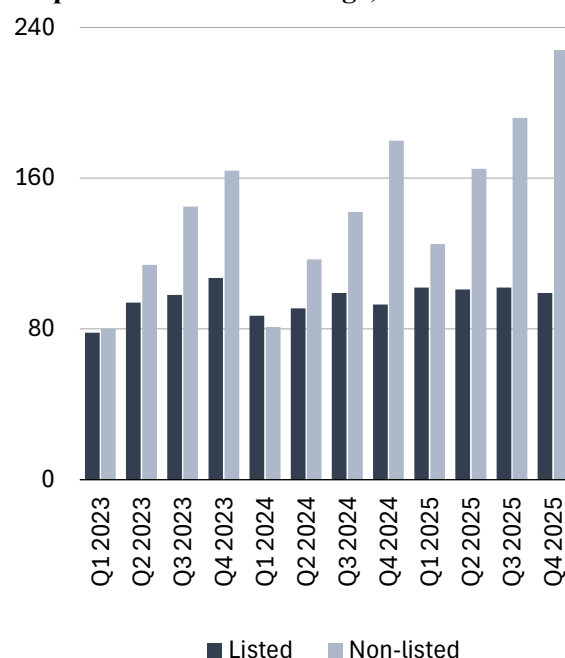


Figure 152. Trade Volume and Number of Transactions in the Corporate Bond Market

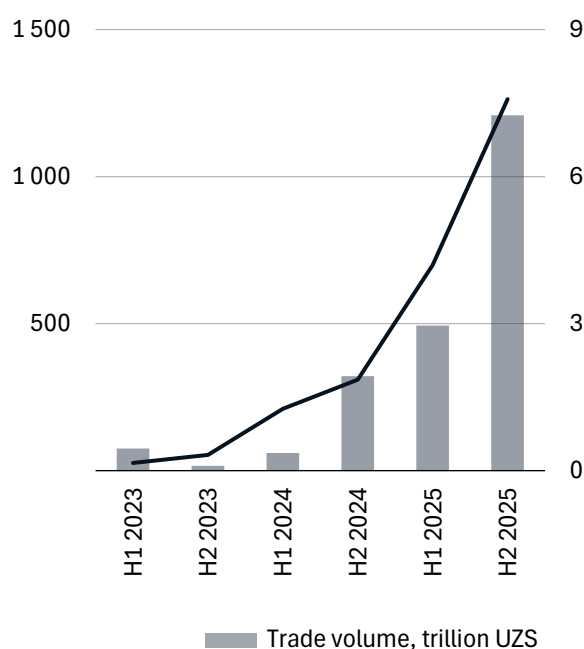
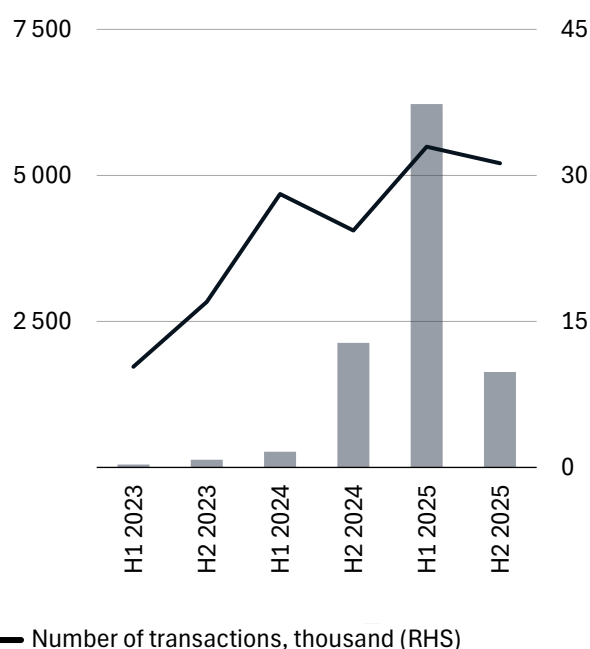


Figure 153. Trade Volume and Number of Transactions in the OTC Market



Source: Republican Stock Exchange.

Note: UCI is a stock market index that represents the overall performance of listed stock issuers on the Republican Stock Exchange. A decrease in the index value reflects a decline in the share prices of issuers included in the quotation list and a reduction in total market capitalization. As of January 1, 2026, there were 85 listed stock issuers on the exchange, out of which 18 were banks.

Figure 154. Trading Volume of Securities of Issuers Included in the Quotation List on the Republican Stock Exchange, trillion UZS

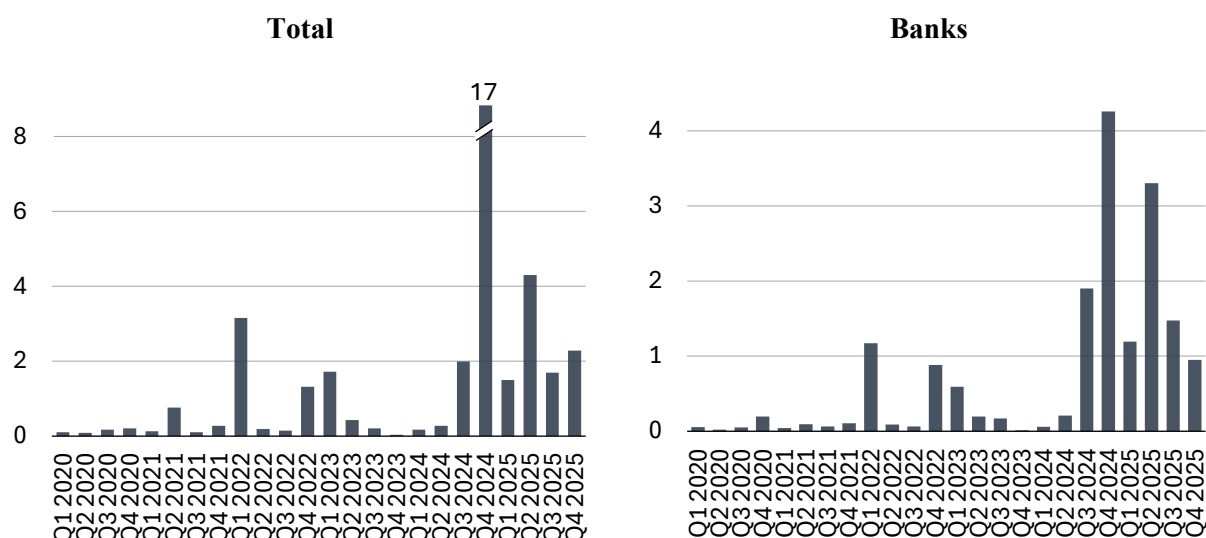
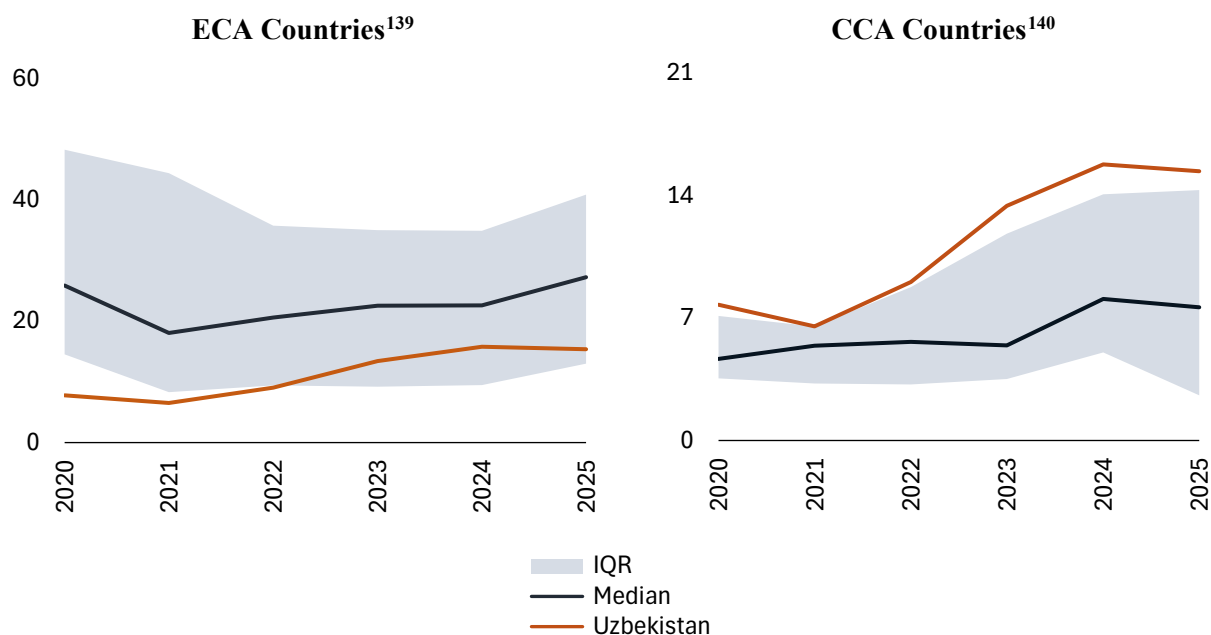


Figure 155. Stock Market Capitalization*-to-GDP, %



Sources: World Bank, Republican Stock Exchange, National authorities and CBU staff calculations.

Note: Stock market capitalization is calculated by multiplying the number of securities of all listed stock issuers on the stock exchange by their closing prices on the trading day.

¹³⁹ According to the World Bank classification, the ECA country group includes Armenia, Austria, Belarus, Bulgaria, Hungary, Georgia, Greece, Cyprus, Luxembourg, Azerbaijan, Poland, Romania, Russia, Slovenia, Türkiye, Croatia, Montenegro, Czechia, Switzerland, North Macedonia, Uzbekistan, the Kyrgyz Republic and Kazakhstan.

¹⁴⁰ According to the IMF classification, the CCA country group includes Armenia, Georgia, Azerbaijan, Uzbekistan, the Kyrgyz Republic and Kazakhstan.

Figure 156. Stock Market Capitalization and Penetration in Uzbekistan

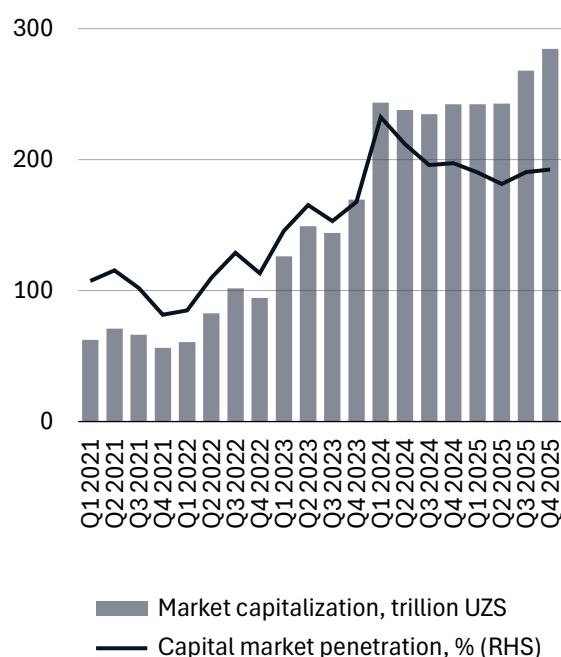


Figure 157. Share of Securities in Bank Assets and Yield on Treasury Bonds, %

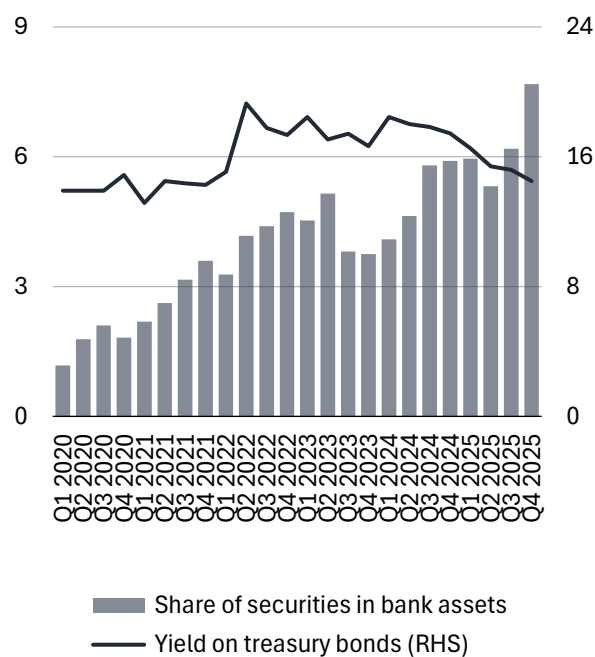
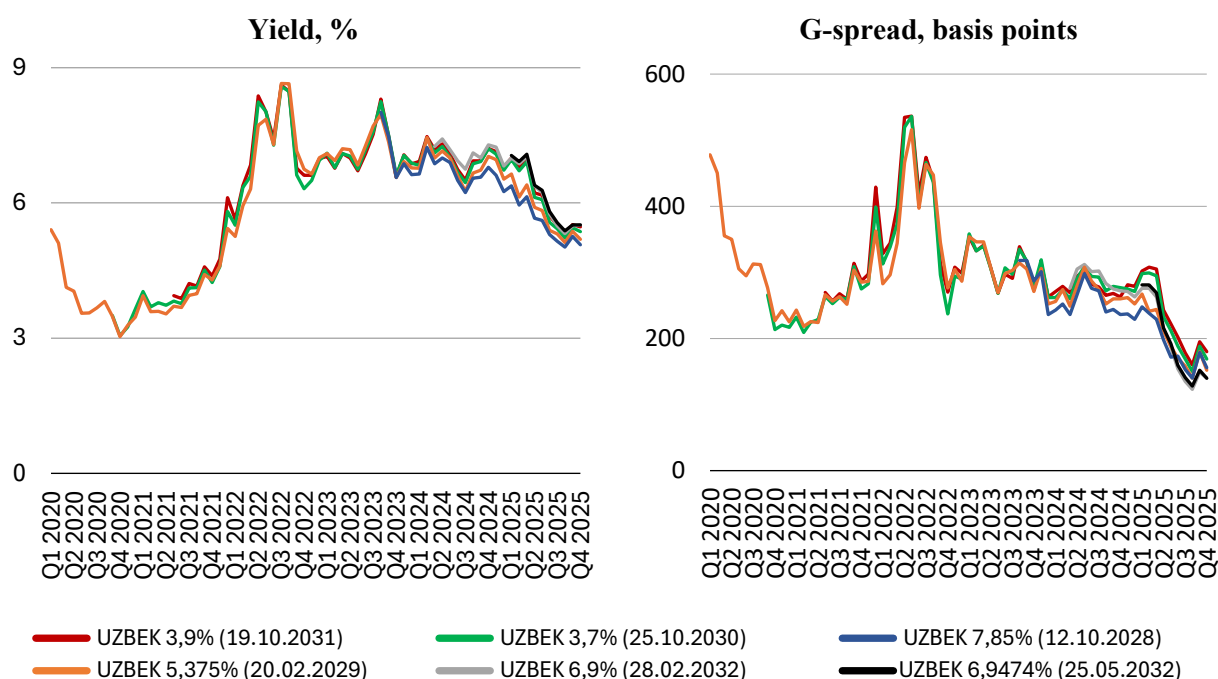


Figure 158. Uzbekistan Foreign Currency Sovereign Eurobonds



Sources: Republican Stock Exchange, Uzbek Republican Currency Exchange, Ministry of Economy and Finance, Bloomberg and CBU staff calculations

Note: A G-spread is the difference between the bond yield and its benchmark, the US Treasury bond yield. An increase in the G-spread denotes an increase in the risk level of this bond compared to the benchmark bond.

Uzbekistan's stock market capitalization is rising. At the end of 2025, the country's stock market capitalization reached UZS 284.6 trillion, equivalent to 15% of GDP. Stock market capitalization in Uzbekistan grew by 17% in 2025. The ratio of Uzbekistan's stock market capitalization to GDP was above the 75th percentile of the IQR for CCA countries while remaining below the median for ECA countries.

Banks' activity on the stock exchange continues to grow. At the end of 2025, the volume of trades involving securities of issuers included in the quotation list amounted to UZS 9.8 trillion, with banks accounting for 71% of the trades concluded. In 2025, transactions with bank securities increased by 8%, reaching UZS 6.9 trillion¹⁴¹.

Banks' exposure to the capital market has increased. At the end of 2025, the net value of securities held by banks amounted to UZS 71 trillion. In particular, the 56% increase in banks' investments in securities in 2025 resulted in the share of securities in banking system assets increasing by 2 p.p. to 8%. Increased demand for treasury bonds was reflected in their market prices rising above their nominal values in secondary trading. As a result, the average yield on treasury bonds stood at 15% in 2025, down 3 p.p. compared with 2024.

Risk associated with Uzbekistan's sovereign Eurobonds has declined. At the end of 2025, the yield on Uzbekistan's sovereign eurobonds denominated in USD was 5–5.5%, down 1–1.5 p.p. compared with the end of 2024. Moreover, the G-spread of Uzbekistan's eurobonds relative to the yield on benchmark eurobonds narrowed by 90–130 basis points compared to the end of 2024, remaining within the range of 140–180 basis points by the end of 2025¹⁴². In this regard, the narrowing of the G-spread indicates that investors in international financial markets assess the risk level of Uzbekistan's eurobonds to be lower relative to benchmark bonds. In addition, the international rating agencies of Fitch Ratings in June 2025¹⁴³ and S&P Global in November 2025¹⁴⁴ upgraded Uzbekistan's long-term sovereign credit rating from “BB-“ to “BB”. The higher sovereign credit rating creates conditions for Uzbekistan to expand external financing opportunities, improve the asset quality of banks, and reduce foreign debt servicing costs.

¹⁴¹ Republican Stock Exchange. (2026). Press release: 2025.

¹⁴² Ministry of Economy and Finance of the Republic of Uzbekistan. (2026). Statistics - daily data: Quotations of sovereign eurobonds of the Republic of Uzbekistan.

¹⁴³ Fitch Ratings. (2025). Republic of Uzbekistan.

¹⁴⁴ S&P Global. (2025). Uzbekistan Upgraded To 'BB' On Strong Growth And Economic Reforms; Outlook Stable.

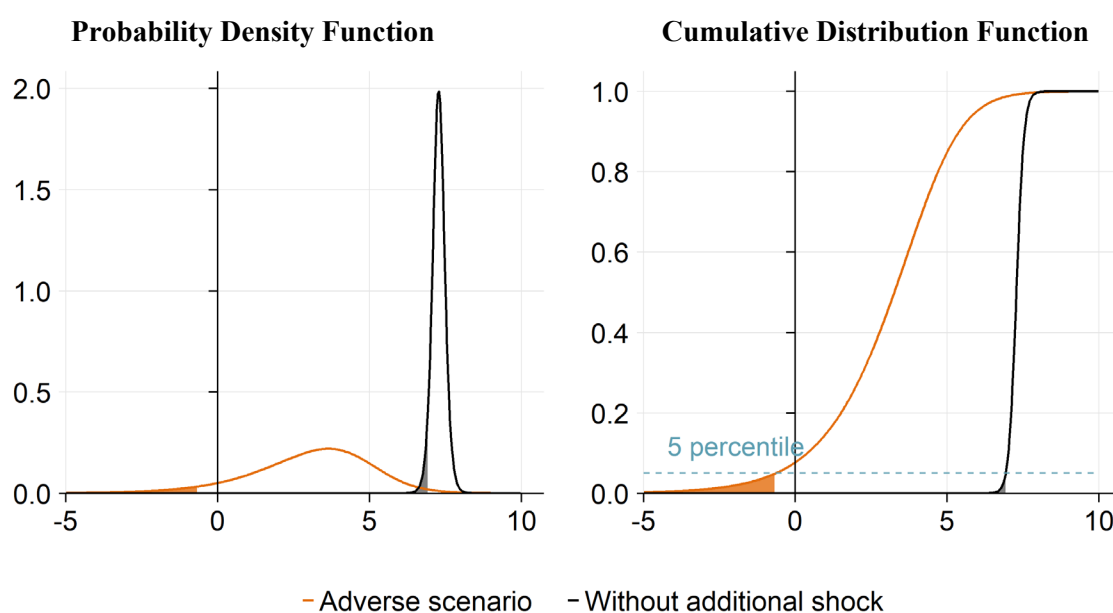
V. Macro Stress Test for Banking System

5.1. Macroeconomic Scenarios

The baseline scenario is based on the prevailing macroeconomic conditions. The baseline scenario reflects the possible economic situation arising from the continuation of the country's current economic trends in future periods. In particular, the persistence of strong economic growth, the emergence of a low-interest rate environment in conditions of slowing inflation, and a lower PD for loans were incorporated (Appendix 4).

The adverse scenario takes into account the tightening of macrofinancial conditions and the intensification of risk factors. The adverse scenario reflects an increase in production costs due to supply chain disruptions and elevated commodity prices under the influence of external geopolitical uncertainties, and a reduction in domestic supply. Tail risks with significant potential negative impacts – despite their low probability – were incorporated in the development of the adverse scenario.

Figure 159. GaR Model Results for Real GDP Growth Rate



Source: CBU staff calculations.

Note: The probability density function represents the probability density¹⁴⁵ of a random variable over a given interval. The cumulative distribution function represents the degree of probability¹⁴⁶ that a random variable will assume a certain value and is determined by taking the integral from the probability density function.

¹⁴⁵ Probability density represents the probability of occurrence of a random variable corresponding to a specified interval unit and has values not smaller than 0.

¹⁴⁶ Probability is a quantitative measure of the likelihood of an event occurring, and is between 0 and 1.

The adverse scenario incorporated the possible decline in real GDP. According to the results of the GaR model¹⁴⁷, the real GDP growth rate under the adverse scenario could decline to -0.7% by the end of 2026. In this case, the economic growth rate was estimated using the GaR model based on the FCI¹⁴⁸ and historical values of real GDP. By the end of 2026, in order to capture cyclical systemic risks under the adverse scenario, an additional shock of three SDs was applied to the FCI, assuming a 5% quantile in the GaR model.

Global inflationary pressures could create a high-interest rate environment under the adverse scenario. Under the adverse scenario, tight monetary policy by the world's leading central banks aimed at curbing high inflation drives interest rates higher in international financial markets. This, in turn, puts upward pressure on domestic lending rates in FX due to increased external financing costs. In addition, a rise in the policy rate by the CBU to reduce high inflation under the adverse scenario contributes to a high interest rate in the country.

High interest rates and slower economic growth under the adverse scenario increase credit risk. While higher real interest rates on loans in UZS raise debt-servicing costs, a decline in economic growth reduces borrowers' solvency. In particular, the higher debt burden in the adverse scenario is reflected in an increase in the PD for loans in UZS to 25% by the end of 2028. Moreover, the results of the satellite model¹⁴⁹ showed that, under the adverse scenario, the PD for FC loans may rise to 4% over the next three years as real GDP growth and the exchange rate change over time.

An increase in loan losses will reduce interest-bearing assets. While the growth dynamics of loans and interest-bearing assets in recent years are maintained under the baseline scenario, fluctuations in these indicators may be observed under the adverse scenario. According to the adverse scenario, the recovery of economic growth following the slowdown by the end of 2026, as well as the presence of a high-inflation environment in the country, will push the annual growth of outstanding loans in nominal terms to 20% by the end of 2027. In addition, the potential emergence of large loan losses under the adverse scenario will cause the annual growth of interest-bearing assets in the banking system to decline from 18% to 3% in 2028.

A high-interest rate environment may positively affect banks' NII in DC. The satellite model of the ratio of NII to interest-bearing assets¹⁵⁰ showed that, under the adverse scenario, the profitability on interest-bearing assets in DC under the adverse scenario may reach 10% by the end of 2027, 2 p.p. higher than in the corresponding period of 2026. In particular, although interest expenses rise due to higher deposit interest rates in the national currency under the adverse scenario in 2027, a relatively faster growth in outstanding DC loans and lending rates is expected to contribute to an increase in banks' NII. On the other hand, under the adverse scenario in 2028, an increase in DC loan losses could cause the ratio of NII to interest-bearing assets to fall to 9%.

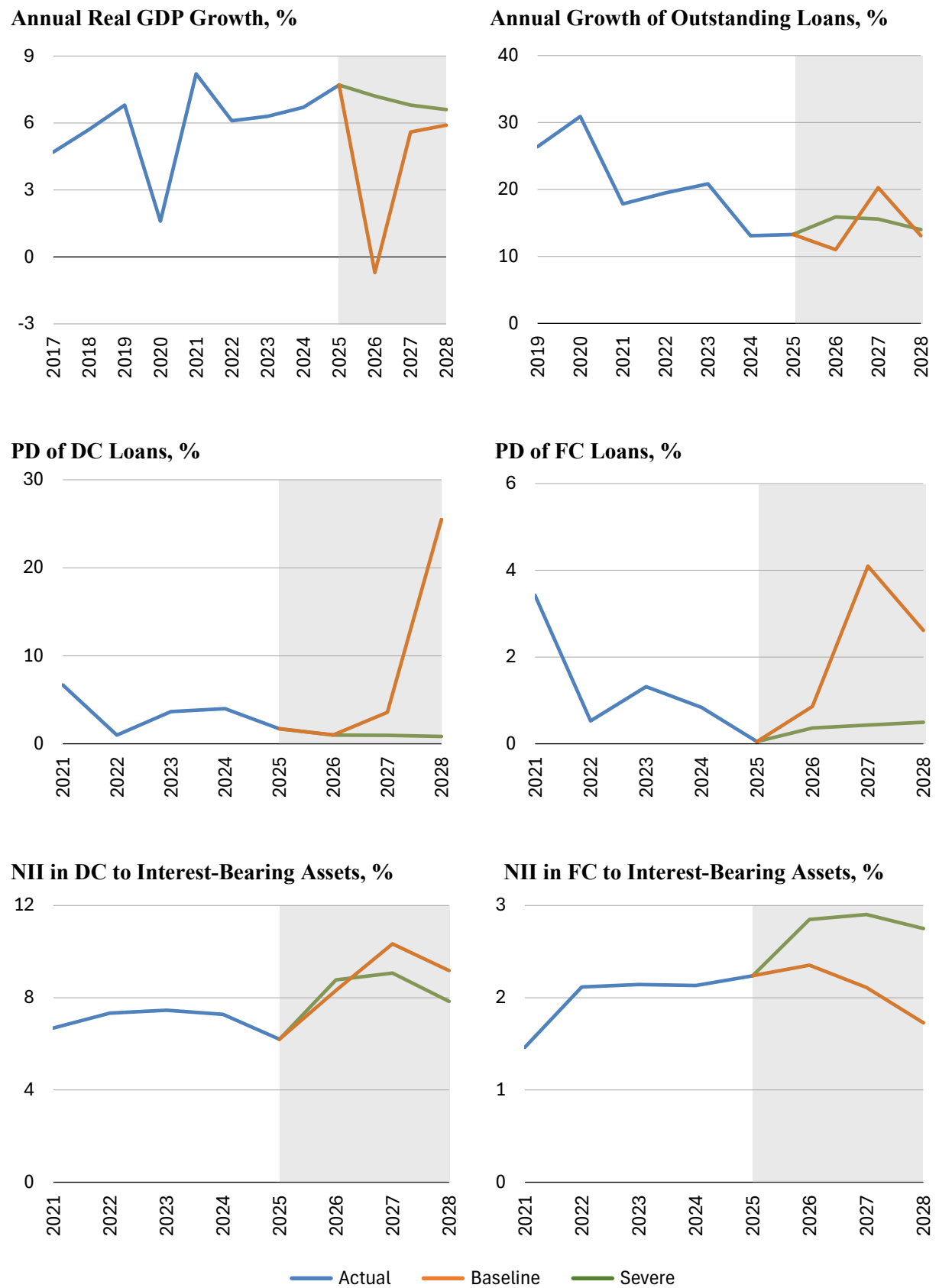
¹⁴⁷ GaR model methodology is presented in the Financial Stability Report for 2024.

¹⁴⁸ The FCI methodology is presented in the Financial Stability Report for 2023.

¹⁴⁹ The methodology for PD of loans is presented in the Financial Stability Report for H1 2025.

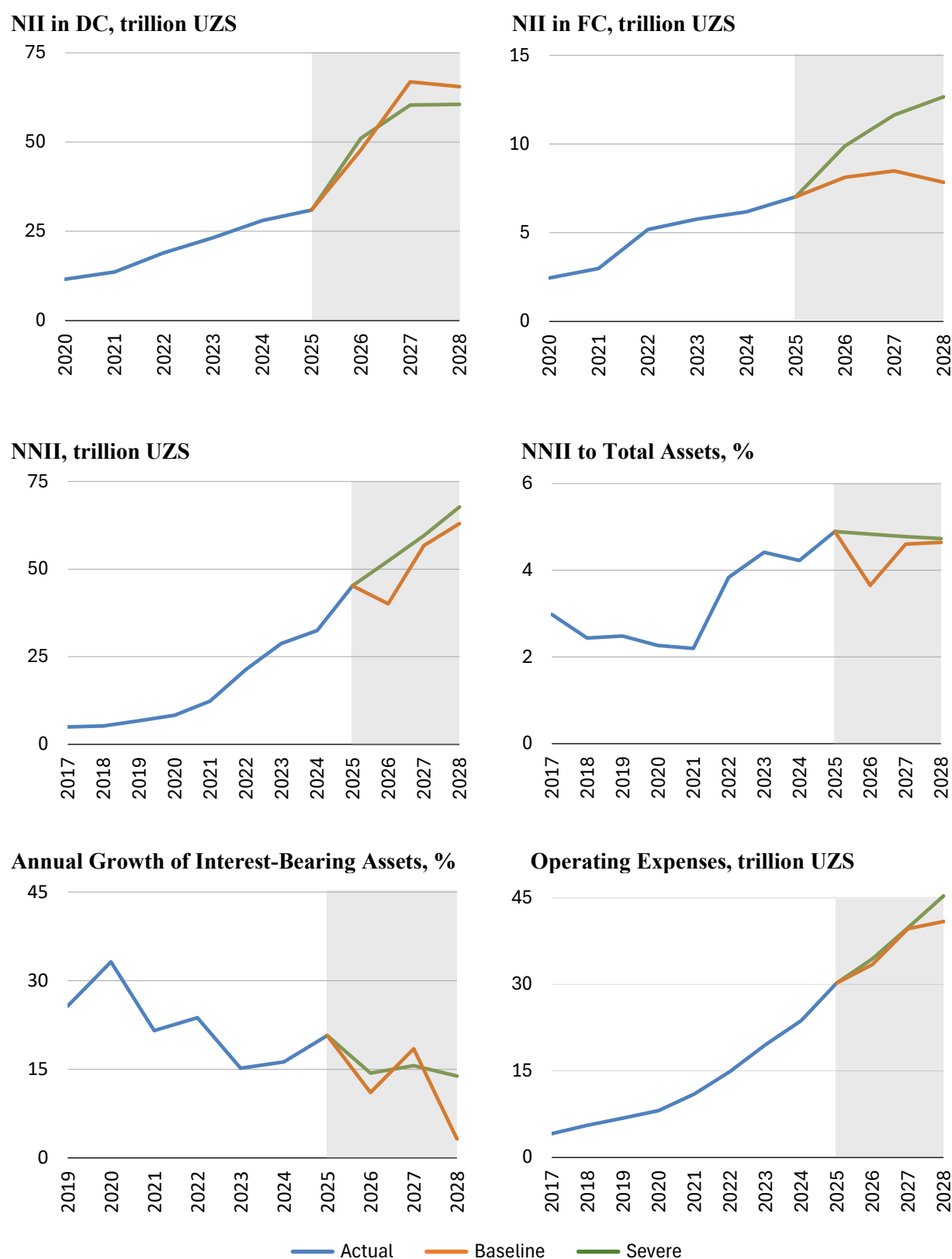
¹⁵⁰ The ratio of NII in national currency to total interest-bearing bank assets was projected for future periods based on the previous period's value of this indicator, the credit growth rate, the interest rate margin in national currency (the difference between loan and deposit rates), and scenario-based values of real GDP growth.

Figure 160. Macroeconomic Scenarios



Source: CBU staff calculations.

Figure 161. Macroeconomic Scenarios¹⁵¹



Source: CBU staff calculations.

¹⁵¹ Macroeconomic scenarios do not constitute forecasts of indicators. The scenarios address high-level risks, known as tail risks, which have a very low probability of occurrence. The tail risks were developed to create adverse scenarios and assess the resilience of banks in Uzbekistan to the shocks.

Higher financing costs under the adverse scenario may have a negative impact on banks' NII in FC. The results of the satellite model¹⁵² showed that, under the adverse scenario, the ratio of NII in FC to interest-bearing assets may decrease to 1.7% by the end of 2028. In this regard, the depreciation of the national currency and the attraction of FC deposits at higher interest rates under the adverse scenario were identified as factors contributing to the decline in the profitability of interest-bearing assets in FX.

Economic development in the country boosts banks' NNII. Stronger economic growth expands financial operations conducted by banks and raises NNII due to higher demand for banking services. In particular, the economic downturn at the end of 2026 under the adverse scenario is reflected in a decline in the ratio of NNII to total assets to 3.7%. Additionally, satellite model results¹⁵³ showed that, under the adverse scenario, the recovery of economic activity in subsequent periods could increase banks' NNII relative to total assets to 4.6% in 2027–2028.

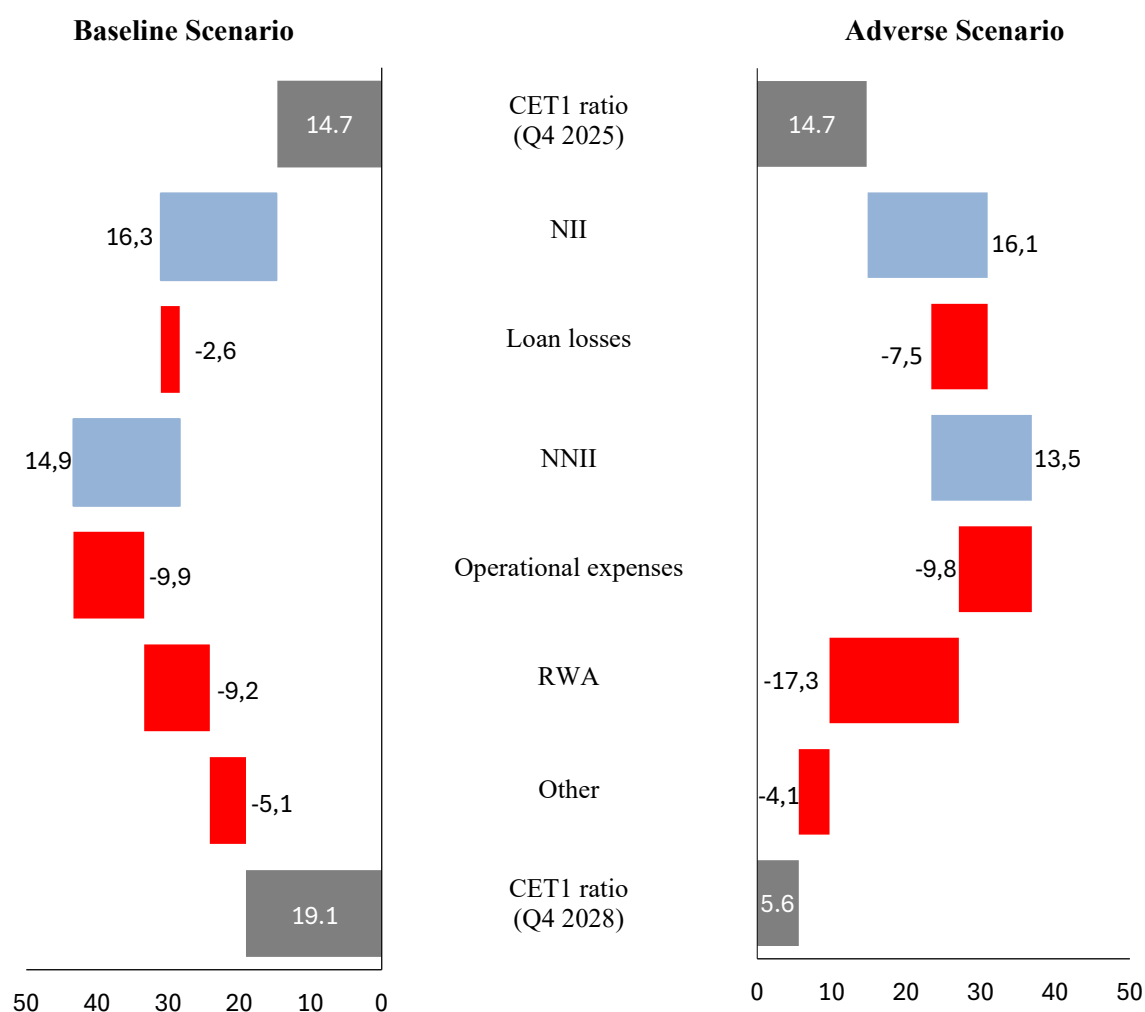
¹⁵² To estimate the future values of the ratio of NII in FX to interest-bearing assets under the scenarios, the value of this indicator in the previous period, interest rates on FX loans and deposits, and exchange rate indicators are used.

¹⁵³ The ratio of NNII to total assets was estimated using scenario-based values of GDP growth and exchange rate for future periods.

5.2. Solvency Macro Stress Test

Macro stress test results showed that capital adequacy ratios (CET1 and CAR) may decline under the adverse scenario. The solvency of banks was assessed through a “top-down” macro stress test¹⁵⁴ under both the baseline and adverse scenarios. By the end of 2028, capital adequacy ratios are expected to increase under the baseline scenario and fall below the minimum capital requirements, taking into account capital buffers, under the adverse scenario.

Figure 162. Macro Stress Test Results on CET1 Ratio

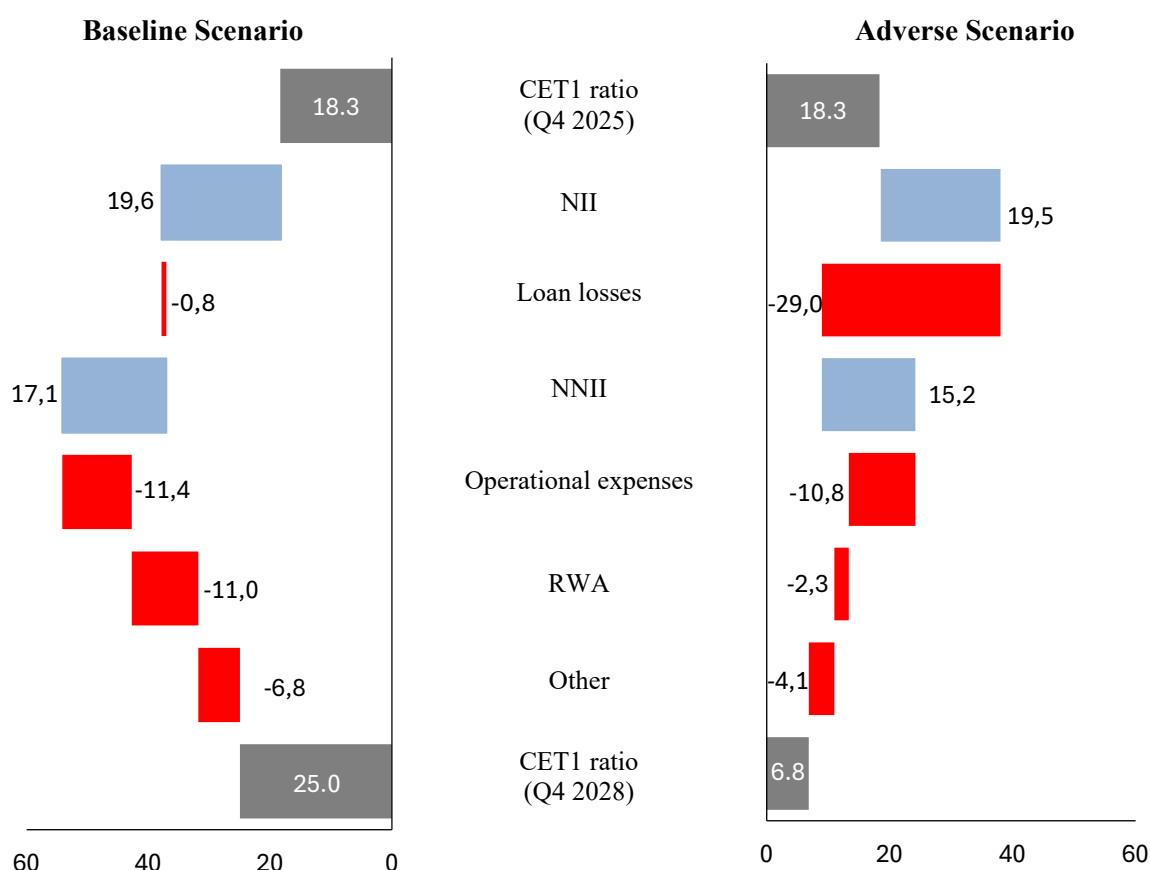


Source: CBU staff calculations.

Note: Other exposures in the macro stress test include losses on securities, FX revaluation, losses on real estate, taxes and dividends.

¹⁵⁴ The “top-down” macro stress-test tool is an instrument for assessing the stability of the banking system based on macroeconomic scenarios. In doing so, the same scenarios, assumptions and models are used for all banks.

Figure 163. Macro Stress Test Results on CAR



Source: CBU staff calculations.

High profitability in the banking system contributed to a rise in the CET1 ratio under the baseline scenario. By the end of 2028, NII and NNII may contribute positively to the CET1 ratio by 16.3 p.p. and 14.9 p.p., respectively. The negative contributions of increased loan losses and operating expenses to the CET1 ratio are expected to be 2.6 p.p. and 9.9 p.p., respectively.

The CET1 ratio could decline to 5.6% by the end of 2028 under the adverse scenario.

According to the adverse scenario, loan losses and operating expenses combined may have a negative impact of 17.3 p.p. on the CET1 ratio, while NII and NNII may have a combined positive impact of 29.6 p.p. In addition, the increase in RWA under the adverse scenario is expected to reduce the CET1 capital ratio by 17.3 p.p.

Figure 164. Macro Stress Test Results on Capital Adequacy, %

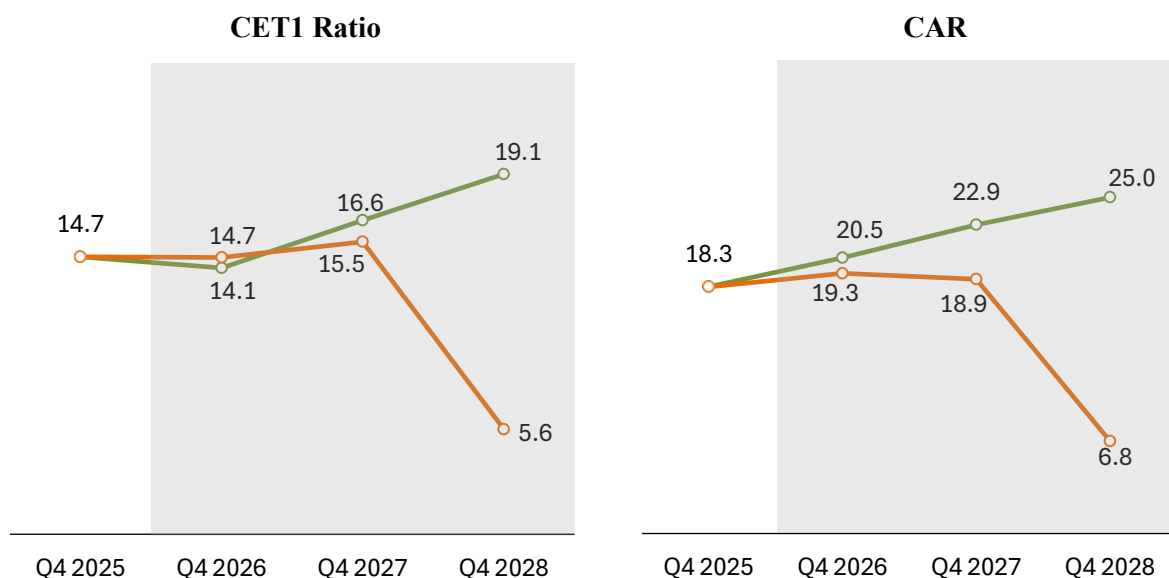
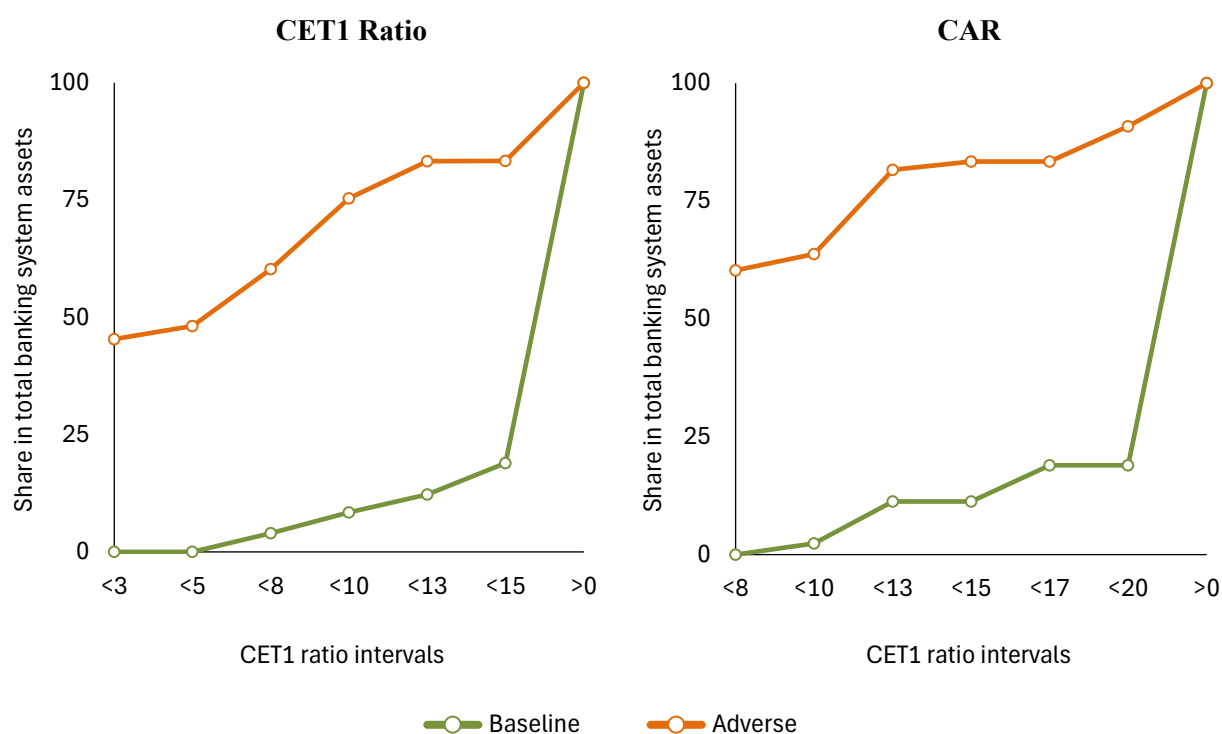


Figure 165. Distribution of Banking Sector's CAR Intervals and Shares in Total Assets, % (as of January 1, 2029)



Source: CBU staff calculations.

Note: The cumulative order is used to set the shares of total assets of banks located within CAR intervals.

Under the baseline scenario, the banking system's solvency may improve due to lower loan losses and higher profitability. By the end of 2028, NII and NNII are projected to contribute positively to the significant growth in the CAR by 19.6 p.p. and 17.1 p.p., respectively. In addition, with loan losses having a negative impact of 0.8 p.p., operating expenses and RWA may reduce the CAR by 11.4 p.p. and 11 p.p., respectively.

Loan losses were a key driver of the decline in banks' solvency under the adverse scenario. While loan losses had a negative impact of 29 p.p. on the CAR, higher operating expenses had a negative impact of 10.8 p.p. Moreover, NII and NNII had positive contributions of 19.5 p.p. and 15.2 p.p., respectively, to the CAR.

The impact of adverse-scenario shocks on banks' capital may emerge with a time lag.

Under the baseline scenario, the CET1 ratio may increase to 19% by the end of 2028, while the CAR may rise to 25%. Furthermore, the macro stress test results showed that, under the adverse scenario, the CAR of the banking system is projected to decline to 6.8% by the end of 2028.

A few non-systemically important banks may fail to meet capital buffer requirements under the baseline scenario. By the end of 2028, the CET1 ratio may exceed 4.5% and the CAR may exceed 8% for all banks. In addition, the assets of banks with CET1 ratio below 8.5% of risk-weighted assets may account for 4% of total banking system assets. Taking capital buffers into account, banks with CAR below the regulatory requirement of 12% are expected to account for 7% of the banking system.

Under the adverse scenario, a few banks may be unable to meet the minimum capital adequacy requirements. By the end of 2028, banks with a CAR below 8% may account for 60% of total banking system assets. Among banks accounting for 46% of banking system assets under the adverse scenario, the CET1 capital ratio may fall below the minimum capital requirement of 4.5%, excluding capital buffers.

Under the baseline scenario, no solvency problems are expected among D-SIBs. By the end of 2028, 2 banks are expected to have a CET1 capital ratio below the minimum requirement¹⁵⁵ under the baseline scenario, compared with 12 banks under the adverse scenario, taking into account capital buffers. Under the baseline scenario, only 3 non-systemically important banks may fail to meet the 12% minimum CAR requirement, taking into account capital buffers, by the end of 2028. Under the adverse scenario, 17 banks may lack sufficient total regulatory capital to satisfy the minimum requirements¹⁵⁶, taking into account capital buffers.

The banking system's leverage ratio is expected to remain above the minimum requirement under the adverse scenario. According to the macro stress test results, the banking system's leverage ratio may stand at 16% under the baseline scenario and 4.8% under the adverse scenario by the end of 2028. Under the baseline scenario, all banks are expected to meet the minimum leverage ratio requirement at the end of 2028, while the leverage ratio of 6 banks may fall below the established 3% requirement under the adverse scenario.

¹⁵⁵ Taking into account capital buffers, the CET1 capital ratio is required to exceed 9.5% for D-SIBs and 8.5% for other banks.

¹⁵⁶ Taking into account capital buffers, the total regulatory capital of D-SIBs is required to exceed 13% of risk-weighted assets, while that of other banks is required to exceed 12%.

Figure 166. Bank-by-Bank Macro Stress Test Results*, % (As of January 1, 2029)

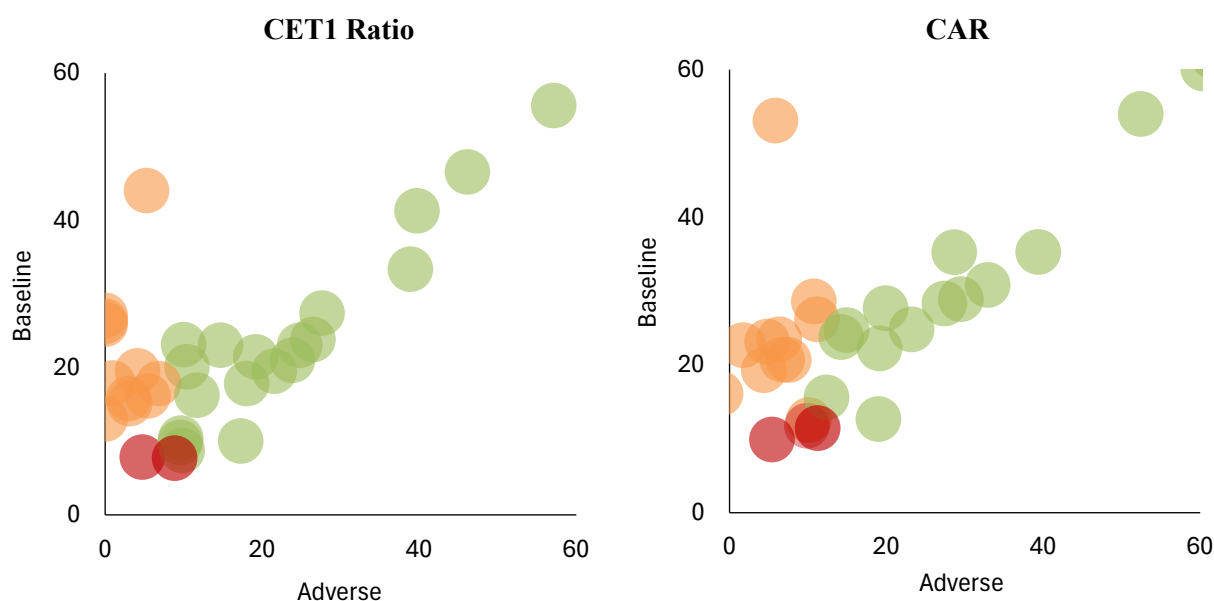
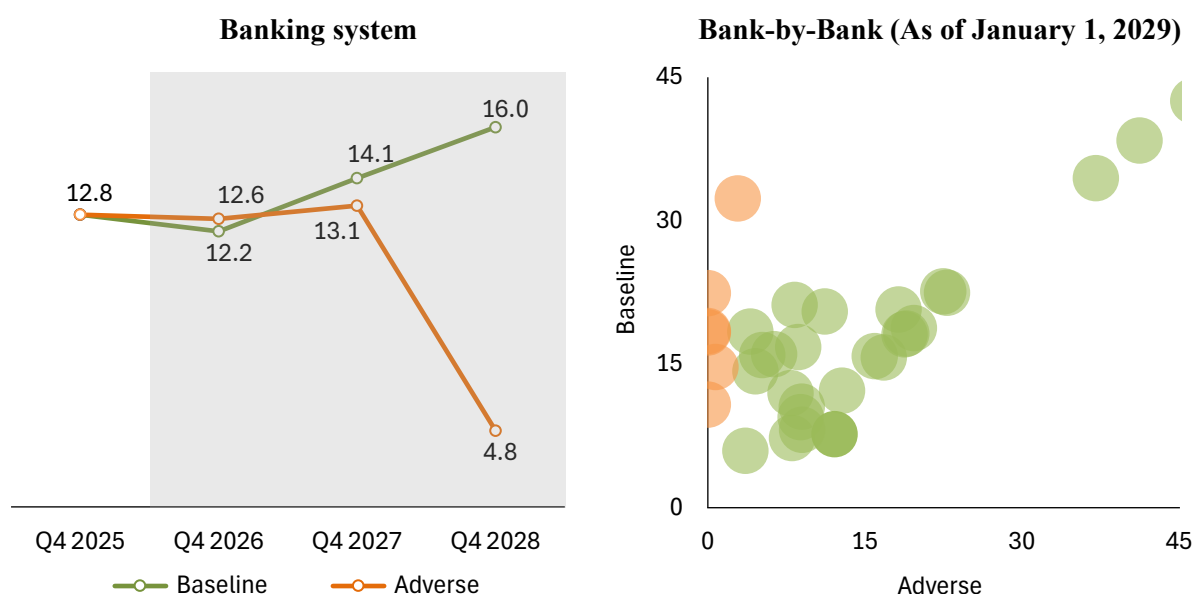


Figure 167. Leverage Ratio in Baseline and Adverse Scenarios, %**



Source: CBU staff calculations.

Note: *The graph presents data on banks, each depicted by a bubble, showing their CAR and CET1 capital ratios within the 0–60% range. Banks are color-coded: a green bubble represents banks that can meet the minimum CAR requirement (13% for D-SIBs and 12% for other banks) and CET1 capital ratio requirement (9.5% for D-SIBs and 8.5% for other banks) under both the baseline and adverse scenarios, taking into account the established capital buffers; a light red bubble represents a bank that falls short of these thresholds in the adverse scenario; and a dark red represents a bank that falls short of these thresholds in the baseline scenario.

**The graph presents data on banks, each depicted by a bubble, showing their leverage ratios within the 0–50% range. Banks are color-coded: a green bubble denotes a bank that satisfies the minimum leverage requirement of 3% under both the baseline and adverse scenarios; a light red bubble represents a bank that falls short of these thresholds in the adverse scenario.

Figure 168. Capital injections as % of GDP

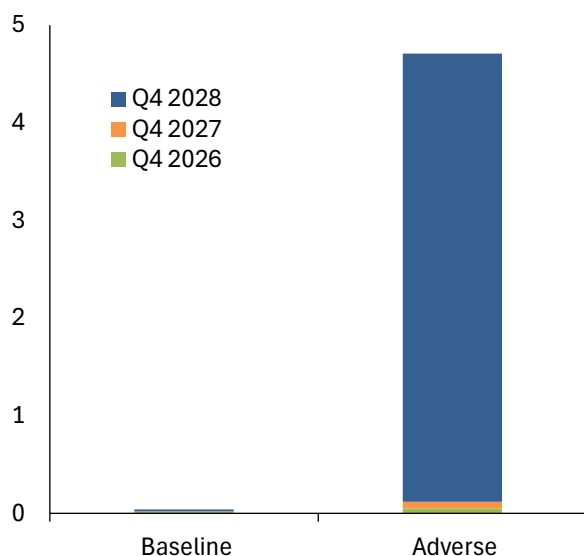
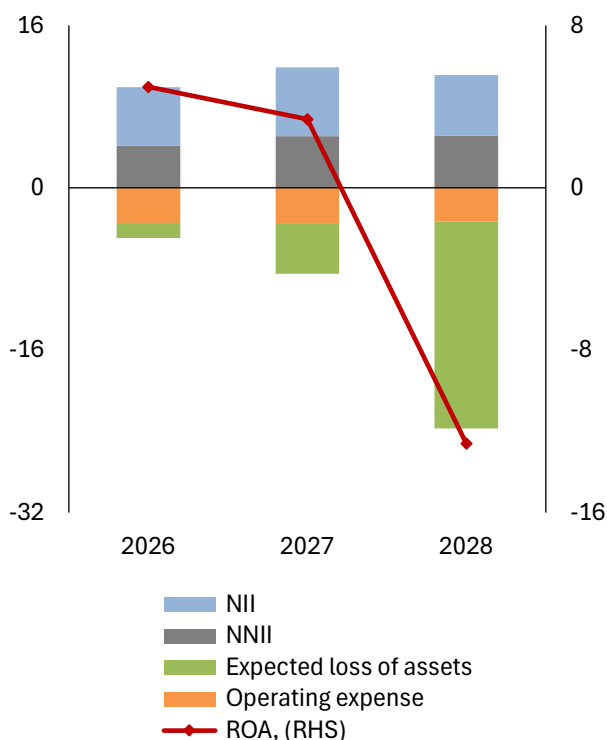


Figure 169. ROA in Adverse Scenario, %



Source: CBU staff calculations.

Additional capital may be required to meet capital adequacy requirements under the adverse scenario. By the end of 2028, the amount of capital that banks may need to raise to meet the minimum CAR requirement, taking into account the capital buffers, may amount to 4.6% of GDP. Under the baseline scenario, the additional capital required is expected to represent a smaller share of GDP, reflecting the limited number of banks that may face difficulties meeting the minimum capital requirements.

ROA may turn negative under the adverse scenario due to loan losses. During 2026–2027, higher growth in NII and NNII relative to assets and relatively lower expected loan losses may support positive ROA in the banking system. By the end of 2028, operating expenses, which are expected to grow in line with assets, and potentially high loan losses may cause ROA to decline to -13%.

The contagion risk to the banking system was evaluated under the adverse scenario. The contagion risk arising from banks' failure to service their interbank liabilities due to insufficient capital adequacy was analyzed using the losses-tied-to-capital¹⁵⁷ and unrecoverable-losses¹⁵⁸ approaches. The analysis of contagion risk was conducted until bank default losses ceased to trigger subsequent defaults in other banks.

¹⁵⁷ In the approach, where losses from bank defaults are tied to capital, the extent of banks' losses from contagion risk is influenced by the defaulting bank's CAR. The lower the failing bank's CAR, the greater the proportional losses incurred by banks that have financial connections with it, such as those that have provided loans to or placed deposits with the defaulting bank.

¹⁵⁸ In the approach, where losses from bank defaults are not recoverable, banks face the loss of all their loans to or deposits placed with a bank with a high probability of default, i.e., a bank with the CAR below the required minimum.

Figure 170. Contagion Risk: Bank Default Losses Tied to Capital (as of January 1, 2029)

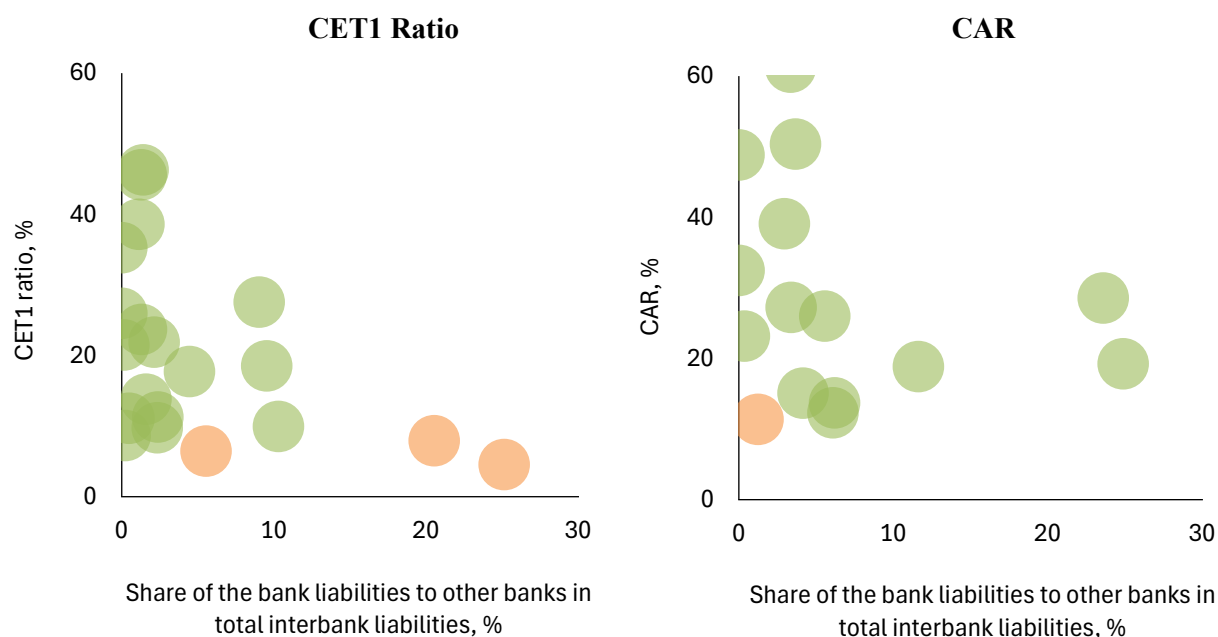
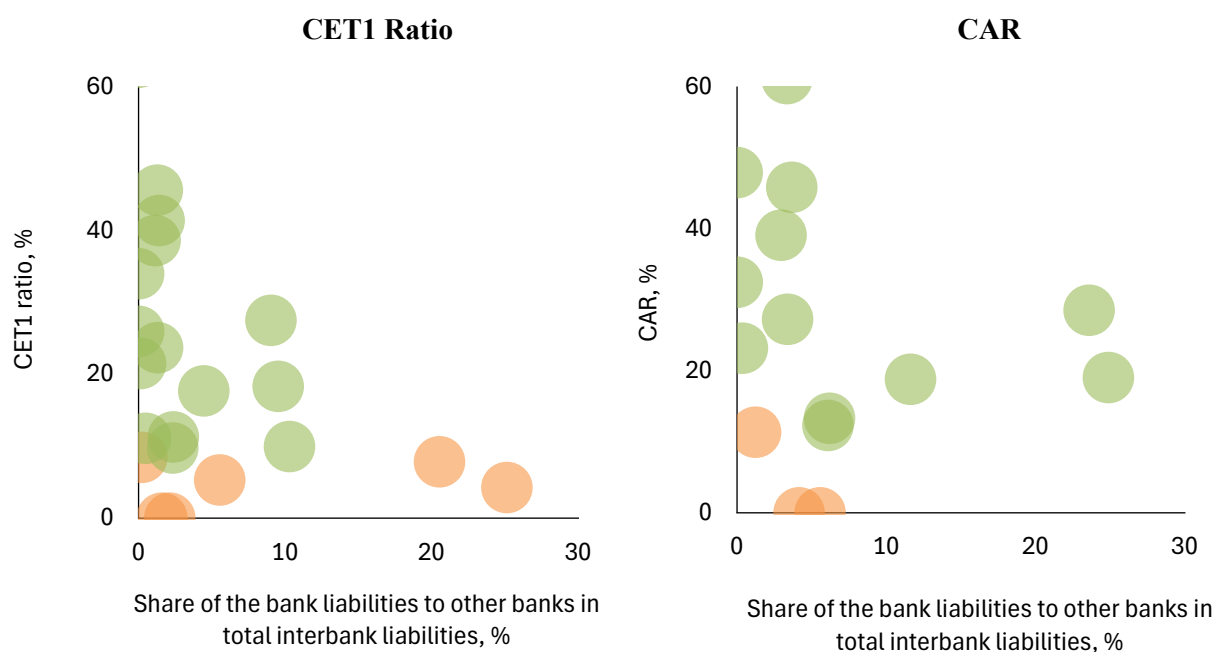


Figure 171. Contagion Risk: Uncoverable Bank Default Losses (as of January 1, 2029)



Source: CBU staff calculations.

Note: The graph presents an analysis of various banks, categorized based on three criteria: those with a CAR and CET1 ratio below 60%, those with liabilities to other banks, and those that meet the minimum CAR and CET1 requirements under the adverse scenario, taking into account the established capital buffers. Banks that comply with the minimum CAR requirement (13% for D-SIBs and 12% for other banks) and CET1 capital ratio requirement (9.5% for D-SIBs and 8.5% for other banks), taking into account the capital buffers, are denoted by green bubbles, whereas light red bubbles indicate banks that fail to meet these thresholds.

The contagion risk arising from bank defaults remains low. According to the results of the macro stress test, under the adverse scenario, the inability of banks with CET1 capital ratios below the minimum requirements, taking into account capital buffers, to fulfill interbank obligations under the losses-tied-to-capital approach could lead to the default of an additional three banks. In addition, the failure of banks to comply with the CAR requirements could result in the CAR of only one bank falling below the minimum requirement.

The contagion risk may be higher in the presence of unrecoverable losses under the adverse scenario. Under the adverse scenario, the complete failure of banks unable to meet the minimum capital requirements to fulfill their obligations to other banks could increase by six the number of banks whose CET1 capital ratios, taking into account capital buffers, may fall below the minimum requirements. In addition, defaults of banks whose CAR falls below the established requirements could result in three banks failing to meet the minimum capital requirements.

The banking system's solvency was evaluated through additional shocks to the adverse scenario. The impact on the banking system of risks arising from high concentration in the loan portfolio and a decline in residential property prices was analyzed by applying additional shocks to the adverse scenario. In this case, the concentration risk of the loan portfolio was analyzed by assessing the impact of losses from the default of the largest borrower for each bank on the capital adequacy of the banks. The analyses assumed that 50% of the bank's loans are unrecoverable due to the default of the largest borrower. In addition, using the results of the House price at risk (HaR) model, the increase in credit risk on mortgages due to a decline in real estate prices resulting from the impact of risks was analyzed.

Loan concentration risk may adversely impact banks' solvency. According to the adverse scenario, by the end of 2028, the default of borrowers accounting for the largest shares of the loan portfolio could reduce the banking system's CET1 capital ratio and CAR by 1.4 p.p. each. Under the adverse scenario, concentration risk could bring the CET1 capital ratio down to 4.6% and the CAR to 5.9%.

The HaR model results were used to apply an additional shock through a decline in real estate prices. The results of the HaR model demonstrated that by the end of 2026, housing prices could decline by 10% with a 1% probability under the impact of risks, while the correction in residential property prices, considering additional shocks, could amount to 17%. It was assumed that borrowers with an LTV ratio above 120% may be unable to repay their loans as a result of the falling collateral values.

Figure 172. Macro Stress Test Results with Concentration Risk, %

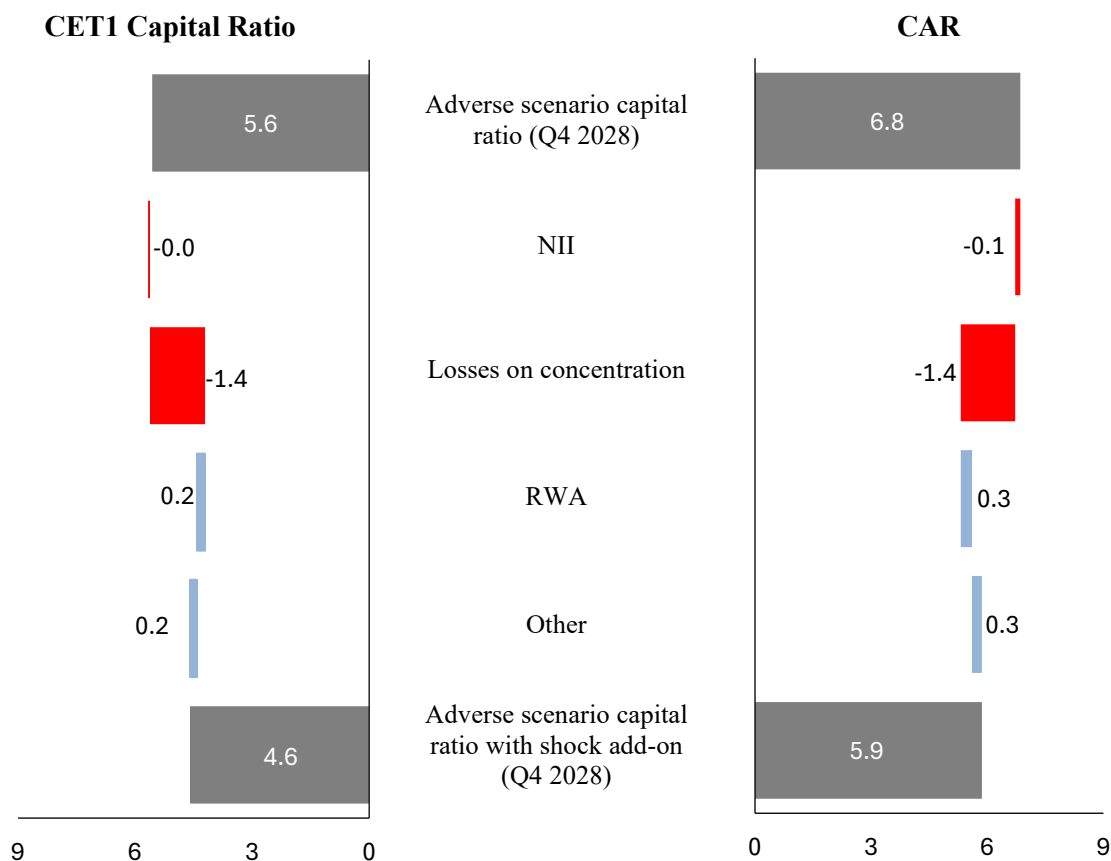
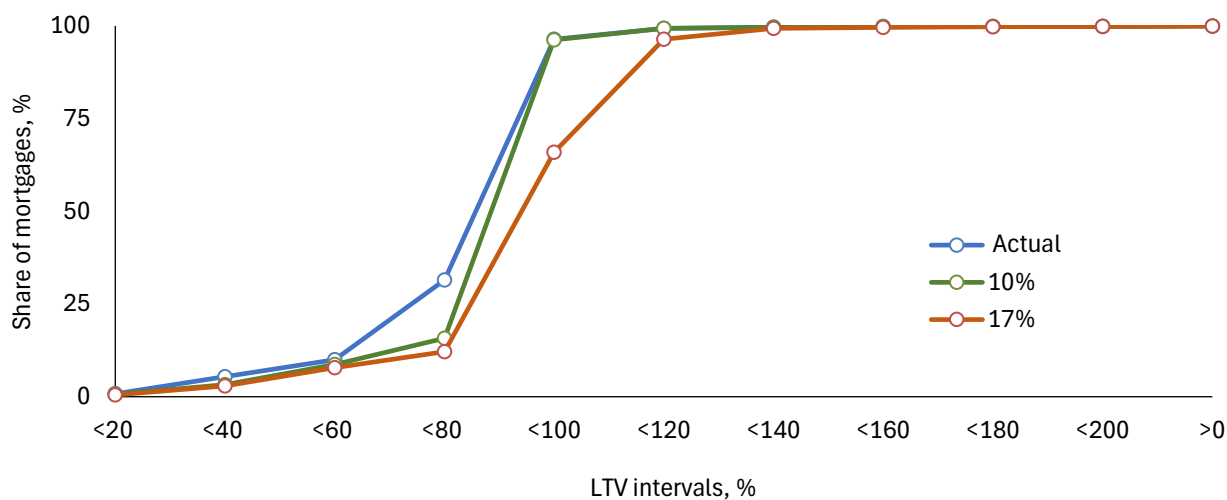


Figure 173. LTV Distribution of Mortgages after Shocks in Real Estate Market, % 2026



Source: CBU staff calculations

Notes: The default of single largest borrower in each bank is taken into account as concentration risk.

The shares of loans in LTV ranges in total mortgages are set in cumulative order.

Figure 174. 10% Decline in Real Estate Market Prices, %

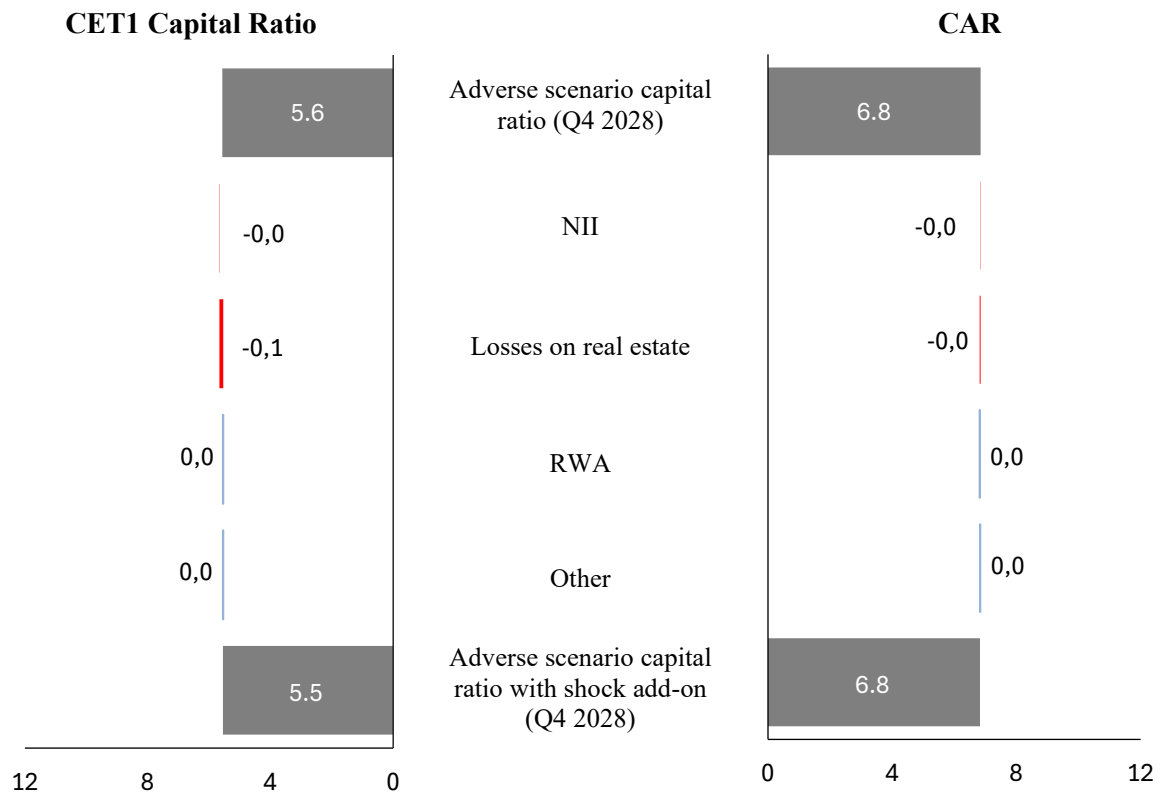
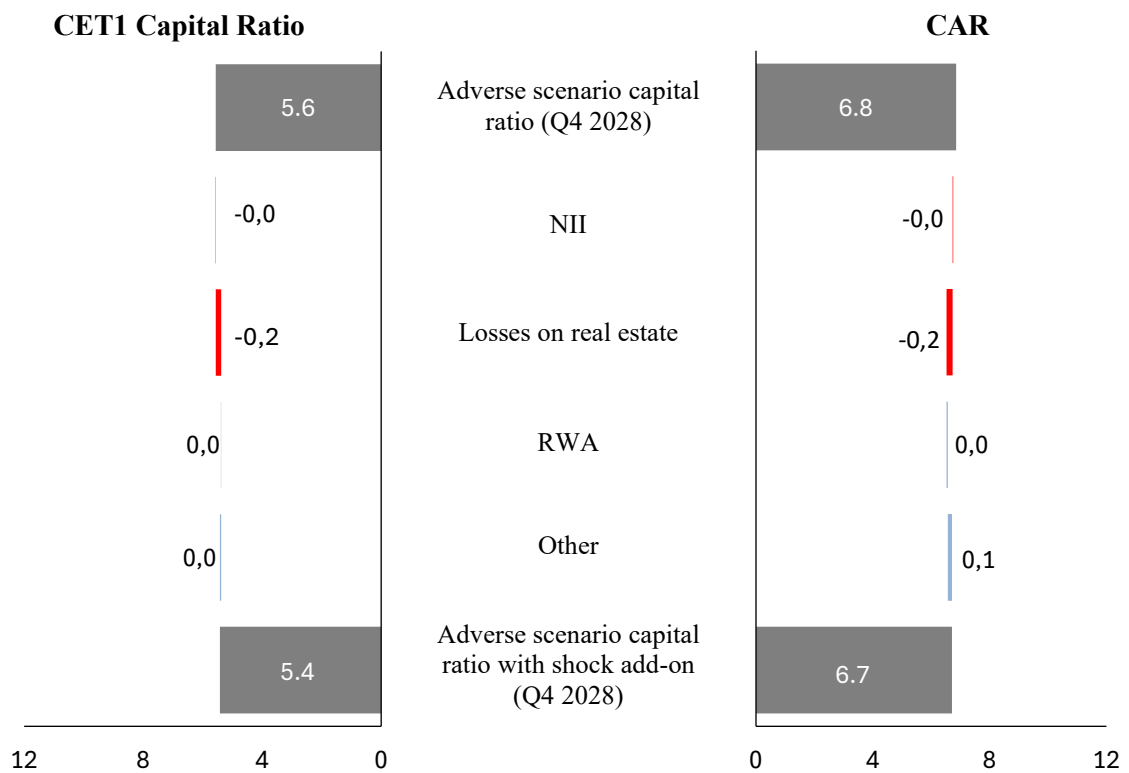


Figure 175. 17% Decline in Real Estate Market Prices, %



Source: CBU staff calculations

The impact of declining residential property prices on mortgage losses is assessed as very low. A 10% decline in housing prices could result in loans with an LTV ratio above 120% accounting for 1% of mortgages issued in 2025, while loans with an LTV ratio above 100% could constitute 4%. A 17% drop in real estate market prices may result in loans with an LTV ratio above 120% representing 4% of mortgages, for which the probability of forfeiting the collateral would be higher than that of repayment. In addition, a 17% decline in housing prices could lead to 34% of loans issued in 2025 lacking sufficient collateral.

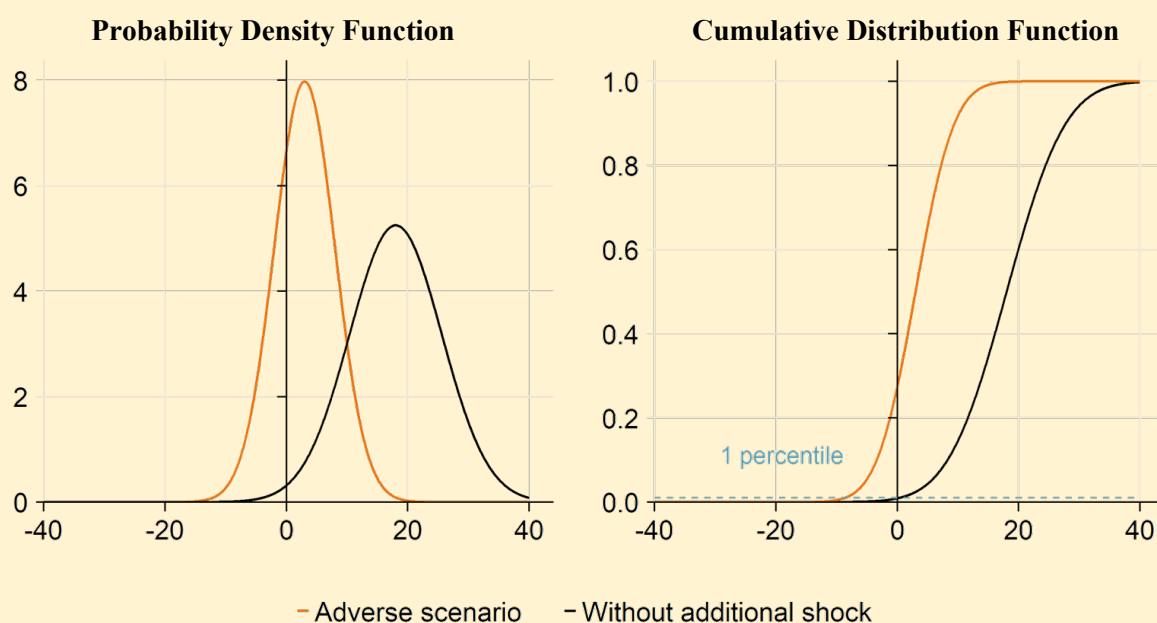
Under the adverse scenario, a 10% or 17% decline in housing prices is expected to possess a negligible impact on the banking system's solvency. As of the end of 2028, the impact of a 10% decline in real estate prices on the PD of mortgages is evaluated as very low. A 17% fall in housing market prices under the adverse scenario could push the PD of banks' mortgage portfolios up by 1.1 p.p. by the end of 2028. Under the adverse scenario, housing-related losses arising from increased credit risk at banks may reduce capital adequacy ratios by 0.2 p.p., with the CET1 capital ratio and CAR expected to stand at 5.4% and 6.7%, respectively as of January 1, 2029.

Box 6. House Price at Risk

The House Price at Risk (HaR) model¹⁵⁹ estimates potential changes in residential property prices in future periods based on the dynamics of current indicators affecting the real estate market. The HaR results provide a quantitative assessment of the extent to which housing prices may change in the forthcoming periods under the influence of risks, and are used as an early warning indicator in financial stability analysis.

The HaR model is implemented in two stages. This model comprises the estimation of relationships between variables using a quantile regression model¹⁶⁰ and the construction of a continuous conditional distribution of housing price growth for future periods (Appendix 5).

Figure 176. HaR Model Results for Housing Price Growth Rate over the next year



Sources: National Statistics Committee and CBU staff calculations.

Note: The probability density function represents the probability density¹⁶¹ of a random variable over a given interval. The cumulative distribution function represents the degree of probability¹⁶² that a random variable will assume a certain value and is determined by taking the integral from the probability density function.

¹⁵⁹ Hafemann, L. (2023). Technical Paper. A house prices at risk approach for the German residential real estate market. Deutsche Bundesbank.

¹⁶⁰ Quantile regression model methodology is presented in Financial Stability Report for 2024.

¹⁶¹ Probability density is the probability of occurrence of a random variable corresponding to a specified interval unit. The probability density will have values not smaller than 0.

¹⁶² The degree of probability is a quantitative indicator of the possibility of occurrence. The probability level is formed between 0 and 1.

At the initial stage, the relationships between statistically significant variables affecting housing price dynamics – the annual change in housing prices over the previous four quarters and the annual growth in outstanding loans to individuals – are estimated at various quantiles using a quantile regression model:

$$y_t^\tau = \alpha^\tau + \beta^\tau X_{t-4} + \gamma^\tau y_{t-4} + \epsilon_t^\tau$$

Where,

y_t^τ – housing price growth at time t ;

X_{t-4} – annual growth in outstanding loans to individuals for the period four quarters prior to time t ;

y_{t-4} – housing price growth for the period four quarters prior to time t ;

$\alpha^\tau, \beta^\tau, \gamma^\tau$ – unknown coefficients;

ϵ_t^τ – error term;

τ – quantile.

Following the estimation of the relationship between housing prices and their determinants at different quantiles ($\tau = \{10, 25, 50, 75, 90\}$) through a quantile regression model, the continuous conditional distribution of housing price growth rates for the upcoming periods is determined.

The continuous conditional distribution is derived by fitting a skew-t distribution function to the estimated discrete values obtained from the conditional quantile regressions. The skew-t distribution is characterized by the mean, SD, skewness and degrees of freedom parameters, and is constructed from the Student-t distribution¹⁶³.

The 1% probability value of the skew-t distribution serves as the output of the HaR model. The HaR model thereby provides a quantitative assessment of potential extreme corrections in housing prices in future periods arising from the effects of the relevant indicators. In addition, the model incorporates the adverse-scenario values of the variables influencing housing price dynamics to assess the corrections in housing prices at the 1% probability level through additional shocks.

According to the HaR model results, housing prices could decline by 10% by the end of 2026 with 1% probability under risk conditions, while corrections in housing prices could reach 17% when additional shocks are taken into account.

¹⁶³ Student-t distribution is a type of symmetric distribution used to estimate the mean when the SD of a random variable is unknown.

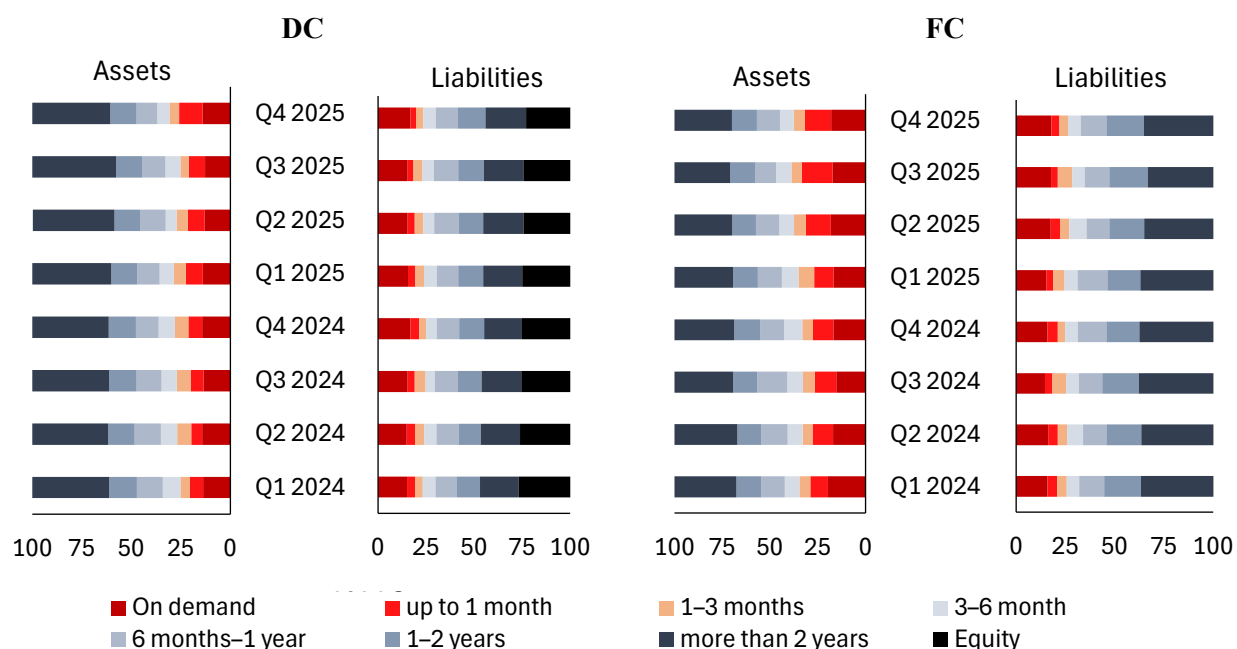
5.3. Liquidity Macro Stress Test

The liquidity macro stress test showed that the banking system will maintain positive net cash inflows¹⁶⁴ under the baseline and adverse scenarios. In the baseline scenario, cash flow factors were calculated in line with the recommendations of the Basel Committee. In the adverse scenario, higher cash outflows and lower cash inflows in banks compared with the baseline scenario were assumed (Appendix 6).

The adverse scenario incorporates tighter global financial conditions and elevated credit risk in banks. Under the adverse scenario, the high-interest rate environment stemming from heightened geopolitical tensions could exert downward pressure on the market prices of securities, thereby reducing cash inflows from treasury bonds held within bank assets. Furthermore, a slowdown in economic growth, coupled with higher lending rates, could impair borrowers' ability to meet their obligations to banks. Consequently, higher PDs of loans and the realization of loan losses could lead to a reduction in cash inflows from the repayment of loans extended by banks (Appendix 7).

The liquidity macro stress test accounts for potential changes in depositor behavior. According to the adverse scenario, increased loan losses, undermined solvency and deteriorating financial performance of banks may influence depositors' decisions. In particular, the adverse scenario factors in withdrawals of unguaranteed deposits resulting from changes in depositor behavior amid the introduction of a limit on guaranteed deposits¹⁶⁵ and potential adverse developments in the banking system.

Figure 177. Structure of Banking System's Assets and Liabilities by Terms, %



Source: CBU staff calculations.

Note: Total liabilities and total equity constitute the liability portion of the bank's balance sheet.

¹⁶⁴ Net cash inflow is the difference between cash inflows and cash outflows

¹⁶⁵ O'zbekiston Respublikasining 2025 yil 18 fevraldagi "Banklardagi omonatlarni himoya qilish kafolatlari to'g'risida"gi 1031-sonli Qonuni.

Figure 178. Net Cash Inflow to Total Assets*, % (as of January 1, 2027)

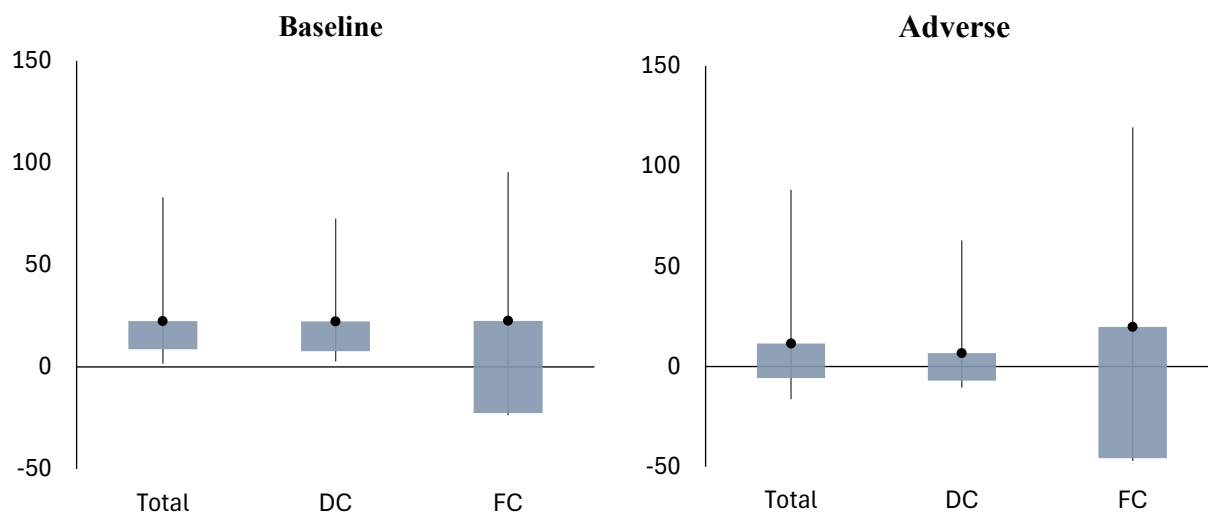
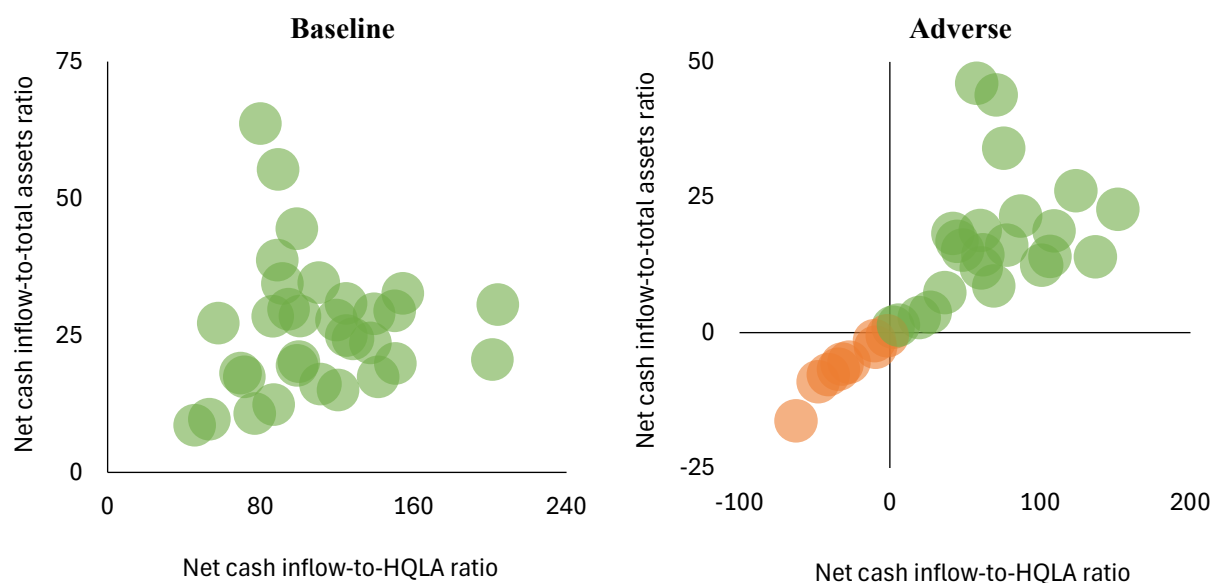


Figure 179. Bank-by-Bank Liquidity Stress Test Results: Total Currencies, % (as of January 1, 2027)**



Source: CBU staff calculations.

Note: *The rectangle displayed in the chart represents the variation between the value of the ratio of net cash inflow to assets as of the end of 2026 according to the results of the liquidity macro stress-test for the banking system and the indicator of the bank with the minimum value of this ratio among banks. The length of the rectangle indicates the difference between the banking system performance and the minimum indicator. The vertical black line on the chart represents the maximum and minimum ratio of net cash inflow to total assets for one year until the end of 2026. Also, the black circle shows the ratio of net cash inflows to the assets at the end of 2026.

** The graph presents data on banks, each depicted by a bubble, showing a ratio of net cash inflow to total bank assets within the 0–75%, and a ratio of net cash inflow to HQLA within the 0–240% under the baseline and adverse scenarios. Banks are color-coded: a green bubble denotes a bank with positive net cash inflows in DC, whereas a light red bubble represents a bank with negative net cash inflows in DC.

The maturity mismatch between banking system assets and liabilities has narrowed further. As of January 1, 2026, assets with maturities up to one year represented 47% of banking system assets in DC. Short-term liabilities up to one year accounted for 42% of liabilities and capital in DC. Meanwhile, 57% of FC assets had maturities of up to one year, compared with 46% of FC liabilities. The availability of sufficient assets to cover short-term liabilities in both national and foreign currencies serves to mitigate liquidity risk.

In the baseline scenario, no liquidity problems are projected to materialize in the banking system. According to the results of the liquidity macro stress test, as of January 1, 2027, the ratio of net cash inflows to total assets in the banking system may reach 22% for total currency, while the corresponding ratios for national and foreign currencies may stand at 22% and 23%, respectively. Furthermore, by the end of 2026, all banks are expected to maintain positive net cash inflows in total currency under the baseline scenario.

Under the adverse scenario, net cash inflows remained positive in the banking system, although some banks recorded negative values. As of January 1, 2027, the ratio of net cash inflows to total assets in the banking system may stand at 12% in total currency, compared with 7% in DC and 20% in FC. Moreover, the largest negative net cash inflow in individual banks may amount to 46% of total assets in FC and 7% in DC. Even among banks facing the most pronounced liquidity pressures, the availability of sufficient assets to cover expected negative net cash inflow contributes to containing liquidity risk across the banking system.

In the adverse scenario, some banks may experience negative net cash inflow in total currency. By the end of 2026, all banks are expected to maintain positive net cash inflows in total currency under the baseline scenario. Under the adverse scenario, negative net cash inflow that may materialize in some banks are expected to amount to 9% of HQLA and 2% of total assets of the banking system.

Under the baseline scenario, banks do not face risks associated with liquidity problems in DC. The results of the liquidity macro stress test indicate that, as of January 1, 2027, positive net cash inflows could be observed in all banks under the baseline scenario.

Figure 180. Bank-by-Bank Liquidity Stress Test Results: DC*, % (as of January 1, 2027)

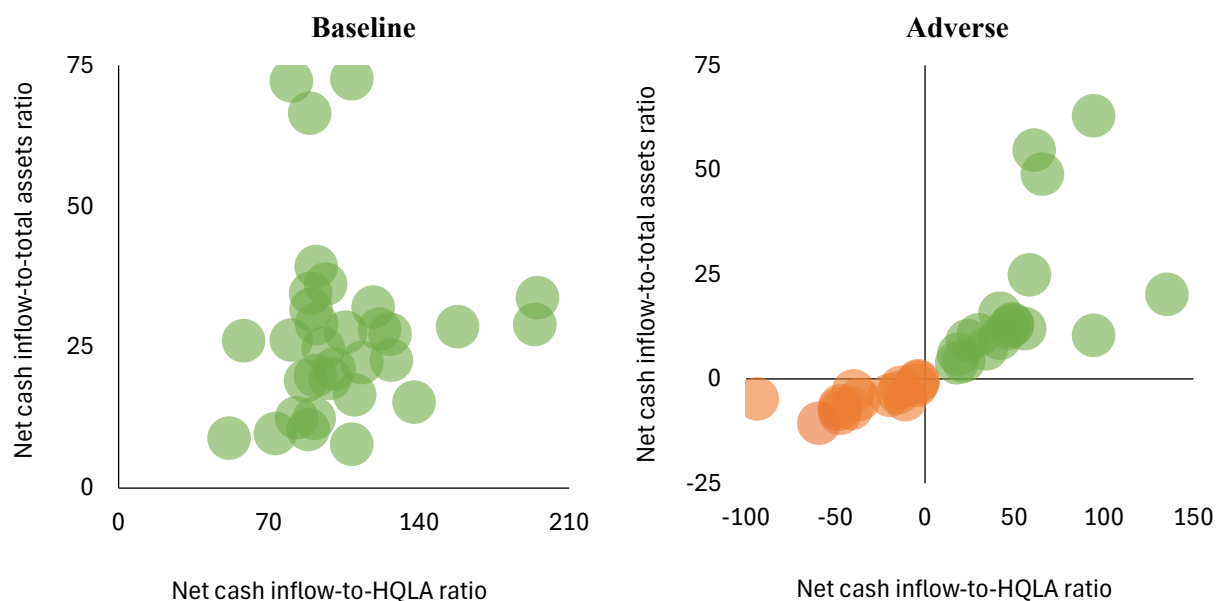
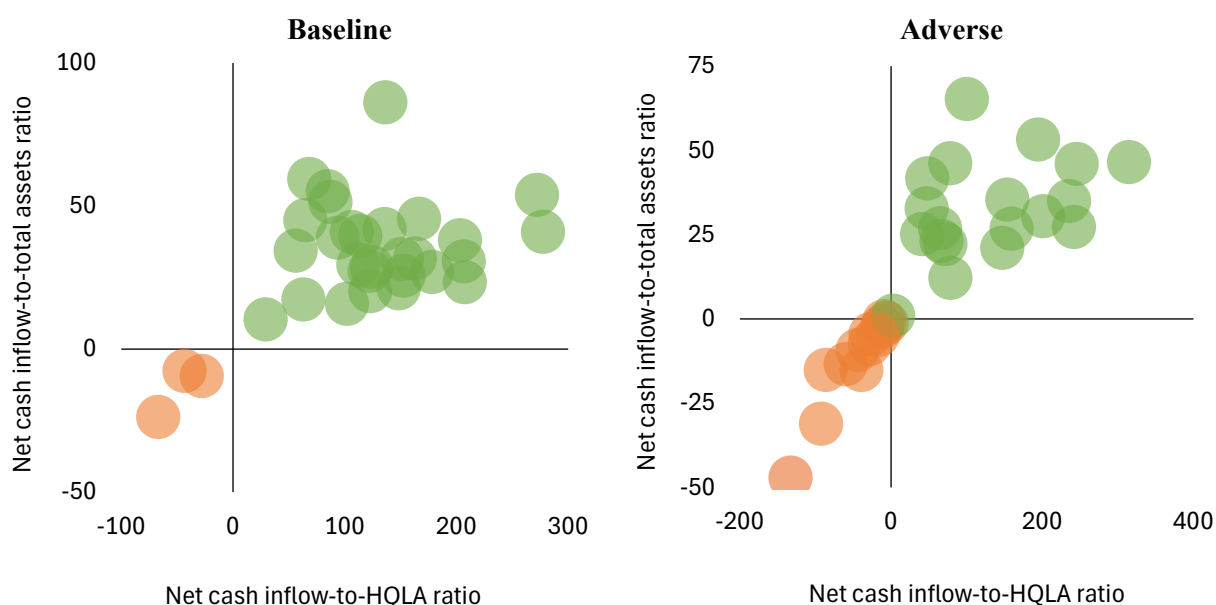


Figure 181. Bank-by-Bank Liquidity Stress Test Results: FC, % (as of January 1, 2027)**



Source: CBU staff calculations.

Note: *The graph presents data on banks, each depicted by a bubble, showing a ratio of net cash inflow to total bank assets within the 0–75%, and a ratio of net cash inflow to HQLA within the 0–210% under the baseline and adverse scenarios. Banks are color-coded: a green bubble denotes a bank with positive net cash inflows in DC, whereas a light red bubble represents a bank with negative net cash inflows in DC.

**The graph presents data on banks, each depicted by a bubble, showing a ratio of net cash inflow to total bank assets within the 0–75%, and a ratio of net cash inflow to HQLA within the 0–400% under the baseline and adverse scenarios. Banks are color-coded: a green bubble denotes a bank with positive net inflows in FC, whereas a light red bubble represents a bank with negative net inflows in FC.

Figure 182. Bank-by-Bank Share of Top Depositor Funds*, % (as of January 1, 2026)

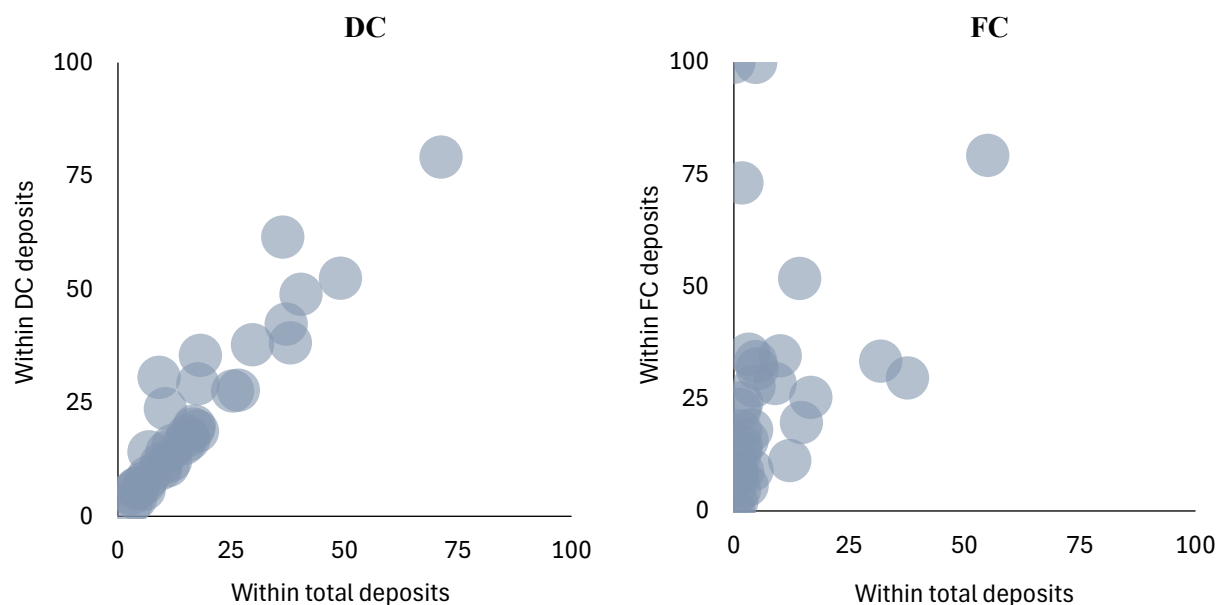
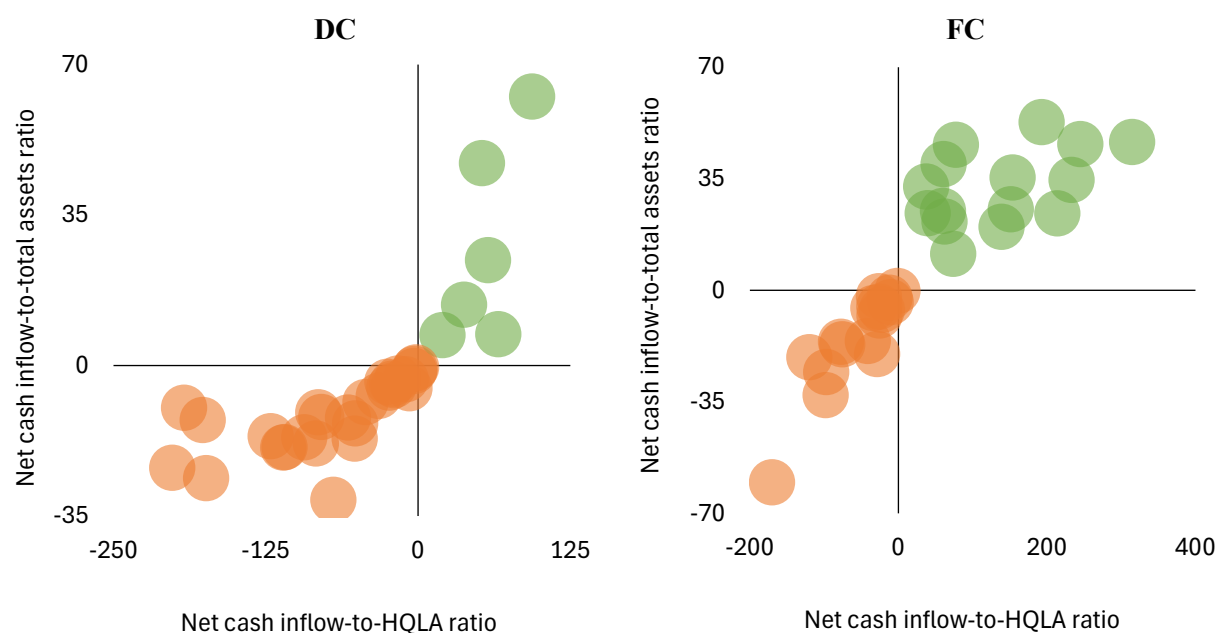


Figure 183. Bank-by-Bank Liquidity Stress Test Results: Impact of Top Depositor Withdrawals on Banks in the Adverse Scenario, % (as of January 1, 2027)**



Source: CBU staff calculations.

Note: *Depositors include legal entities and individuals.

**The graph presents data on banks, each depicted by a bubble, showing a ratio of net cash inflow in DC and FC to total bank assets up to 70%, and a ratio of net cash inflow to HQLA up to 400%. Banks are color-coded: a green bubble denotes a bank with positive net cash inflows, whereas a light red bubble represents a bank with negative net cash inflows.

The net cash inflow of some banks in FC may remain negative in the baseline scenario. By the end of 2026, negative net cash inflow in FC may comprise 10% of HQLA under the baseline scenario, whereas it may account for 6% of total FC assets and 28% of HQLA under the adverse scenario.

Bank's liquidity exposed to deposit concentration risk was assessed by incorporating an additional shock into the adverse scenario. The adverse scenario was augmented by conditionally applying an additional shock to assess the potential risks arising from the withdrawal of funds by the largest depositors in banks' DC and FC deposit portfolios.

Banks' FC deposit portfolios remain relatively more concentrated. As of the end of 2025, the largest depositor's funds in DC represented 18% of the banking system's total deposit portfolio¹⁶⁶ and 23% of the DC deposit portfolio. Moreover, the largest FC depositor's funds constituted 6% of the banking system's total deposit portfolio and 23% of the FC deposit portfolio.

The stress-test results indicate that the largest depositors' withdrawals could undermine banks' liquidity. Under the adverse scenario, incorporating the withdrawal of each bank's largest depositor, the negative net cash inflow that may materialize across the banking system by the end of 2026 could stand at 46% of HQLA in DC and 10% of total assets. The stress-test results further indicate that, FC concentration risk could lead to a positive net cash inflow which may decline from 55% to 14% of FC-denominated HQLA.

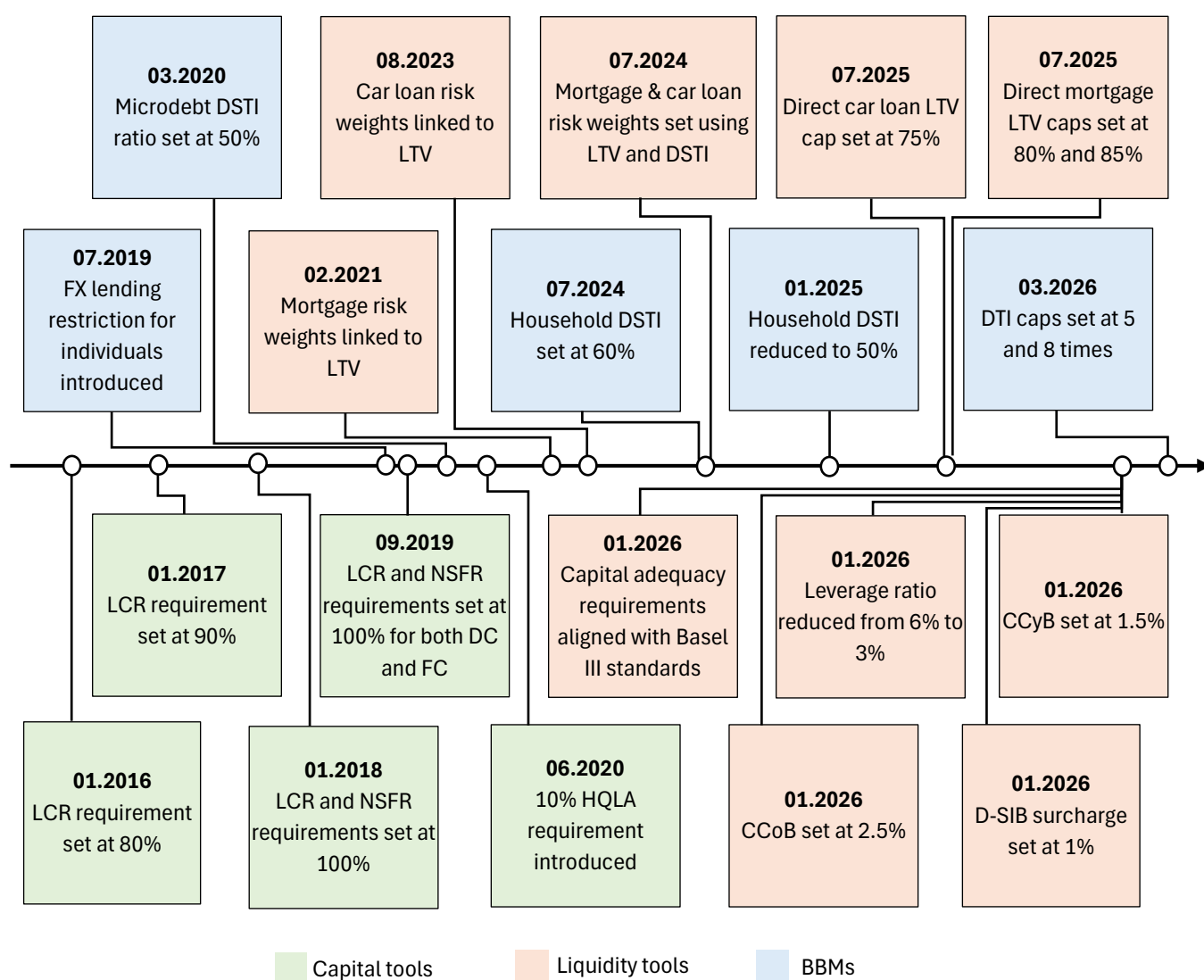
¹⁶⁶ The share of the largest depositors in the total deposits is defined as the ratio of the sum of the funds of the largest depositors to the deposit portfolio of the banking system.

VI. Macroprudential Policy

6.1. Macroprudential Policy Tools

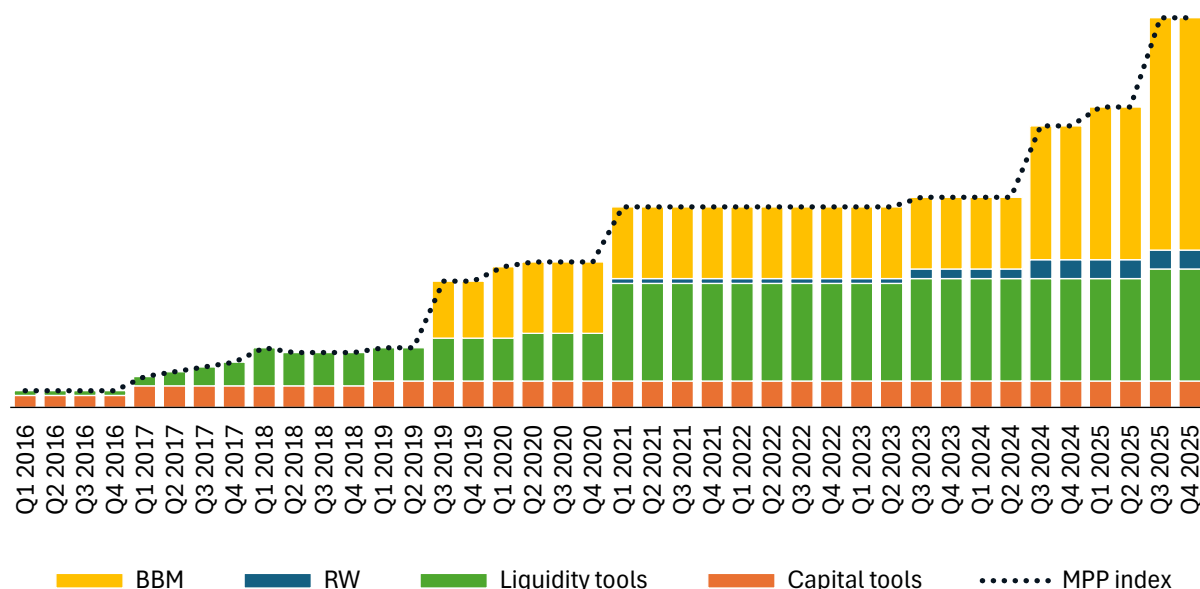
In Uzbekistan, MPP tools have been strengthened in line with Basel III standards. In particular, the CCoB, the CCyB, and D-SIB surcharge have been introduced. Additionally, the minimum capital adequacy requirements for banks have been brought into alignment with Basel III standards. BBMs of MPP, including direct DSTI, LTV and DTI caps, have also been introduced and further refined (Appendix 8).

Figure 184. Macroprudential Policy Developments in Uzbekistan



Source: CBU.

Figure 185. MPP Index



Source: CBU staff calculations.

Note: An increase of the MPP index indicates a tightening of MPP, while a decrease indicates a loosening of MPP.

In 2025, MPP was tightened through the further refinement of BBMs. From July 24, 2025, the implementation of direct caps on the LTV ratio at 75% for car loans and 80–85% for mortgages contributed to an increase in the MPP index. For mortgages refinanced with funds provided by the Ministry of Economy and Finance, a requirement was introduced stipulating that the LTV ratio should not exceed 85% when extending mortgages to individuals whose average monthly income can be determined.

BBMs of MPP have been expanded. In particular, from 2025, the DSTI cap applicable to all types of loans to individuals was tightened to 50%. The DTI cap was also introduced to reduce the debt burden risk for consumer loans and microdebts extended to households. From March 1, 2026, the DTI cap was set at a maximum of 8 times for self-employed individuals and borrowers whose average monthly income can be verified, and at a maximum of 5 times for individuals whose average monthly income cannot be verified¹⁶⁷.

Concentration limits were introduced for certain types of loans to promote greater diversification of banks' loan portfolios. In addition to the existing concentration limit applicable to car loans, concentration limits were imposed on microdebts, overdrafts and credit cards in banks' loan portfolios, effective from July 24, 2025. Accordingly, it was stipulated that microdebts, overdrafts and credit cards must not exceed 25% of the loan portfolio. Furthermore, to prevent severe constraints on the banking activities, banks not meeting the additional requirements were granted the opportunity to progressively align the composition of their loan portfolios with the established limits by the end of 2028.

¹⁶⁷ O'zbekiston Respublikasi Markaziy banki boshqaruvining 2025-yil 22-apreldagi "Banklarga o'rnatiladigan makroprudensial normativlar hamda ular tomonidan beriladigan kreditlar (mikroqarzlar) bo'yicha to'lovlarning eng yuqori qiymatlariga doir talablar to'g'risidagi nizomni tasdiqlash haqida"gi 3697-sonli qarori.

Table 1. Minimum Capital Requirements and Buffers for Banks, %

Indicators	Until January 1, 2026	Effective from January 1, 2026
CET1 ratio	6	4.5
Tier 1 ratio	8	6
CAR	13	8
CCoB	3% (as part of Tier 1 capital)	2.5
CCyB	-	1.5
D-SIB ¹⁶⁸ surcharge	-	1

Source: CBU

Note: Microfinance banks are excluded. From January 1, 2026, the CET1 ratio, Tier 1 ratio and CAR for microfinance banks are set at 8%, 10% and 13%, respectively.

Figure 186. Uzbekistan's Financial Cycle Index¹⁶⁹

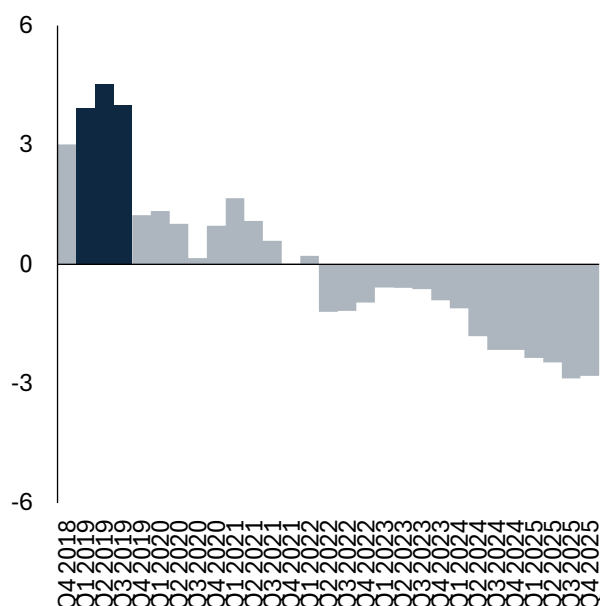
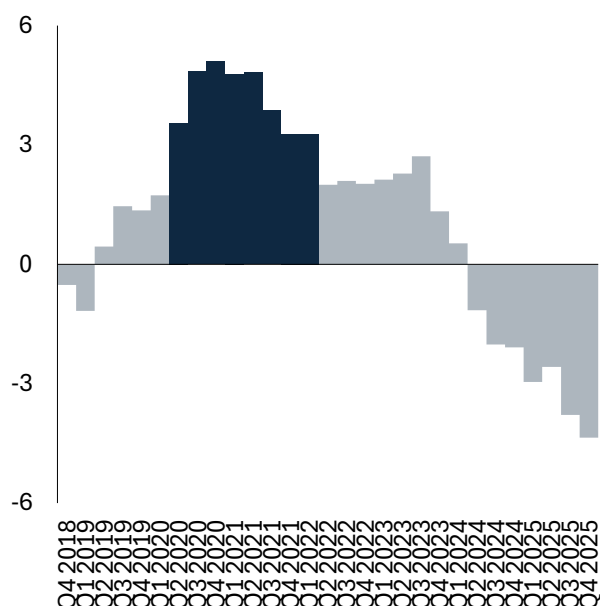


Figure 187. Credit to the Private Sector-to-GDP Gap, p.p.



■ Buffer build-up period

Source: National Statistics Committee and CBU staff calculations.

Note: An increase in the financial cycle index indicates a period of economic expansion, while a decrease indicates a period of economic contraction.

For periods of establishing a pnCCyB based on credit to the private sector-to-GDP gap, the periods in which this gap is above 2% are taken into account. According to Uzbekistan's financial cycle index, periods with the highest values are considered for the periods of establishing a pnCCyB.

¹⁶⁸ For 2026, National bank of Uzbekistan, Agrobank, Uz sanoatqurilishbank, Xalq bank, Ipoteka-bank, Kapitalbank, and Asakabank have been designated as D-SIBs.

¹⁶⁹ The financial cycle index methodology is presented in the Financial Stability Report for 2023.

The CCyB rate for commercial banks was set at 1.5%. The CCyB rate was determined using quantitative approaches in accordance with the Framework for the Calibration of the CCyB Rate for Banks¹⁷⁰, developed with due regard to the recommendations of international financial organizations and the experience of foreign countries. In particular, the alignment of effective indicators with their historical averages, continued growth in bank assets, stable lending activity, and a slowdown in NPL growth all pointed to the economy being in the standard-risk phase of the financial cycle. Taking into account the results of the quantitative approaches, the Central Bank decided to set a positive CCyB rate for banks from January 1, 2026, in light of the prevailing standard-risk environment¹⁷¹. Raising or decreasing the buffer rate enables the mitigation of cyclical risks and enhances the effectiveness of MPP tools (Appendix 9).

The relative stability of the Financial Cycle Index supports the calibration of a positive buffer during a standard-risk phase. Having remained relatively stable in recent years, the financial cycle index indicates that a standard-risk environment prevails in the country. Furthermore, the negative private sector credit-to-GDP gap stood at 4 p.p. at the end of 2025. In particular, developments in the credit to the private sector-to-GDP ratio relative to its long-term trend suggest that the positive CCyB was introduced with a delay.

An additional capital buffer of 1% was established for D-SIBs to mitigate structural systemic risks. Effective from January 1, 2026, D-SIB surcharges were introduced to contain the potential adverse effects of risks arising from D-SIBs on the country's banking system and the real economy¹⁷². In particular, this buffer is intended to curb the excessive accumulation of risks by D-SIBs while ensuring that potential losses can be absorbed through high-quality capital.

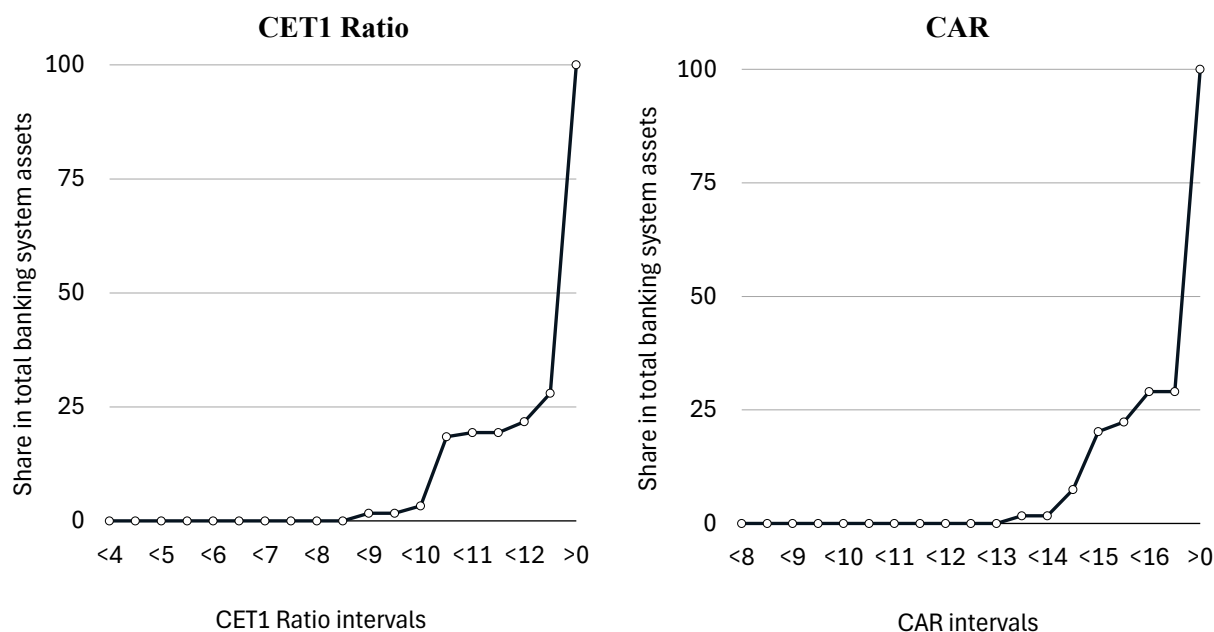
The CCoB for banks was introduced in accordance with Basel III standards. To ensure the stable functioning of the banking sector and further strengthen banks' solvency, the CCoB, alongside the minimum capital adequacy ratios, was brought into alignment with Basel III standards, effective from 2026. In particular, banks are required to maintain the CCoB at 2.5% of RWA in the form of CET1 capital (Appendix 10).

¹⁷⁰ The Central Bank of the Republic of Uzbekistan. (2025). Framework for the Calibration of the Countercyclical Capital Buffer Rate for Banks.

¹⁷¹ The Central Bank of the Republic of Uzbekistan. (2025). Press Releases: The countercyclical capital buffer (CCyB) rate has been set for banks.

¹⁷² O'zbekiston Respublikasi Markaziy banki boshqaruvining 2025-yil 28-oktabrdagi "Banklar kapitalining monandligiga qo'yilgan talablar to'g'risidagi nizomni tasdiqlash haqida"gi 3697-sonli qarori.

Figure 188. Distribution of CAR Intervals and Shares in Total Assets, % (as of January 1, 2026)



Source: CBU staff calculations.

Note: The cumulative order is used to set the shares of total assets of banks located within specific CAR intervals.

Banks remain fully compliant with the minimum capital adequacy and capital buffer requirements prescribed under the Basel III framework. As of January 1, 2026, the CET1 capital ratio of D-SIBs, including capital buffers, stayed above the minimum requirement of 9.5%, while the ratio for other banks exceeded the 8.5% minimum requirement. Moreover, the CAR of all banks remained above 13% at the beginning of 2026.

6.2. Risks and Mitigation Measures

Key financial stability risks of Uzbekistan and mitigation measures	Risk level and its change	
	In the short term	In the medium term
Tightening of global financial conditions amid geopolitical instability International tensions, including heightened global inflationary expectations stemming from developments in the Middle East, together with the persistence of a high-interest rate environment, contribute to the tightening of financial conditions. This, in turn, makes it difficult for the country to attract funds from international financial markets and raises the cost of servicing foreign debt. Consequently, capital inflows to the country decelerate, the cost of financing the budget deficit rises, and the interest rates on loans extended to the domestic economy through foreign credit lines increase. Moreover, geopolitical instability could disrupt international logistics chains, drive up transportation and insurance tariffs, and increase fuel prices, thereby weighing on foreign trade turnover. In particular, domestic inflationary pressures may intensify due to the decrease in the competitiveness of Uzbekistan's export products in international markets and high import prices. The widening of the foreign trade balance deficit amid volatile commodity prices, coupled with the initial effects of capital-account liberalization that enable domestic residents to undertake FC-denominated investments abroad, could exert pressure on the domestic FX market. Against a backdrop of constrained external financing opportunities, this could, in turn, heighten the vulnerability of the domestic economy to global external shocks. Furthermore, a deterioration in the financial condition of export-oriented enterprises may reduce their capacity to fulfill their financial obligations, thereby adversely affecting the quality of bank assets. In particular, an acceleration in the annual growth rate of FC deposits and loans in FC-equivalent terms and the expansion of the net open FX position could amplify the banking system's exposure to potential FX risks. Risk mitigation measures: - ensuring strict compliance with the established upper limit for the consolidated budget deficit; - introducing systemic risk buffer (SyRB); - enhancing opportunities to attract foreign direct investment through improvements in the investment environment; - expanding domestic financing through the development of the country's capital market, given high interest rates in international financial markets; - diversifying international logistics routes for foreign trade and strengthening trade integration with neighboring countries.		
Increased credit risk in microdebts An increase in NPLs on microdebts within banks' loan portfolios raises credit risk and, consequently, potential loan losses. Moreover, as the debt burden of microdebt borrowers increases, banks may incur loan losses if		

Key financial stability risks of Uzbekistan and mitigation measures	Risk level and its change	
	In the short term	In the medium term
borrowers fail to meet their obligations, given that collateral is not required when extending microdebts. Risk mitigation measures: - ensuring that exceptional loan allocations do not bypass debt burden assessments for microdebts, in line with established debt burden requirements; - establishing a minimum monthly income threshold for microdebt eligibility, calibrated according to minimum consumer expenses.		
The rise of cyber risks As payment systems and digitization accelerate, the occurrence of cyber risks is also increasing. Elevated cyber risk may undermine confidence in the financial system and adversely affect financial stability. Moreover, the growing number of cyberattacks, information security breaches, and data theft heightens operational risk and may lead to increased financial losses for financial system participants due to external events. Risk mitigation measures: - introducing artificial intelligence-based monitoring systems to detect suspicious transactions and apply restrictions to transactions identified as high risk; - improving information security systems among financial system participants; - enhancing the level of financial literacy of the population with regard to cyberattacks and fraud.		
Climate change risks Risks stemming from climate change can lead to significant losses for businesses and individuals, ultimately impacting the financial system. In particular, the vulnerability of key sectors of the national economy to physical and transition risks associated with climate change may increase. Risk mitigation measures: - continuously assessing the impact of physical and transition risks of climate change on the financial health of banks through climate stress testing; - implementing stricter capital requirements for sectors vulnerable to climate change risks while applying lower capital requirements for green investment projects.		



Note: The direction of the arrow indicates the change in the risk level.

Box 7. Climate-Related Physical Risks

Uzbekistan is exposed to physical risks associated with climate change, posing threats to the stability of the economy and infrastructure. The country is prone to earthquakes, given that its eastern and southern regions are situated in seismically active zones. At the same time, the country's dry climatic conditions may exacerbate water scarcity and drought risks, potentially leading to a contraction in agricultural output, rising unemployment, and declining household incomes. Furthermore, hazards such as river and urban flooding, landslides, and extreme heat may manifest with varying intensity across regions, damaging infrastructure and public well-being. Banks may consequently incur losses on loans extended to areas subject to elevated climate-related risks.

The eastern and southern regions of Uzbekistan exhibit greater susceptibility to seismic activity. Due to its proximity to the convergence of the Indian and Eurasian tectonic plates¹⁷³, Uzbekistan is considered a seismically active country¹⁷⁴. In particular, owing to geological and tectonic factors, Andijan, Jizzakh, Namangan, Samarkand, Surkhandarya, Tashkent, Ferghana, and Kashkadarya regions, together with the city of Tashkent, are classified as areas facing a higher risk of earthquakes. The remaining regions of the country are characterized by a medium level of seismic risk.

Dry climatic conditions in the western regions may exacerbate the risk of water scarcity. The Republic of Karakalpakstan, Khorezm, Navoi and Bukhara regions face climate risks arising from low precipitation and soil salinity. Uzbekistan's western regions receive nearly ten times less rainfall than their southeastern counterparts¹⁷⁵. Furthermore, the Khorezm region and the Republic of Karakalpakstan are among the areas most severely affected by soil salinity, with moderately and heavily saline land accounting for 41% and 40% of the total area, respectively. Substantial volumes of water are required to leach salt from these fields¹⁷⁶. Given the limited precipitation, irrigation is of critical importance to agriculture, which consumes nearly 90% of available water resources¹⁷⁷. In 2024, agriculture accounted for 18% of nominal GDP¹⁷⁸ and 23% of total employment¹⁷⁹. Additionally, demographic growth and industrialization are driving growing demand for both surface water and groundwater in Uzbekistan, while water supplies are dwindling under the impact of climate change. In particular, by 2050, the flows of the country's two main rivers – the Amu Darya and the Syr Darya – could decline by 5% and 15%, respectively. The total annual water shortage is projected to reach 7 billion cubic meters in 2030 and 15 billion cubic meters in 2050¹⁸⁰. In turn, the expected rise in average temperatures could accelerate evaporation and further intensify demand for water.

¹⁷³ Tectonic (lithosphere) plates are large segments of the Earth's outer layer that move relative to one another.

¹⁷⁴ World Bank. (2024, June). Uzbekistan - General Water Security Assessment.

¹⁷⁵ World Bank. (2024, May). Uzbekistan Climate Adaptation and Resilience Assessment.

¹⁷⁶ Khanal, S., C. Nolet, M. Tursunov, J.E. Hunink, D. de Condappa. (2023, May). Climate Change Risk Mapping of the Amu Darya River Basin, Uzbekistan. Future Water Report 257.

¹⁷⁷ World Bank. (2025, May). Uzbekistan to Modernize Its Irrigation Infrastructure with World Bank Support.

¹⁷⁸ National Statistics Committee. (2024). Gross value added of industries (at current prices, annual).

¹⁷⁹ National Statistics Committee. (2024). Distribution of the employed population by type of economic activity.

¹⁸⁰ World Bank. (2023, November). Uzbekistan Country Climate and Development Report.

The river flood risks are mounting owing to climate change. The majority of Uzbekistan's territory remains vulnerable to river flood hazards. Such risks persist across large parts of the country, particularly in areas near major water bodies and the upper reaches of rivers¹⁸¹. The risk of river flooding in the southeastern part of Tashkent city is assessed as low¹⁸². Peak river flows driven by snowmelt are expected to occur approximately one month earlier than usual during the year. This shift could increase the probability of such flows coinciding with heavy rainfall events and base flows in rivers, thereby further exacerbating flood risks¹⁸³.

Most cities are at risk of floods. Khorezm, Jizzakh and Andijan regions are assessed as facing a medium level of risk, while Tashkent city and the Syrdarya region are classified as low-risk areas. All remaining regions fall into the high-risk category, with flooding potentially arising from urban and river floods as well as heavy rainfall. This risk may be amplified by the condition of drainage systems and the widespread prevalence of impermeable surfaces. The increasing use of impermeable surfaces, such as asphalt roads and concrete pavements, limits water infiltration into the ground, increasing the probability of water accumulation and flooding in low-lying areas. More than half of the country's population currently resides in urban areas¹⁸⁴. Expanding green spaces and upgrading drainage systems are therefore crucial to mitigating flood risks in cities. Green spaces, including parks and boulevards, facilitate rainwater absorption and help attenuate surface runoff.

In Uzbekistan, landslide risk is concentrated predominantly in mountainous regions. Mountains cover 90,000 square kilometers of the country's territory, of which 17% is considered susceptible to landslides. Of these landslides, approximately 65-70% are triggered by snow melting, precipitation, and underground waters, while 20-25% are attributable to earthquakes, with technogenic factors¹⁸⁵ accounting for 15-20%¹⁸⁶. Regions such as Tashkent, Jizzakh, Samarkand, Kashkadarya, Surkhandarya, Ferghana, Namangan and Andijan are subject to a high risk of landslides due to steep terrain, heavy precipitation, and seismic activity. The Navoi Region is classified as having a medium risk level, which is largely explained by the relatively limited number of mountainous areas within the region. Conversely, flat and desert areas, including the Republic of Karakalpakstan, Khorezm, Bukhara, and Syrdarya regions, and the city of Tashkent, are characterized by a low risk of landslides, owing to their predominantly flat terrain and the absence of major mountain ranges.

Climate risks induced by extreme heat may adversely affect the energy sector, transport, and labor productivity. Although the risk of high temperatures is widespread across the country, almost all regions are assessed as exhibiting a medium risk level. Surkhandarya is the

¹⁸¹ At the district level, some districts face medium, low or very low flood risk. For example, in Navoi, only two small districts face high flood risk, while the remaining districts are assessed as having low or very low risk.

¹⁸² ADB. (2023, August). Incorporating climate resilience in urban planning and policy making: Focus on Armenia, Georgia, and Uzbekistan.

¹⁸³ World Bank. (2022, April). Toward a Prosperous and Inclusive Future: The Second Systematic Country Diagnostic for Uzbekistan.

¹⁸⁴ National Statistics Committee. (2025). Demographic situation in the Republic of Uzbekistan.

¹⁸⁵ Technogenic factors refer to accidents and disasters arising from human activities, industrial production, machinery or technological processes. These include transport accidents, chemical incidents, fires, explosions and malfunctions in energy systems.

¹⁸⁶ World Bank and GFDR. (2020, January). Disaster Property Insurance in Uzbekistan: Overview and Recommendations.

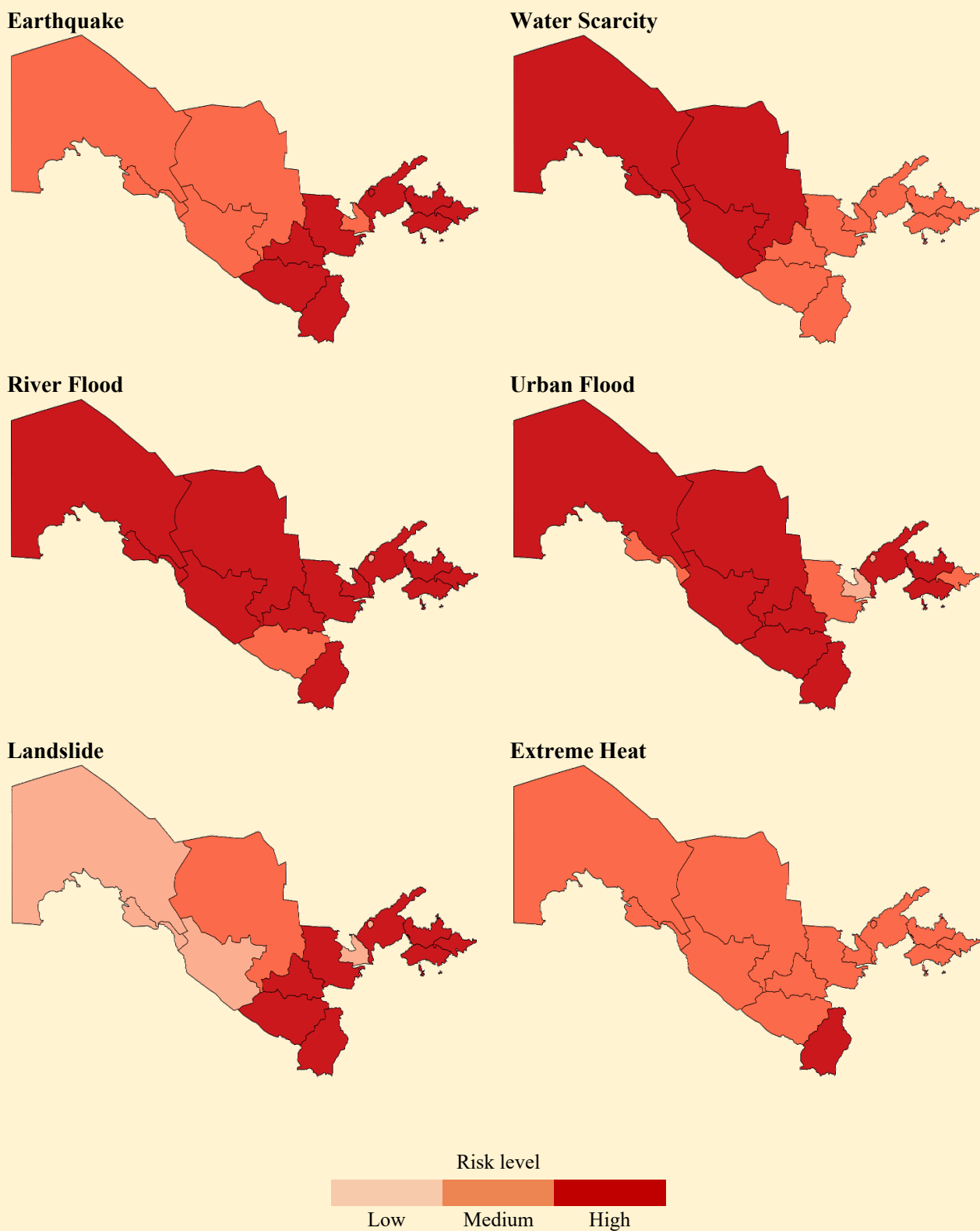
only region classified as having a high-risk level, as the mountain ranges surrounding the region to the west, north, and east impede the free movement of air masses, contributing to the persistence of high temperatures. With its dry climate, Uzbekistan has already experienced changes in temperature, and climate-related stress is expected to intensify as temperatures continue to rise. Between 1950 and 2020, the country's average temperature increased by 2.9°C. Projections indicate a further rise of 1.21°C-1.94°C by the end of the century¹⁸⁷. Although the overall risk level remains moderate, rising temperatures could give rise to several challenges. In particular, a one-degree rise in air temperature results in a 0.5%–8.5% increase in electricity demand on average, with cooling systems in commercial and residential buildings constituting one of the primary factors. Such an increase in demand could place additional strain on the energy system¹⁸⁸. Extreme heat also poses risks to transportation infrastructure. In addition, extreme heat may undermine labor productivity, especially on extremely hot days when productivity losses in the construction industry can reach 20–30%¹⁸⁹.

¹⁸⁷ World Bank. (2023, November). Uzbekistan Country Climate and Development Report.

¹⁸⁸ World Bank and Asian Development Bank (2021). Climate Risk Country Profile: Uzbekistan.

¹⁸⁹ World Bank. (2025, June). Unlivable. How Cities in Europe and Central Asia Can Survive – and Thrive – in a Hotter Future.

Figure 189. Climate-Related Physical Risks in Uzbekistan



Source: ThinkHazard

Note: The regional assessment was aggregated by selecting the highest risk level identified among the districts within each region.

Climate Dashboard

Table 2. Climate Change Dashboard for Uzbekistan

	Indicator	Unit	The value before the reference period	The value of the reference period	Reference period	Change
Climate indicators	Total greenhouse gas emissions	million metric tons of carbon dioxide (CO ₂)* equivalent	211.4	227.5	2024	↑
	Total greenhouse gas emissions per capita	metric tons of CO ₂ equivalent	5.7	6.1	2024	↑
	Total greenhouse gas emissions per unit of real GDP	metric kilograms of CO ₂ equivalent per 1 million UZS at 2024 prices	146.8	148.2	2024	↑
	Total greenhouse gas emissions from agriculture	million metric tons of CO ₂ equivalent	51.9	52.2	2024	↑
	Total greenhouse gas emissions from industrial processes and product use	million metric tons of CO ₂ equivalent	10.3	10.3	2023	→
	Total greenhouse gas emissions from energy sectors	million metric tons of CO ₂ equivalent	147.3	145.3	2023	↓
	Total greenhouse gas emissions from waste	million metric tons of CO ₂ equivalent	6.9	7.1	2024	↑
	Effects of land-use and forestry on greenhouse gas emissions	million metric tons of CO ₂ equivalent	-3.4	-3.4	2023	→
	Other greenhouse gas emissions	million metric tons of CO ₂ equivalent	0.3	0.3	2023	→
	Total greenhouse gas emissions in countries that share climate-related risks with Uzbekistan**	billion metric tons of CO ₂ equivalent	44.4	44.9	2024	↑
	Total carbon dioxide emissions	million metric tons	132.6	148.5	2024	↑
	Total methane emissions	million metric tons of CO ₂ equivalent	64.4	64.3	2024	↓
	Total methane emissions from agriculture	million metric tons of CO ₂ equivalent	37.6	37.8	2024	↑
	Total methane emissions from industrial processes and product use	thousand metric tons of CO ₂ equivalent	0.9	0.9	2023	→
	Total methane emissions from energy sectors	million metric tons of CO ₂ equivalent	19.7	18.7	2023	↓
	Total methane emissions from waste	million metric tons of CO ₂ equivalent	6.3	6.4	2024	↑
	Total energy efficiency***	%	4.5	4.2	2024	↑
	Climate altering land cover index (CALCI)****	index	99.04	98.98	2022	↓
	Temperature change with respect to a baseline climatology, corresponding to the period 1951–1980	Celsius	2.4	2.1	2024	↓
	Water scarcity indicator	index		3.1	2024	
	The share of agriculture in total freshwater consumption	%	91	92	2022	↑

Indicator		Unit	The value before the reference period	The value of the reference period	Reference period	Change
Real economic indicators	The share of renewable energy sources in the total volume of electricity production	%	9.6	15.7	2024	↑
	Share of industry in total electricity consumption	%	30.2	31.1	2024	↑
	Share of agriculture in total electricity consumption	%	11.7	11.3	2024	↓
	Environmental protection expenditure as percent of GDP	%	0.34	0.36	2024 H1	↑
	Share of state budget expenditures***** with a positive impact on climate change as a percent of GDP	%	3.2	2.4	2024	↓
	Exports of low carbon technology products as percent of GDP	%	0.1	0.1	2023	→
	Imports of low-carbon technology products as percent of GDP	%	1.8	3.2	2023	↑
	Total trade in low carbon technology products as percent of GDP	%	1.9	3.3	2023	↑
	Volume of electricity production by renewable energy sources	billion kWh	7.5	13.0	2024	↑
	Increase in electricity prices	%	67.0	18.8	2025	↓
	Amount of fossil fuel subsidies	billion USD	13.2	14.5	2022	↑
	Amount of fossil fuel subsidies	billion USD	13.2	14.5	2022	↑
Climate-related financial indicators	Volume of “green” sovereign international bonds	million USD	348.4	873.4	2025	↑
	Share of industry loans in total loans	%	28.8	23.6	2025	↓
	Share of agricultural loans in total loans	%	9.4	10.1	2025	↑
	Share of construction loans in total loans	%	2.4	3.1	2025	↑
	Share of transport and communication loans in total loans	%	6.2	5.6	2025	↓
	Share of loans allocated in Tashkent in total loans	%		47.0	2025	
	Share of loans to non-financial organizations in total banking system assets	%	45.7	41.1	2025	↓
	Share of mortgages to individuals in total banking system assets	%	8.8	8.6	2025	↓
	Insurance penetration	per mille	6.2	7.0	2025	↑

Sources: IMF, European Commission, World Wildlife Fund, National Statistics Committee, Ministry of Economy and Finance, National Agency of Prospective Projects and CBU staff calculations.

Notes: Positive changes in the indicator are represented by green symbols, negative changes by red symbols, and unchanged states by yellow symbols. In addition, the direction of these signs means changes in the value of indicators.

*CO₂ equivalent is a metric measure used to compare the emissions from greenhouse gases on the basis of their global-warming potential (GWP), by converting the amounts of other gases to the equivalent amount of carbon dioxide with the same global-warming potential. Carbon dioxide equivalents are usually expressed as million metric tons of CO₂ equivalent. The CO₂ equivalent for a gas is derived by multiplying the tons of the gas by the associated global warming potential.

**Afghanistan, China, Kazakhstan, Kyrgyzstan, Russia, Tajikistan, Türkiye and Turkmenistan, are taken into account as countries that share climate change risks with Uzbekistan¹⁹⁰.

***Total energy efficiency determines the amount of GDP per unit of consumption of total fuel and energy resources.

****The Climate Altering Land Cover Index (CALCI) is used to assess changes in land cover that may have a significant impact on climate change. It takes into account changes in land cover, such as deforestation, level of urbanization and expansion of agricultural land. The year 2015 was selected as the base for the index since all countries reported land cover data for that year (2015 = 100).

*****State budget expenditures that have a positive impact on climate, by their nature, include costs aimed at preventing factors that negatively affect the climate and expenses for adapting to climate change. These represent expenditures directed at financing measures that reduce greenhouse gas emissions, as well as timely adaptation costs aimed at preventing or mitigating losses associated with the inevitable consequences of climate change.

The climate change dashboard for Uzbekistan indicates rising transition risks¹⁹¹ associated with climate change within the country as well as a growing impact of these risks on the financial system. Particularly, total greenhouse gas emissions in Uzbekistan rose by 7.6% in 2024 compared with 2023, reaching 227.5 million metric tons of CO₂ equivalent¹⁹². Meanwhile, total greenhouse gas emissions per unit of real GDP¹⁹³ amounted to nearly 0.15 tons in 2024, representing a 1% increase compared with 2023. Furthermore, the decline in total energy efficiency from 4.5% in 2023 to 4.2% in 2024 points to heightened concerns regarding transition risks linked to energy sector reforms in the course of the transition to a low-carbon economy.

The vulnerability of agriculture to climate change risks has become more pronounced. In particular, the increase in total greenhouse gas emissions from agriculture heightens the sector's vulnerability to transition risks, alongside the physical risks¹⁹⁴ associated with climate change. Furthermore, the fact that agriculture accounts for the majority of total freshwater withdrawals¹⁹⁵ underscores the sector's high exposure to water resource-related risks, thereby further intensifying its vulnerability to climate change risks. Moreover, the share of agricultural loans in

¹⁹⁰ Kollenda, P., Logan, S., & Wang, D. (2025). Finding your Peers: Comparing Countries on a Level Playing Field. World Bank Paper.

When identifying countries for comparison, it is appropriate to take into account their geographic location, bilateral trade turnover, and income level, particularly GDP per capita.

¹⁹¹ Transition risks are associated with the transition to a low-carbon economy, and changes in technology, legislation and country policies aimed at climate change mitigation and adaptation can affect the value of financial assets and liabilities.

¹⁹² European Commission. (2025). GHG emissions of all world countries.

¹⁹³ Total greenhouse gas emissions per UZS 1 million of GDP at 2024 prices were calculated.

¹⁹⁴ Physical risks, i.e. the economic costs associated with the intensification and frequent recurrence of extreme weather events related to climate change, may reduce the value of financial assets or increase liabilities.

¹⁹⁵ World Bank. (2024). Annual freshwater withdrawals, agriculture (% of total freshwater withdrawals).

the banking system's total loan portfolio increased from 9.1% to 10.1% in 2025¹⁹⁶. This upward shift, in turn, points to a relatively elevated probability of credit risk in the banking system due to financial losses that may occur in the sector as a result of the transition to a low-carbon economy¹⁹⁷. In addition, agriculture comprises 92% of total freshwater withdrawals.

A temperature rise of 2.1°C relative to the long-term baseline¹⁹⁸ was observed in Uzbekistan. In particular, Uzbekistan's air temperature is growing above the Paris Agreement's target to keep global warming significantly below 2°C relative to the average temperature of the pre-industrial period¹⁹⁹. This temperature change, in turn, indicates that physical risks associated with climate change persist in the country.

¹⁹⁶ The Central Bank of the Republic of Uzbekistan (2026). Information on commercial bank loans by economic sectors.

¹⁹⁷ O'zbekiston Respublikasining 2025-yil 7-iyuldagi "Issiqxona gazlarining chiqarilishini cheklash to'g'risida"gi O'RQ-1073-sonli Qonuni.

¹⁹⁸ The average air temperature for 1951–1980 was used as the long-term baseline.

¹⁹⁹ United Nations. (2015). Paris Agreement.

Table 3. Early warning indicators heatmap

Indicator	Interpretation	Description	Sign of impact	Unit of measurement
Private Sector Credit-to-GDP Gap	A credit to the private sector-to-GDP ratio that remains above its trend reflects the buildup of cyclical systemic risks.	The gap between the actual private sector credit-to-nominal GDP ratio and its long-term trend. The long-term trend is determined using a one-sided HP filter with a smoothing parameter of 400,000 designed for quarterly data.	+	p.p.
Spread between DC Lending Rates and Government Securities Yields	A widening spread between domestic currency lending rates and government securities yields indicates an increase in the credit risk premium, suggesting that banks are assigning higher credit risk to lending.	The spread between the average interest rate on total loans denominated in DC and the average yield on government securities.	+	p.p.
FCI	An increase in the FCI indicates a tightening of financial conditions in the country, suggesting that real economic growth may slow in the future.	The final value of the FCI is calculated by aggregating the sub-indices representing the banking sector, FX market, external sector, and macroeconomic indicators using PCA.	+	index
Total Credit-to-GDP Gap	A credit-to-GDP ratio above its long-term trend indicates an increasing overall debt burden, reflecting the accumulation of cyclical systemic risks.	The gap between the ratio of total outstanding loans to nominal GDP and its long-term trend estimated using the HP filter. A smoothing parameter of 400,000 designed for quarterly data is used to estimate the long-term trend using the HP filter.	+	p.p.
Nominal GDP Gap	A nominal GDP below its long-term trend indicates that the economy is operating below its potential, economic activity has weakened, and systemic risks are accumulating.	The gap between actual nominal GDP and its long-term trend. A smoothing parameter of 400,000 designed for quarterly data, is used to estimate the long-term trend using the HP filter.	-	p.p.

Indicator	Interpretation	Description	Sign of impact	Unit of measurement
FSI	A high FSI indicates an increased level of stress in the financial system.	The final value of the index is calculated as the sum of the products of the values of the sub-indices representing the money market, domestic FX market, and banking sector and their respective weights.	+	index
Credit-to-GDP Ratio Growth	An increase in the credit-to-GDP ratio indicates a rising debt burden in the country, reflecting a higher risk of loan losses.	The annual growth rate of the ratio of total outstanding loans to nominal GDP.	+	p.p.
CAB-to-GDP Ratio	An increase in the current account deficit-to-GDP ratio indicates that the country's economy has become more vulnerable to external risks.	The ratio of the CAB to nominal GDP.	-	percent
Financial Cycle Index	An increase in the Financial Cycle Index indicates rising risk appetite among financial market participants during periods of economic expansion and the accumulation of systemic risks.	The indicators are standardized using the Z-score method and aggregated into the Financial Cycle Index using PCA.	+	index
Loan-to-Deposit Ratio	A high loan-to-deposit ratio indicates increased liquidity risk due to banks' reliance on unstable funding sources for lending.	The ratio of outstanding loans to outstanding deposits.	+	percent
ROE	A decline in ROE indicates a deterioration in commercial banks' profitability and the occurrence of financial losses.	It is calculated as the ratio of the banking system's NPAT to total equity.	-	percent
NPL Growth Rate	An acceleration in the growth of NPL indicates a deterioration in the quality of the loan portfolio and an increased probability of loan losses.	It is calculated as the annual growth rate of the outstanding balance of NPL relative to its value one year earlier.	+	percent
Banking Sector Assets-to-GDP Ratio	An increase in this indicator reflects a stronger interconnection between the real economy and the banking system, indicating that potential risks arising in the banking system could have a greater adverse impact on the country's economy.	The ratio of total banking system assets to nominal GDP.	+	percent

Indicator	Interpretation	Description	Sign of impact	Unit of measurement
NSFR	A decline in the NSFR indicates increased liquidity risk in banks and implies that banks may face difficulties in meeting their obligations on time.	The ratio of available stable funding to required stable funding.	-	percent
LCR	A decline in the LCR indicates increased liquidity risk in banks and reflects a reduced level of HQLA available to cover expected net cash outflows over the next 30 days.	The ratio of HQLA to total net cash outflows over the next 30 days.	-	percent
Credit Growth (YoY)	Rapid growth in outstanding loans indicates an increasing share of high risk-weighted assets within banks' total assets.	The annual growth rate of total outstanding loans.	+	percent
FC Lending Share	A high level of dollarization in the loan portfolio indicates that banks may experience increased loan losses as a result of fluctuations in the FX market.	The ratio of outstanding FC loans to legal entities to total loans.	+	percent
ROA	A decline in ROA indicates a decrease in the profitability of commercial banks and a deterioration in their financial condition.	It is calculated for the banking system as the ratio of PBT to total assets.	-	percent
Leverage Ratio	A decline in the leverage ratio reflects a lower level of capital coverage for total bank assets, indicating a deterioration in banks' solvency to absorb potential losses.	It is calculated as the ratio of Tier 1 capital to total assets.	-	percent
CET1 Ratio	A decline in CET1 ratio indicates a deterioration in banks' solvency and their resilience to systemic risks.	It is calculated as the ratio of CET1 capital to RWA.	-	percent
Share of HQLA	A decline in the share of HQLA in total assets indicates rising liquidity risk in the banking system.	The ratio of HQLA to total assets.	-	percent

Indicator	Interpretation	Description	Sign of impact	Unit of measurement
FX position	An increase in the absolute value of the FX position indicates an increase in potential bank losses arising from sharp fluctuations in FX rates.	The difference between commercial banks' FC claims and FC liabilities when they are not equal.	+	amount
Banking Sector Concentration (by assets)	An increase in the HHI, which measures the level of concentration and competition in the banking sector, indicates a decline in the level of competition and an increase in concentration risk within the banking system.	The asset-based HHI for the banking system is the sum of the squared shares of each bank's assets in total banking system assets.	+	index
Wholesale Funding Ratio	Due to the continuous monitoring of banks' financial condition and other investment opportunities in financial markets by owners of wholesale funding sources, these funds are withdrawn in large amounts during periods of uncertainty in the banking system. Therefore, an increase in this ratio indicates a higher probability of liquidity problems arising.	The ratio of bank liabilities excluding household deposits to total assets.	+	percent
Share of Noncore Funding in Total Liabilities	Due to the high sensitivity of wholesale funding to changes in the financial system, large-scale withdrawals of these funds are observed during periods of uncertainty. Therefore, an increase in the share of wholesale funding sources in total bank liabilities indicates a rise in potential liquidity problems.	The ratio of bank liabilities excluding household deposits to total liabilities.	+	percent

Indicator	Interpretation	Description	Sign of impact	Unit of measurement
Household Credit Growth Rate	Rapid growth in retail lending leads to a decline in future consumer spending and aggregate demand in the economy due to increased debt service costs for borrowers. This, in turn, increases banks' loan losses as borrowers' financial condition deteriorates.	The annual growth rate of total outstanding loans to individuals.	+	percent
Corporate Credit-to-GDP Gap	A corporate credit-to-nominal GDP ratio standing above its trend reflects an increasing debt burden in the corporate sector and a buildup of cyclical systemic risks.	The gap between the corporate credit-to-nominal GDP ratio and its long-term trend. The long-term trend is determined using a one-sided HP filter with a smoothing parameter of 400,000 designed for quarterly data.	+	p.p.
Household Credit-to-GDP Gap	A household credit-to-GDP ratio standing above its trend indicates rising household debt burden and the accumulation of cyclical systemic risks.	The gap between the household credit-to-nominal GDP ratio and its long-term trend. The long-term trend is determined using a one-sided HP filter with a smoothing parameter of 400,000 designed for quarterly data.	+	p.p.
Share of Corporate Loans in Total Credit	An increase in this indicator indicates a higher concentration risk associated with corporate borrowers in the bank loan portfolio and increased probability of loan losses due to a deterioration in the financial condition of enterprises.	The ratio of outstanding corporate loans to total loans.	+	percent
Corporate Credit Growth Rate	Rapid growth in corporate lending increases the likelihood of significant credit losses for banks due to the deterioration in the solvency of large borrowers as a result of potential risks arising in the real economy.	The annual growth rate of total corporate loans.	+	percent
Share of Household Loans in Total Credit	An increase in the share of household loans in the loan portfolio may increase the likelihood of credit losses for banks due to a deterioration in borrowers' financial condition.	The ratio of outstanding household loans to total loans.	+	percent

Indicator	Interpretation	Description	Sign of impact	Unit of measurement
DSTI Ratio	An increase in the DSTI ratio of individuals indicates a higher household debt burden and increases the probability of borrowers being unable to repay their loans on time and loan losses.	The ratio of total monthly debt payments under existing loan and debt contracts concluded with banks, non-bank, and non-financial organizations to the monthly income of individuals who obtained loans from banks.	+	percent
House Price-to-Disposable Income Ratio	House prices rising faster than household disposable income suggests that non-fundamental factors play a significant role in house price formation.	The ratio of average market house prices to household disposable income.	+	amount
Mortgage Credit Growth Rate	The rapid growth of outstanding mortgages indicates that the banking system has become increasingly vulnerable to potential risks in the real estate market.	The annual growth rate of outstanding mortgages to individuals.	+	percent
Mortgage Loan Leverage	The rapid growth of mortgage lending relative to the country's GDP indicates that the debt burden of individuals associated with mortgages has increased.	The ratio of outstanding mortgages to individuals to nominal GDP.	+	percent
House Price Growth Rate	The high increase in the absolute value of the annual growth rate of house prices indicates increased volatility and the accumulation of risks in the real estate market.	The annual growth rate of average house prices across the country.	+	percent
Uzbekistan Sovereign Eurobond G-Spread	An increase in the G-spread of Uzbekistan's Sovereign Eurobonds indicates an increase in the level of risk relative to benchmark bonds, as well as an increase in the risk premium demanded by investors for the country's sovereign debt in international financial markets.	The difference between the yield on Uzbekistan's sovereign bonds denominated in FC and the yield on benchmark bonds. To determine the overall G-spread for all Eurobonds, a weighted arithmetic mean is calculated based on the G-spread and the outstanding amount of each Eurobond.	+	p.p.

Note: An increase in a (+) indicator indicates rising financial vulnerabilities, whereas an increase in a (–) indicator indicates a decrease in financial vulnerabilities.

Extreme Value Theory

An Extreme Value Theory (EVT) approach is aimed at quantitatively identifying the extreme values of risks that adversely affect the banking system and analyzing the contagion of these risks throughout the system²⁰⁰. In particular, this approach makes it possible to assess the potential extreme values of the FX rate that may arise in future periods based on its historical volatility.

The change in the FX rate estimated based on EVT result in changes in the nominal UZS value of FC assets and FC liabilities on banks' balance sheets. As a result of these changes, banks may experience adverse effects due to mismatches between FC assets and FC liabilities. In addition, the risk of contagion arising from defaults at certain banks caused by large losses due to FX risk is also analyzed.

The volatility of the FX rate is determined in logarithmic form as follows:

$$r_t = \log\left(\frac{FX_t}{FX_{t-1}}\right) = \log(FX_t) - \log(FX_{t-1})$$

Where,

r_t – logarithmic volatility of the exchange rate in period t ;

FX_t – the nominal value of UZS against FC in period t ;

FX_{t-1} – the nominal value of DC against FC in period $(t - 1)$.

As the primary focus is on the depreciation of UZS, exchange rate volatility is recalculated with a negative sign and denoted as $y_t = -r_t$ ²⁰¹. The dynamics of FX rate volatility are modeled as a stochastic process²⁰² in the following form:

$$y_t = \mu_t + \varepsilon_t$$

$$\varepsilon_t = z_t \sigma_t$$

Where,

y_t – negative exchange rate volatility;

μ_t – conditional mean;

σ_t – conditional standard deviation;

²⁰⁰ Nikzad, R. (2011). Extreme Value Theory with an Application to Bank Failures through Contagion. University of Ottawa.

²⁰¹ Titov, C. (2022). Forecasting Exchange Rate Value-at-Risk and Expected Shortfall: A GARCH-EVT Approach. School of Economics and Management, Lund University.

²⁰² A stochastic process is a process that evolves over time under the influence of randomness.

$z_t \sim F(0, 1)$ – an independent and identically distributed random process following a standard Student-t distribution²⁰³.

The conditional mean and conditional variance are estimated based on the dataset available up to period $(t - 1)$ which is denoted by G_{t-1} . The conditional mean σ_t and conditional variance σ_t^2 are determined as follows:

$$\begin{aligned}\mu_t &= E(y_t | G_{t-1}) \\ \sigma_t^2 &= Var(y_t | G_{t-1})\end{aligned}$$

Where, $E(y_t | G_{t-1})$ and $Var(y_t | G_{t-1})$ denote the conditional mean and conditional variance, respectively.

The EVT approach requires the data to be independent and identically distributed. To obtain independent and identically distributed residuals, the ARMA model or various GARCH model is applied to the time series.

An Autoregressive (AR) model is a statistical model that explains the current value of a time series using its values from previous periods. By adding lagged random errors ε_{t-j} to the AR model, an ARMA model is obtained. The ARMA(r,s) representation of a time series is expressed as follows:

$$y_t = c + \sum_{i=1}^r \varphi_i y_{t-i} + \sum_{j=1}^s \gamma_j \varepsilon_{t-j} + \varepsilon_t$$

Where,

y_t – the value of the data in period t ;

c – constant term;

y_{t-i} – the value of the data in the previous i periods;

ε_{t-j} – the value of the random errors in the previous j periods;

φ_i, γ_j – unknown coefficients.

²⁰³ The probability density function of the Student-t distribution has the following form:

$$\begin{aligned}t_v(x) &= \frac{\Gamma\left(\frac{v+1}{2}\right)}{\sqrt{\pi v} \Gamma\left(\frac{v}{2}\right)} \left(1 + \frac{x^2}{v}\right)^{-\frac{v+1}{2}} \\ v &= t - 1 \\ \Gamma(p) &= \int_0^\infty x^{p-1} e^{-x} dx.\end{aligned}$$

Where,

$t_v(x)$ – probability density function;

v – degrees of freedom;

t – sample size;

$\Gamma(p)$ – Gamma function.

The historical variance of many financial time series tends to change over time. In other words, time-varying conditional heteroskedasticity²⁰⁴ is observed in these indicators.

The GARCH model is a method for identifying the volatility characteristics of financial time series. In the GARCH model, positive and negative random errors have a symmetric effect on variance. In this case, the conditional variance of the GARCH(p,q) model is expressed as follows:

$$\begin{aligned}\sigma_t^2 &= \omega + \sum_{i=1}^p \alpha_i \varepsilon_{t-i}^2 + \sum_{j=1}^q \beta_j \sigma_{t-j}^2 \\ \sum_{i=1}^p \alpha_i + \sum_{j=1}^q \beta_j &< 1 \\ \omega > 0, \alpha_i &\geq 0, \beta_j \geq 0\end{aligned}$$

Where,

ε_{t-i} – random errors in the previous i periods;

σ_{t-j}^2 – conditional variances in the previous j periods;

$\omega, \alpha_i, \beta_j$ – coefficients.

In the above equation, assuming that all coefficients are non-negative is necessary to ensure a non-negative variance. The coefficient α_i in the conditional variance equation indicates the extent to which random errors from previous periods affect the conditional variance. Meanwhile, the β_j coefficient indicates the degree of persistence of the conditional variance.

The most common approach in GARCH models is to use only first-order random errors and conditional variance lags. The standard GARCH(1,1) model is expressed as follows:

$$\sigma_{t+1}^2 = \omega + \alpha \varepsilon_t^2 + \beta \sigma_t^2$$

In addition, the Integrated GARCH (IGARCH) model is similar to the standard GARCH model, with positive and negative random errors having a symmetric effect on variance. The difference from the GARCH model is that, in the IGARCH model, the sum of the coefficients α_i and β_j is equal to one:

$$\begin{aligned}\sigma_t^2 &= \omega + \sum_{i=1}^p \alpha_i \varepsilon_{t-i}^2 + \sum_{j=1}^q \beta_j \sigma_{t-j}^2 \\ \sum_{i=1}^p \alpha_i + \sum_{j=1}^q \beta_j &= 1\end{aligned}$$

²⁰⁴ Heteroskedasticity is a condition in which the variance of a sequence of random variables varies over time rather than remaining constant across the time series.

Where,

$$\omega > 0, \alpha_i \geq 0, \beta_j \geq 0$$

ε_{t-i} – random errors in the previous i periods;

σ_{t-j}^2 – conditional variances in the previous j periods;

The GJR-GARCH (Glosten, Jagannathan and Runkle GARCH) model is an asymmetric GARCH model in which negative random errors have a greater effect on conditional variance than positive random errors. The conditional variance of the GJR-GARCH(p, q) model is expressed as follows:

$$\sigma_t^2 = \omega + \sum_{i=1}^p (\alpha_i + \gamma_i I_{t-i}) \varepsilon_{t-i}^2 + \sum_{j=1}^q \beta_j \sigma_{t-j}^2$$

$$I_{t-i} = \begin{cases} 1, & \text{if } \varepsilon_{t-i} < 0 \\ 0, & \text{if } \varepsilon_{t-i} \geq 0 \end{cases}$$

Where,

$$\omega > 0, \alpha_i \geq 0, \beta_j \geq 0$$

ε_{t-i} – random errors in the previous i periods;

σ_{t-j}^2 – conditional variances in the previous j periods;

The Exponential GARCH (EGARCH) model is one of the widely used asymmetric GARCH models and models conditional variance in logarithmic form. The EGARCH(p, q) model is expressed as follows:

$$\ln(\sigma_t^2) = \omega + \sum_{i=1}^p \left(\frac{\alpha_i \varepsilon_{t-i} + \gamma_i |\varepsilon_{t-i}|}{\sigma_{t-i}} \right) + \sum_{j=1}^q \beta_j \log(\sigma_{t-j}^2)$$

Where,

ε_{t-i} – random errors in the previous i periods;

σ_{t-j}^2 – conditional variances in the previous j periods;

By substituting ε_t using the equation $\varepsilon_t = z_t \sigma_t$ given above, the EGARCH(p, q) model can be written as follows:

$$\ln(\sigma_t^2) = \omega + \sum_{i=1}^p (\alpha_i z_{t-i} + \gamma_i |z_{t-i}|) + \sum_{j=1}^q \beta_j \log(\sigma_{t-j}^2)$$

Here, no restrictions are imposed on α_i and β_j , and γ is required to be positive. The effect of a positive random error on the logarithm of conditional variance is expressed as $(\alpha_i + \gamma_i)$, while the effect of a negative random error is expressed as $(\alpha_i - \gamma_i)$.

The Power GARCH (PGARCH) model is an asymmetric GARCH model that models conditional variance in the form of its δ -th power. The conditional variance of the PGARCH(p, q) model is expressed as follows:

$$\sigma_t^\delta = \omega + \sum_{i=1}^p (\alpha_i |\varepsilon_{t-i}| + \gamma_i \varepsilon_{t-i})^\delta + \sum_{j=1}^q \beta_j \sigma_{t-j}^\delta$$

Where,

$\omega > 0, \alpha_i \geq 0, -1 < \gamma_i < 1, \beta_j \geq 0, \delta > 0$;

ε_{t-i} – random errors in the previous i periods;

σ_{t-i} – conditional variances in the previous j periods.

All combinations of the above-mentioned ARMA-GARCH models are estimated using the maximum likelihood²⁰⁵ function. The form of the maximum likelihood function depends on the parametric structure of the GARCH models.

EVT is a key tool for analyzing rare events. Many parametric approaches use a normal distribution approximation when modeling time series data. However, the drawback of modeling extreme values in financial data using this approach is that the normal distribution underestimates the probability of extreme events. Unlike traditional modeling approaches, this approach focuses on modeling only extreme values rather than the entire distribution. Thus, the EVT approach seeks to address the above-mentioned problems by modeling the extreme values of the data series.

In EVT, large losses are defined as observations exceeding a certain threshold. If $X = \{x_1, x_2, \dots, x_T\}$ is a sequence of independent and identically distributed observations with distribution function F , where u is the selected threshold value, and y denotes the values exceeding the selected threshold, the conditional distribution function is defined as follows:

$$F_u(y) = p(X - u \leq y | X > u) = \frac{F(y + u) - F(u)}{1 - F(u)}$$

Where, $x - u = y$ and $y > 0$.

If the threshold is sufficiently high, the conditional distribution function $F_u(y)$ converges to the Generalized Pareto Distribution (GPD), namely $F_u(y) \approx G_{\xi, \eta}(y)$. The GPD is determined as follows:

²⁰⁵ Maximum likelihood estimation is a method for estimating model parameters by maximizing the likelihood function constructed from the observed data.

$$G_{\xi,\eta}(y) = \begin{cases} 1 - \left(1 + \frac{\xi y}{\eta}\right)^{-\frac{1}{\xi}}, & \xi \neq 0 \\ 1 - \exp\left(-\frac{y}{\eta}\right), & \xi = 0 \end{cases}$$

Where,

ξ – shape parameter;

η – scale parameter.

The selection of the threshold value is important in the exceedances over a threshold approach. Therefore, in this study, values between the 85th and 95th percentiles of the loss distribution are considered as thresholds. For each selected threshold, the GPD is fitted separately, and the goodness of fit of the model is evaluated using the Anderson-Darling (AD²⁰⁶) and Cramer-von Mises (CvM) tests. In each case, the statistical significance of the GPD parameters (ξ and η) is also analyzed, and the optimal threshold is selected.

By combining F_u and $G_{\xi,\eta}(y)$, the overall distribution function for $x > u$ is expressed as follows:

$$F(x) = (1 - F(u))G_{\xi,\eta}(y) + F(u) \approx 1 - \frac{k}{T} \left(1 + \frac{\xi(x - u)}{\eta}\right)^{-\frac{1}{\xi}}$$

Where,

k – number of observations exceeding the threshold;

T – total sample size.

GPD parameters are estimated using the maximum likelihood method. For the distribution $F(x)$, the Value at Risk (VaR) at a predetermined confidence level is estimated as follows:

$$VaR_q^{EVT} = u + \frac{\eta}{\xi} \left[\left(\frac{T(1 - q)}{k} \right)^{-\xi} - 1 \right]$$

Where,

u – threshold value;

η – GPD scale parameter;

ξ – GPD shape parameter;

T – total sample size;

q – confidence level;

k – number of observations exceeding the threshold.

²⁰⁶ Nemukula, M., & Sigauke, C. (2020). A Point Process Characterisation of Extreme Temperatures: Application to South African Data. Springer.

The equation above estimates the VaR(95) value for the standardized residuals (z). In the dynamic volatility model, negative volatility values are defined as follows:

$$VaR_{q,t+1} = \mu_{t+1} + \sigma_{t+1}VaR_q^{EVT}$$

Here, μ_{t+1} and σ_{t+1} are the estimated values using the ARMA-GARCH model. The average value of losses (Expected Shortfall, ES) exceeding the estimated VaR_q^{EVT} is evaluated as follows:

$$ES_q^{EVT} = \frac{VaR_q^{EVT}}{1 - \xi} + \frac{\eta - \xi u}{1 - \xi}$$

In the dynamic volatility model, the ES value is expressed as follows:

$$ES_{q,t+1} = \mu_{t+1} + \sigma_{t+1}ES_q^{EVT}$$

Using this final formula, the forecast of the negative logarithmic volatility of the national currency exchange rate at extreme values for period $t + 1$ is estimated.

Changes in bank balance sheets occur under the impact of exchange rate volatility at estimated extreme values. As a result of the depreciation of the DC, banks with FC assets exceeding FC liabilities experience an increase in their long FX positions. Conversely, banks whose FC assets are lower than their FC liabilities experience an increase in their short FX positions.

If the mismatch between banks' assets and liabilities due to the depreciation of the DC exceeds the bank's capital value, the bank is considered to be in default. In the event of a bank default, contagion risk emerges due to interbank interconnectedness. As a result of a defaulting bank's partial or complete inability to meet its obligations, the value of the assets of banks that are creditors of the defaulting bank decreases. This indicates that interbank contagion risk can result in credit losses for creditor banks.

The interbank liabilities matrix is used to identify interbank contagion risk. If there are N banks in the banking system that can lend to or place deposits with one another, the interbank liabilities ($N \times N$) matrix is expressed as follows:

$$X = \begin{bmatrix} 0 & \cdots & x_{1j} & \cdots & x_{1N} \\ \vdots & \ddots & \vdots & \ddots & \vdots \\ x_{i1} & \cdots & 0 & \cdots & x_{iN} \\ \vdots & \ddots & \vdots & \ddots & \vdots \\ x_{Ni} & \cdots & x_{Nj} & \cdots & 0 \end{bmatrix}$$

Where,

x_{ij} – represents the liabilities of bank j to bank i ;

$\sum_j x_{ij}$ – represents the total amounts due to bank i from other banks;

$\sum_i x_{ij}$ – represents the total liabilities of bank j to other banks.

This model was applied to the data, and two types of selections were made during the analysis. In the first stage, the statistical significance of the parameters across the five GARCH models and the goodness of fit of the models to the data were evaluated using Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC). Based on the comparative analysis, the EGARCH model was selected as the best-fitting model for the data.

In the second stage, the optimal threshold for the standardized residuals was determined. The 92nd percentile was selected as the threshold that provides the best fit. For the values exceeding this threshold, the statistical significance of the GPD distribution parameters and the goodness of fit of the GPD model were determined using the AD and CvM tests.

Potential Demand Model

The Potential Demand model for estimating the fundamental price of housing in the real estate market is based on the potential demand that can be generated by the total employed population in the economy. In this case, the purchasing capacity of households is determined by subtracting monthly payment amount on existing outstanding loans of households from total disposable income of households²⁰⁷:

$$PC_t = ADI_t - DB_t$$

Where,

PC – purchasing capacity;

ADI – total disposable income of households;

DB – monthly payment amount on outstanding loans of households;

t – quarters.

Total monthly disposable income of households is calculated by multiplying the average monthly disposable income after taxes and mandatory payments by the number of employed people:

$$ADI_t = DI_t - EP_t$$

Where,

ADI – total monthly disposable income of households;

DI – total disposable income of households;

EP – number of employed people;

t – quarters.

The monthly payment amount on existing loans of households is calculated based on the total outstanding amount of household loans, the weighted average interest rate, and the maturity:

$$DB_t = VL_t * \frac{r_{1,t}(1 + r_{1,t})^{n_{1,t}}}{(1 + r_{1,t})^{n_{1,t}} - 1}$$

Where,

ADI – monthly loan payment amount;

VL – outstanding amount of household loans;

r_1 – weighted average monthly interest rate on outstanding loans extended to households;

n_1 – weighted average monthly maturity of outstanding loans extended to households;

t – quarters.

²⁰⁷ Cesnak, M., Klasco, J., Kupkovič, P., Moravčík, A., Rychtárik, Š., & Vrbovský, R. (2024). Assessing Residential Real Estate prices in Slovakia: Possible Approaches and Indices. NBS Occasional Paper.

The potential demand that may arise in the real estate market is determined based on purchasing capacity of households:

$$D_t = PC_t * \frac{(1 + r_{2,t})^{n_{2,t}} - 1}{r_{2,t}(1 + r_{2,t})^{n_{2,t}}}$$

Where,

D – potential demand;

PC – purchasing capacity;

r_2 – weighted average monthly interest rate on household mortgages;

n_2 – weighted average monthly maturity of household mortgages;

t – quarters.

The fundamental price of housing is calculated using potential demand and the coefficients estimated by the model:

$$FP_t = e^{\alpha * \ln(D_t) + \beta}$$

Where,

FP – fundamental price of housing;

D – potential demand;

α, β – unknown coefficients;

t – quarters.

Based on the historical relationship between housing market prices and potential demand, the unknown coefficients are determined using the Ordinary Least Squares (OLS) model. In this case, the natural logarithmic values of the variables in the model are used to ensure that the model results are statistically significant:

$$\ln(MP_t) = \alpha * \ln(D_t) + \beta$$

Where,

MP – market price of housing;

D – potential demand;

α, β – unknown coefficients;

t – quarters.

According to the main property of the least squares method, the unknown parameters are determined by minimizing the sum of the squared differences between the actual values of the dependent variable and the values estimated by the model²⁰⁸:

²⁰⁸ Gujarati, D.N. (2009). Basic Econometrics Fifth Edition. McGraw-Hill.

$$\begin{aligned}
u_t &= \ln(MP_t) - (\alpha * \ln(D_t) + \beta) \\
\sum u_t^2 &= \sum (\ln(MP_t) - (\alpha * \ln(D_t) + \beta))^2 \\
\sum u_t^2 &= f(\alpha, \beta) \rightarrow \min
\end{aligned}$$

To determine the minimum of the function, partial derivatives are taken with respect to the unknown coefficients α and β and set equal to zero:

$$\text{with respect to } \alpha: \frac{\partial f}{\partial \alpha} = -2 \sum \ln(D_t) * (\ln(MP_t) - \beta - \alpha * \ln(D_t)) = 0$$

$$\text{with respect to } \beta: \frac{\partial f}{\partial \beta} = -2 \sum (\ln(MP_t) - \beta - \alpha * \ln(D_t)) = 0$$

By simplifying the equations, the following system of equations is obtained:

$$\begin{cases}
n\beta + \alpha \sum D_t = \sum MP_t \\
\beta \sum D_t + \alpha \sum D_t^2 = \sum (D_t * MP_t)
\end{cases}$$

$$\beta = \frac{\sum MP_t - \alpha \sum D_t}{n}$$

$$(\overline{MP}_t - \alpha \overline{D}_t) \sum PD_t + \alpha \sum D_t^2 = \sum (D_t * MP_t)$$

$$\alpha = \frac{\sum (D_t * MP_t) - n \overline{MP}_t * \overline{D}_t}{\sum D_t^2 - n \overline{D}_t^2}$$

$$\begin{cases}
\alpha = \frac{\sum ((D_t - \overline{D}_t) * (MP_t - \overline{MP}_t))}{\sum (D_t - \overline{D}_t)^2} \\
\beta = \overline{MP}_t - \alpha * \overline{D}_t
\end{cases}$$

The unknown coefficients are determined based on this system of equations. The fundamental housing price is determined based on potential demand and the unknown coefficients estimated by the model.

The difference between the market price of housing and the fundamental price estimated by the model reflects the extent to which asking prices in the real estate market deviate from fundamental factors. In this context, the key determinants of demand in the real estate market include total employed population, household disposable income, the outstanding amount of loans extended to individuals, as well as mortgage interest rates and maturities.

Table 4. Solvency Top-down Macro Stress Test Tool

Basic parameters	A total of 34 banks, 7 of which are D-SIBs, were taken into account. As of January 1, 2026, the assets of banks included in the macro stress test constituted 100% of the assets of the banking system. All banks must comply with the capital adequacy requirements set by the CBU.
Horizon	3 years (from the end of 2025 to the end of 2028)
Assumptions	Dynamic balance: – The amount of total loans and other bank assets, including securities issued by the Ministry of Finance or CBU, securities of private organizations, claims on other banks, and the CBU, increases based on the scenarios of the annual loan outstanding growth; – Asset composition changes during the stress test period; – Banks form their own capital from retained earnings.
Macroeconomic scenarios	Macroeconomic scenarios do not represent forecasts of the indicators. Instead, high-impact risks (tail risks) that have a very low probability of occurring are designed to construct adverse scenarios and assess the resilience of banks in Uzbekistan. In the baseline scenario, the future state of the economy is projected based on the continuation of current economic trends. The internal and external shocks that have a low probability of materializing in the future but have a high negative impact on the banking system are taken into account in the adverse scenario. In the adverse scenario, the real GDP growth rate is estimated using the GaR model. In this context, the financial cycle index and the lagged value of real GDP are used as factors affecting economic growth. To fully reflect the risks, an additional shock of three SD is applied to the financial cycle index when assessing the real GDP growth rate under the adverse scenario. The loan growth rate under the adverse scenario is determined to be equal to the nominal GDP growth rate, calculated based on the product of the inflation rate and the real GDP growth rate. Loan and deposit interest rates in DC and FC are estimated through models, incorporating the effect of the CBU policy rate. The annual values of macroeconomic indicators for future periods under the scenarios are converted into quarterly values using cubic spline interpolation for use in satellite models.
Regulatory standards	Capital adequacy requirements are set for total regulatory capital, CET1 capital, and Tier 1 capital, while capital buffers and a minimum leverage ratio requirement are established. Banks use a standardized approach²⁰⁹ in calculating RWA for credit risk.

²⁰⁹ Bank for International Settlements. Calculation of RWA for credit risk, standardized approach.

	Assets are classified into five different groups according to their quality, and the following provisions are created for them as determined by the CBU²¹⁰: – 1% for “standard” assets; – 20% for “substandard” assets; – 25% for “non-satisfactory” assets; – 50% for “doubtful” assets; – 100% for “loss” assets.
Methodology	Based on macroeconomic scenarios, the components of the profit and loss module are evaluated. Credit risk. The PD of the loan portfolio denominated in DC and FC is estimated for future periods under the macroeconomic scenario through satellite models. In assessing the PD in DC, its lagged value and scenario-based values of GDP growth and the real lending interest rate in UZS are used. The PD in FC is estimated for future periods using its lagged value, as well as scenario-based values of FX rate and GDP growth. In the baseline and adverse scenarios, the volume of loan losses is calculated by multiplying the outstanding loan balance, PD and loss given default (LGD). The provision coverage shortfall of the loan portfolio is used as the measure of LGD. In this context, the share of net loans in total loans, calculated after deducting the established provisions, is considered as the provision coverage shortfall. Credit risk assessment employs data on the share of NPLs in total loans, determined in accordance with International Financial Reporting Standards 9 (IFRS 9). Market and FX risk. According to current regulations in Uzbekistan, banks are not required to revalue securities in their possession at market prices. Therefore, the book value of securities is reflected at base prices, and changes in market interest rates do not affect the value of securities. However, the current regulation mandates the creation of reserves for securities that do not generate income for a certain period. Thus, the creation of additional reserves for securities of private organizations in the adverse scenario is considered. Furthermore, the macro stress test incorporates the profit or loss arising from the revaluation of assets and liabilities denominated in FC. This assessment is based on the banks’ disclosed currency positions and reflects the impact of fluctuations in the FX rate. NII. The ratio of NII to interest-bearing assets is estimated using satellite models for both DC and FC. The ratio of NII in UZS to interest-bearing assets is estimated for future periods based on its lagged value as well as scenario-based values of loan growth rate, the net interest margin in UZS (the difference between loan and deposit interest rates) and the real GDP growth.

²¹⁰ O‘zbekiston Respublikasi Markaziy banki boshqaruvinin 2021-yil 19-noyabrda “Tijorat banklarida aktivlar sifatini tasniflash va aktivlar bo‘yicha ehtimoliy yo‘qotishlarni qoplash uchun zaxiralar shakllantirish hamda ulardan foydalanish tartibi to‘g‘risidagi nizomga o‘zgartirish va qo‘shimchalar kiritish haqida”gi 27/7–sonli qarori.

	To estimate the projected values of the ratio of NII in FC to interest bearing assets in future periods based on scenarios, the indicator's lagged value, interest rates on loans and deposits in FC as well as FX rate are used. The amount of NII in UZS and FC is determined by multiplying the total interest-bearing assets by the ratio of NII to interest-bearing assets, estimated using satellite models. NNII. The ratio of NNII to total assets is estimated for future periods using a satellite model based on the scenario-based values of GDP growth and the FX rate. The amount of NNII is calculated by multiplying total assets by the ratio of NNII to total assets, as estimated through a satellite model. Operating expenses. Since the ratio of operating expenses to total assets remained almost unchanged in previous periods, the growth of operating expenses for future periods is projected to follow the same growth rate as total assets. The growth rate of total assets is set to be the same as the growth rate of interest-bearing assets, which account for a large share of total assets. Dividends. Dividend payments for future periods are taken into account for banks whose NPAT is positive. The dividend payout ratio from NPAT is determined for each bank based on the dividend payout indicators of previous periods.
Capital requirements	Capital adequacy requirements set by the CBU for commercial banks (% of RWA)²¹¹: – CET1 ratio is 4.5%; – Tier 1 ratio is 6%; – CAR is 8%; – CCoB is 2.5%; – CCyB is 1.5%; – D-SIB buffer is 1%. If the amount of Tier 2 capital exceeds 100% of the amount of Tier 1 capital, the excess amount is not included in the regulatory capital. In addition, provisions for loans of "standard" classification, included in Tier 2 capital, should not exceed 1.25% of RWA. The minimum requirement for the leverage ratio is 3%²¹².
Concentration risk	As an additional shock to the adverse scenario, the impact of the default of the largest borrowers on the banking system's total capital is considered. In this context, the LGD of 50% is assumed for the outstanding loans of defaulted large borrowers.
Asset Price Volatility Risks	The impact of a sharp decline in asset prices on the quality of banks' loan portfolios and total capital is assessed as an additional shock in the adverse scenario. In this context, the level of potential corrections in housing prices in future periods arising from risks in the real estate market is determined using the HaR model. A sudden fall in asset prices lowers the market value of collateral used for securing loans, increasing

²¹¹ O'zbekiston Respublikasi Markaziy banki boshqaruvining 2021-yil 11-yanvardagi "Tijorat banklari kapitalining monandiligiga qo'yiladigan talablar to'g'risidagi nizomga o'zgartirish va qo'shimchalar kiritish haqida"gi 28/22–sonli qarori.

²¹² O'zbekiston Respublikasi Markaziy banki boshqaruvining 2018-yil 31-martdagi "Tijorat banklari kapitalining monandiligiga qo'yiladigan talablar to'g'risidagi nizomga o'zgartirish va qo'shimchalar kiritish haqida"gi 12/21–sonli qarori.

	the probability of loan losses for banks. In this context, the rise in the LTV ratio, caused by the lower market value of properties serving as collateral for mortgages issued by banks, is taken into account. In addition, it is assumed that borrowers may default on loans with an LTV ratio exceeding 120% as a result of the sharp drop in housing prices.
Contagion risk	In the adverse scenario, contagion risk is evaluated using the losses-tied-to-capital and unrecoverable-losses approaches: – In the approach, where losses from bank defaults are tied to capital, the extent of bank's losses from contagion risk is influenced by the defaulting bank's CAR. The lower the failing bank's CAR, the greater the proportional losses incurred by banks that have financial connections with it, such as those that have provided loans to or placed deposits with defaulting bank. – In the approach, where losses from bank defaults are not recoverable, banks face the loss of all their loans to or deposits placed with a bank with a high probability of default, i.e., a bank with the CAR below the required minimum.
Result	Capital adequacy ratios (CET1, Tier 1 and CAR) and the leverage ratio, are the final results of the macro stress testing conducted for the entire banking system as well as for individual banks.

House Price at Risk

The House Price at Risk model is used to assess the extent of corrections in house prices in the event of adverse changes in the real estate market. The HaR²¹³ model is implemented in two stages. In the first stage, the impact of factors affecting house price growth is estimated at various quantiles using a quantile regression model²¹⁴. In the second stage, based on the results of the quantile regression model, a continuous conditional distribution of house price growth for future periods is constructed.

Quantile regression model

The effects of different variables on housing price growth are estimated using a quantile regression model at {10; 25; 50; 75; 90} quantiles:

$$y_t^\tau = \alpha^\tau + \beta^\tau X_{t-h} + \gamma^\tau y_{t-h} + \epsilon_t^\tau$$

Where,

y_t^τ – housing price growth at time t ;

X_{t-h} – growth in outstanding loans to individuals;

y_{t-h} – housing price growth h periods prior;

α^τ – constant term;

β^τ, γ^τ – unknown coefficients;

ϵ_t^τ – residual;

τ – quantile.

The unknown parameters in the quantile regression model are estimated by minimizing the weighted sum of the absolute values of residuals:

$$Q(\beta^\tau) = \sum_{t: \epsilon_t^\tau \geq 0} \tau |\epsilon_t^\tau| + \sum_{t: \epsilon_t^\tau < 0} (1 - \tau) |\epsilon_t^\tau|$$

Where,

$Q(\beta^\tau)$ – objective function;

τ – quantile;

ϵ_t^τ – residual in quarter t .

²¹³ Hafemann, L. (2023). Technical Paper. A house prices at risk approach for the German residential real estate market. Deutsche Bundesbank.

²¹⁴ Quantile regression model methodology is presented in Financial Stability Report for 2024.

The linear programming type of the optimization model in mathematical programming is used to determine the unknown parameters at the minimum value of the objective function ($Q(\beta^r) \rightarrow \min$). In this case, the optimal values of the unknown parameters are determined using the simplex method²¹⁵ through linear programming²¹⁶.

Conditional continuous distribution of future housing price growth

The conditional continuous distribution of housing price growth is created in the next stage after housing price growth in subsequent periods is estimated at various quantiles using the quantile regression model. The distribution of housing price growth in future periods is derived by fitting the Azzalini and Capitanio multivariate skew-t distribution²¹⁷ to the predicted values obtained from the quantile regression model.

The multivariate skew-t distribution is characterized by the parameters of mean, SD, skewness, and degrees of freedom²¹⁸:

$$f(y, \mu, \sigma, \alpha, n) = \frac{2}{\sigma} t\left(\frac{y - \mu}{\sigma}; n\right) T\left(\alpha \frac{y - \mu}{\sigma} \sqrt{\frac{n + 1}{n + \left(\frac{y - \mu}{\sigma}\right)^2}}; n + 1\right)$$

Where,

y – housing price growth;

α – skewness;

n – degrees of freedom;

σ – SD;

μ – mean;

$t(\cdot)$ – probability density function;

$T(\cdot)$ – probability distribution function.

The multivariate skew-t distribution is generated using the Student-t distribution²¹⁹ with a mean of zero and one SD. In this case, the skew-t distribution has an asymmetric form, and its probability density function²²⁰ is expressed as follows:

²¹⁵ The simplex method is one of the main methods for solving linear programming problems, in which the optimal values of the variables that result in the objective function reaching its maximum or minimum value are determined by moving step-by-step toward optimality.

²¹⁶ Nelder, J.A. & Mead, R. (1965). Simplex method for function minimization. Oxford University Press: The Computer Journal.

²¹⁷ The skew-t distribution is a type of asymmetric distribution characterized by the parameters of mean, SD, skewness, and degrees of freedom, and is derived using the Student-t distribution with a mean of zero and an SD of one.

²¹⁸ Azzalini, A., & Capitanio, A. (2002). Distributions generated by perturbation of symmetry with emphasis on a multivariate skew t-distribution. University of Padua.

²¹⁹ Student-t distribution is a type of symmetric distribution used to estimate the mean when the SD of a random variable is unknown. As the sample size increases, this distribution converges toward the normal distribution.

²²⁰ The condition for a probability density function: $\int_{-\infty}^{\infty} f(x) d(x) = 1$.

$$f(y, \alpha, n) = \frac{2}{\sigma} t(y; n) T\left(\alpha y \sqrt{\frac{n+1}{n+y^2}}; n+1\right)$$

Where,

y – housing price growth;

α – skewness;

n – degrees of freedom;

$t(\cdot)$ – probability density function;

$T(\cdot)$ – distribution function.

The optimal estimate of the unknown parameters is obtained by minimizing the sum of the squared distance between the inverse distribution function of the multivariate skew-t distribution and the estimated housing price growth at the 10th, 25th, 50th, 75th, and 90th quantiles:

$$\{\hat{\mu}, \hat{\sigma}, \hat{\alpha}, \hat{n}\} = \underset{\tau}{argmin} \sum \left(\hat{Q}_{y_t|x_{t-h}}(\tau|x_{t-h}) - F^{-1}(\mu, \sigma, \alpha, n) \right)^2$$

Where,

$\hat{Q}_{y_{t+h}|x_t}(\tau|x_t)$ – housing price growth estimated through the quantile regression model;

$F^{-1}(\mu, \sigma, \alpha, n)$ – the inverse distribution function of the skew-t distribution.

The inverse distribution function of the skew-t distribution is determined using the Cornish-Fisher expansion²²¹. In this case, the moment-based estimation of the Cornish-Fisher expansion has the following form:

$$\begin{aligned} F^{-1} \approx & z_{\tau} + \frac{1}{6}(z_{\tau}^2 - 1)E(X^3) + \frac{1}{24}(z_{\tau}^3 - 3z_{\tau})E(X^4) - \frac{1}{36}(2z_{\tau}^3 - 5z_{\tau})E(X^3)^2 + \dots \\ & + \frac{1}{288}(14z_{\tau}^5 - 103z_{\tau}^3 + 107z_{\tau})E(X^3)^2E(X^4) \\ & - \frac{1}{7776}(252z_{\tau}^5 - 1688z_{\tau}^3 + 1511z_{\tau})E(X^3)^4 + \dots \end{aligned}$$

Where,

F^{-1} – the inverse distribution function of the skew-t distribution;

z_{τ} – the inverse distribution function of the standard normal distribution;

$E(X^n)$ – moments of order n .

The approximate inverse distribution function of the skew-t distribution derived from the Cornish-Fisher expansion is applied in the minimization problem, and the unknown parameters of the skew-t distribution are determined. The one- or five-percent probability value of the fitted skew-t distribution is taken as the result of the HaR model.

²²¹ Amedee-Manesme, C., & Barthélemy, F. (2012). Cornish-Fisher Expansion for Real Estate Value at Risk. CergyPontoise University.

Table 5. Liquidity Stress Test Tool

Basic parameters	A total of 34 commercial banks, 7 of which are D-SIBs, were taken into account. As of January 1, 2026, the assets of banks included in the liquidity stress test constituted 100% of the assets of the banking system. The starting period for the liquidity stress test is January 1, 2026.
Horizon	1 year (from January 1, 2026 to January 1, 2027)
Assumptions	In the liquidity stress test, banks' resilience to liquidity risk is assessed based on the projected cash flows under the scenarios. Over the time horizons considered in the liquidity stress test, situations where expected cash inflows fall short of corresponding cash outflows are considered indication of the potential materialization of liquidity risks within banks.
Scenarios	In the liquidity stress test, cash flow indicators are analyzed at both banking system and individual bank levels under the baseline and adverse scenarios. In the baseline scenario, factors for calculating the expected cash inflows and outflows for banks are determined in line with the recommendations of the Basel Committee. When determining the coefficients for expected cash inflows, the quality of bank assets and their liquidity levels are taken into account. The factors for calculating expected cash outflows, in turn, are established taking into account the characteristics of banks' liabilities. Under the adverse scenario, higher expected cash outflows and lower cash inflows relative to the baseline scenario, driven by external and internal shocks, are taken into account. In particular, the assessment incorporates lower cash inflows from loans and treasury bonds, alongside higher cash outflows associated with deposits. The emergence of credit losses resulting from an increase in the PD on loans under the adverse scenario of the solvency macro stress test is integrated into the liquidity stress test. As credit losses increase under the adverse scenario, cash inflows from the repayment of loans extended by banks decline. Moreover, under the adverse scenario, geopolitical developments, instability in trade tariffs, and global inflationary pressures contribute to a decline in the market prices of securities. In particular, amid heightened uncertainty in international financial markets, investors prefer to invest in relatively safer assets. This reduces demand for Uzbekistan's sovereign eurobonds denominated in FC, leading to a decline in their market prices relative to their nominal value. Under the adverse scenario, a decrease in the market prices of treasury bonds denominated in DC and FC reduces cash inflows from treasury bonds in banks' assets. The market price decline of treasury bonds is estimated using the historical observation approach. Furthermore, under the adverse scenario of the liquidity stress test, the withdrawal of unguaranteed deposits is assumed to occur in response to potential changes in depositor behavior arising from the implementation of the guaranteed-deposit threshold, an increase in credit losses, a deterioration in solvency, and a weakening of banks' financial performance. In particular, the full withdrawal of unguaranteed deposits

	by individuals, as well as by legal entities other than the government and state-owned enterprises, under the adverse scenario increases banks' cash outflows. When calculating the overall cash outflow factor for deposits of individuals, the deposit portfolio of individuals is divided into guaranteed and unguaranteed components. In this calculation, the cash outflow factor applied to guaranteed deposits of individuals is retained at the level specified for the baseline scenario in the Basel recommendations, while full withdrawal of unguaranteed deposits is assumed. When estimating the potential cash outflow factor for legal entity deposits under the adverse scenario, the deposit portfolio of legal entities is divided into guaranteed deposits, deposits of the government and state-owned enterprises, and other unguaranteed deposits. The cash outflow factors for guaranteed deposits and deposits of the government and state-owned enterprises are maintained at the levels specified for the baseline scenario in the Basel recommendations. For unguaranteed deposits of legal entities other than the government and state-owned enterprises, full withdrawal is assumed.
Liquidity	Across the relevant time horizons, banks' expected cash inflows should not fall below their cash outflows in in total currency, DC and FC. In particular, to prevent liquidity problems arising from maturity mismatches, the cumulative expected net cash inflows across time buckets must remain positive at all times.
Cash flow	To continuously monitor the expected liquidity of banks, liquidity stress tests may be conducted every 30 days. In the liquidity stress test, banks' expected net cash inflow is evaluated based on scenarios. The difference between expected cash inflows and outflows over various time horizons represents the expected net cash inflow. Possible liquidity risk in banks is analyzed by aggregating the expected net cash inflows across different maturities. In the analysis of cash inflows, bank assets, including cash and other cash items, funds held with CBU excluding mandatory reserves, securities and investments in securities, loans and leasing provided to customers, as well as other assets, are classified by maturity. Expected cash inflows by maturity are determined by multiplying the volume of bank assets by the scenario-specific factors (representing expected cash inflow rates by asset type). In the analysis of cash outflows, bank liabilities are distributed by maturity, including deposits, amounts due to the CBU and other banks, liabilities for loans and leases, and other on-balance and off-balance sheet obligations. Expected cash outflows by maturity are determined by multiplying the volumes of various on-balance and off-balance sheet obligations by the scenario-specific factors (representing expected cash outflow rates by liability type).
Advantages	In the liquidity stress test, unlike the LCR and NSFR ratios, cash flow indicators are analyzed over time intervals of non-maturing, 1 to 7 days, 7 to 30 days, 30 to 90 days, 90 to 180 days, and 180 to 365 days. This, in turn, allows for the identification of the timing of potential liquidity pressures in banks.

FX risk	As an additional shock to the adverse scenario, the impact of currency depreciation on expected cash flows has been assessed. In this context, the shock to the FX rate under the adverse scenario of the solvency macro stress test has been integrated into the liquidity stress test.
Deposit concentration risk	The impact of the largest depositor's withdrawal of funds on banks' liquidity was assessed by applying an additional shock under the adverse scenario. In this context, the assumption of funds being withdrawn by the largest depositor in each bank's deposit portfolio, in both DC and FC, was incorporated into the assessment.
Result	The net cash flow indicators (difference between cash inflows and outflows) are the final results of the liquidity stress test conducted for the banking system as well as for individual banks. In addition, to assess the impact of banks with liquidity problem on the banking system, the share of assets in the total banking system assets is evaluated for banks with negative net cash inflows by currencies.

Table 6. Cash Flow

Cash flow indicators	Baseline scenario	Adverse scenario
I. Cash inflow indicators		
1. Cash and other cash items	100	100
2. Bank's funds in the CBU (excluding mandatory reserve)	100	100
3. Amounts due from banks and other financial institutions (up to 181 days)	100	100
4. Amounts due from banks and other financial institutions (over 181 days)	50	50
5. Government and CBU securities in DC	100	85
6. Government and CBU securities in FC	100	80
7. Securities of low-risk countries	85	85
8. Securities issued by IMF, WB, ADB, AIIB, EBRD, EIB, EIF, IDB, CEB	100	100
9. Securities of leading corporates in low-risk countries	50	50
10. Securities of mortgage refinancing organizations	75	65
11. Other securities	100	100
12. Customers' obligations under letters of credit and trust arrangements, net	100	100
13. Customers' obligations under unpaid bank acceptances, net	100	100
14. Loans and leases to the CBU, net (up to 181 days)	100	100
15. Loans and leases to the CBU, net (over 181 days)	50	50
16. Loans and leases to other banks, net (up to 181 days)	100	100
17. Loans and leases to other banks, net (over 181 days)	50	50
18. Loans and leases extended to customers, net (up to one year)	50	50
19. Loans and leases extended to customers, net (from one year to two years)	50	45
20. Loans and leases extended to customers, net (over two years)	50	35
21. Securities purchased under REPO transactions	100	100
22. Unrealized gain on revaluation of derivative instruments (without maturity)	0	0
23. Unrealized gain on revaluation of derivative instruments (term)	100	100
24. FX trading and currency positions	100	100
25. Other assets (without maturity)	0	0
26. Other assets (term)	100	100
27. Collateralized HQLA	100	100
II. Cash outflow indicators		
1. Households demand deposits	5	40
2. Households deposits pledged as collateral for loans (up to 181 days)	100	100
3. Households deposits pledged as collateral for loans (over 181 days)	50	50
4. Other deposits pledged as collateral for loans (up to 181 days)	100	100
5. Other deposits pledged as collateral for loans (over 181 days)	50	50
6. Demand deposits of legal entities	40	70
7. Term deposits of legal entities	40	70
8. Household term deposits	5	40
9. Households funds on bank plastic cards	5	40
10. Legal entities' funds on bank plastic cards	40	70
11. Customer deposits under letters of credit	-5	-40
12. Other deposits of legal entities	40	70
13. Amounts due to the CBU	40	40
14. Other amounts due to the CBU (payment and clearing systems)	25	25

Cash flow indicators	Baseline scenario	Adverse scenario
15. Amounts due to other banks' correspondent accounts (up to 181 days)	100	100
16. Amounts due to other banks' correspondent accounts (over 181 days)	50	50
17. Accounts of other banks – Deposits (up to 181 days)	100	100
18. Accounts of other banks – Deposits (over 181 days)	50	50
19. Funds due to banks for payments made from bank cards (up to 181 days)	100	100
20. Funds due to banks for payments made from bank cards (over 181 days)	50	50
21. Other items (up to 181 days)	100	100
22. Other items (over 181 days)	50	50
23. Outstanding bank acceptances (up to 181 days)	100	100
24. Outstanding bank acceptances (over 181 days)	50	50
25. Obligations for loans and leases (up to 181 days)	5	5
26. Obligations for loans and leases (over 181 days)	2.5	2.5
27. Securities issued by the bank (up to 181 days)	100	100
28. Securities issued by the bank (over 181 days)	50	50
29. Subordinated debt obligations (up to 181 days)	100	100
30. Subordinated debt obligations (over 181 days)	50	50
31. High quality liquid securities sold under REPO transactions	100	100
32. Other securities sold under REPO transactions (up to 181 days)	100	100
33. Other securities sold under REPO transactions (over 181 days)	50	50
34. Unrealized losses and other deferred income from revaluation of derivative instruments (up to 181 days)	100	100
35. Unrealized losses and other deferred income from revaluation of derivative instruments (over 181 days)	50	50
36. Clearing transactions (up to 181 days)	100	100
37. Clearing transactions (over 181 days)	50	50
38. Other obligations (without maturity)	0	0
39. Other obligations (from 1 day to 181 days)	100	100
40. Other obligations (over 181 days)	50	50
41. Off-balance sheet liabilities	5	20

Table 7. Financial Stability Measures in Uzbekistan as of January 1, 2026

Direction	Tool	Applicable norm	
		Banks (excluding microfinance banks)	Microfinance banks
Liquidity	Share of HQLA in total assets	10%	5%
	Instant liquidity ratio	25%	
	LCR	100%	
	NSFR	100%	
Capital adequacy	CAR	8%	13%
	Tier 1 ratio	6%	10%
	CET1 ratio	4,5%	8%
	CCoB	2,5%	
	CCyB	1,5%	
	D-SIB surcharge	1%	
Leverage and risk appetite	RWA	Based on the annual interest rate and other indicators	
	Leverage ratio	3%	
	Concentration limit	25% for car loans 25% for microdebts 25% for overdrafts and credit cards	
Dollarization	Ban on issuing FC loans to individuals	Ban on issuing FC loans to individuals	
	Differentiated reserve requirements	4% for the DC 8,5% for the FC	
	LCR in FC	100%	
	NSFR in FC	100%	
Debt burden	DSTI	50%	
	Daily limit of interest payments on a loan or microdebt in relation to the principal outstanding	0,25%	
	LTV	75% for car loans 80% and 85% for mortgages	
Concentration risk	Bank's maximum exposure limit for one borrower or a group of interconnected borrowers	25% of the Tier 1 capital	UZS 5 billion
	The maximum amount of unsecured credit risk of a bank attributable to a single borrower or group of related borrowers	5% of the Tier 1 capital	
	A limit on the total amount of all major risks of the bank	Up to 5 times the Tier 1 capital	
	A limit on the maximum amount of risk per affiliated person	15% of the Tier 1 capital	UZS 5 billion
	Maximum exposure limit for all affiliated persons	25% of the Tier 1 capital	

Source: CBU.

Table 8. Capital Buffers as of January 1, 2026, % of RWA

Country	CCoB	CCyB	SyRB	D-SIB Surcharge
Albania	2.5	0.5	0	0.5–1
Armenia	2.5	1.75	0	1.5
Australia	2.5	1	0	1
Austria	2.5	0	1	0.45–1.75
Belgium	2.5	1	6	0.75–1.5
Bulgaria	2.5	2	3	0.5–1
Canada	2.5	0	0	1
Chile	2.5	0.5	0	1–1.75
Croatia	2.5	1.5	1.5	0.25–2.25
Cyprus	2.5	1	0	0.5–2.25
Czechia	2.5	1.25	0.5	0.5–2.5
Denmark	2.5	2.5	7	1–3
Estonia	2.5	1.5	0	0.5–2
Finland	2.5	0	1	0.5–2.5
France	2.5	1	0	0.25–1.5
Georgia	2.5	0.5	0	0.5–3
Germany	2.5	0.75	1	0.25–2
Greece	2.5	0.25	0	1–1.25
Hong Kong	2.5	0.5	0	1–2.5
Hungary	2.5	1	1	0.5–2
Iceland	2.5	2.5	2	3
Ireland	2.5	1.5	0	0.5–1.5
Italy	2.5	0	1	0.25–1.5
Latvia	2.5	1	0	1.25–2
Liechtenstein	2.5	0	1	2
Lithuania	2.5	1	2	1–2
Luxembourg	2.5	0.5	0	0.5–1
Malaysia	2.5	0	0	0.5–1
Malta	2.5	0	1.5	0.5–2
Moldova	2.5	0	1	0.5–1.5
Montenegro	2.5	1	1.5	2
Netherlands	2.5	2	0	0.25–2
New Zealand	3.5	0	0	2
North Macedonia	2.5	1.75	0	1–3.5
Norway	2.5	2.5	4.5	1–2
Poland	2.5	1	0	0.25–2
Portugal	2.5	0.75	4	0.25–1
Romania	2.5	1	0–2	0.5–2.5
Saudi Arabia	2.5	0	0	0.5–2.5
Singapore	2.5	0	0	2
Slovakia	2.5	1.5	0	0.25–2
Slovenia	2.5	1	0.5	0.25–1.25
South Korea	2.5	1	0	1
Spain	2.5	0.5	0	0.25–1.25
Sweden	2.5	2	3	1
United Kingdom	2.5	2	0	1–2

Sources: National authorities and the European Systemic Risk Board.

Table 9. Actual and Announced CCyB Rates, % of RWA

Country	Buffer rate as of January 1, 2026	Announced buffer rate in the upcoming period
Albania	0.5	
Armenia	1.75	
Australia	1	
Austria	0	
Belgium	1	01.07.2026: 1.25
Bulgaria	2	
Chile	0.5	
Cyprus	1	14.01.2026: 1.5
Croatia	1.5	01.01.2027: 2
Czechia	1.25	
Denmark	2.5	
Estonia	1.5	
Finland	0	
France	1	
Georgia	0.5	15.03.2026: 0.75 15.03.2027: 1
Germany	0.75	
Greece	0.25	01.10.2026: 0.5
Hong Kong	0.5	
Hungary	1	
Iceland	2.5	
Ireland	1.5	
Italy	0	
Latvia	1	
Liechtenstein	0	
Lithuania	1	
Luxembourg	0.5	
Malaysia	0	
Malta	0	
Moldova	0	30.01.2026: 0.5 13.05.2026: 1.5
Montenegro	1	
Netherlands	2	
New Zealand	0	
North Macedonia	1.75	01.10.2026: 2
Norway	2.5	
Poland	1	30.09.2026: 2
Portugal	0.75	
Romania	1	
Saudi Arabia	0	25.05.2026: 1
Singapore	0	
Slovakia	1.5	
Slovenia	1	
South Korea	1	
Spain	0.5	01.10.2026: 1
Sweden	2	
Switzerland	0	
United Kingdom	2	

Sources: National authorities.

Glossary

Asset fire sale

The forced sale of assets by their owner at a discounted price to meet creditors' claims.

Capital buffers

Additional capital requirements established on top of minimum regulatory capital requirements to strengthen banks' resilience to various shocks.

Capital conservation buffer (CCoB)

An additional capital buffer imposed on top of minimum capital adequacy requirements to ensure that banks maintain sufficient high-quality capital to absorb losses. The buffer is set as a percentage of a bank's total risk-weighted assets and must be met with capital elements that qualify as CET1 capital.

Common Equity Tier 1 capital (CET1)

The highest-quality form of regulatory bank capital, consisting of capital elements capable of absorbing losses and supporting banks' solvency and financial resilience.

Countercyclical capital buffer (CCyB)

A capital buffer accumulated by banks to strengthen the resilience of the banking system during periods of stress following an increase in cyclical systemic risks. It helps maintain the provision of credit to the economy and mitigate losses during the downswing of the financial cycle. It also helps moderate excessive credit growth during the upswing of the financial cycle.

Cyclical systemic risk

Refers to the procyclical nature of financial risk, whereby financial and non-financial economic agents tend to increase risk-taking during the boom phase of the financial cycle and become overly risk-averse during the bust phase. Procyclicality can manifest through credit and liquidity cycles, excessive leverage, and maturity mismatches.

Debt-service-to-income ratio (DSTI)

A measure of a borrower's total debt-service payments relative to total disposable income. A DSTI limit is a macroprudential instrument aimed at strengthening borrowers' resilience by limiting debt-service obligations relative to income.

Debt-to-income ratio (DTI)

A measure of a borrower's total debt relative to income, used to limit the amount of debt that can be taken on relative to income.

Deleveraging

The process by which banks reduce their indebtedness or leverage.

Domestic systemically important bank (D-SIB)

A bank whose size, complexity, or interconnectedness means that its failure could cause significant disruptions to the banking system and economic activity.

D-SIB surcharge

An additional capital requirement imposed on domestic systemically important banks to strengthen their resilience to potential shocks and losses.

Financial cycle

Economic fluctuations that originate in, or are amplified by, the financial system. The financial cycle is typically reflected in the joint movements of credit aggregates and asset prices, which may also affect developments in the real economy.

Financial stability

The ability of the financial system, including financial institutions and market infrastructures, to withstand potential shocks while continuing to perform its financial intermediation functions and providing financial services without major disruptions.

Guided discretion

An approach to macroprudential policy decision-making under which the activation, deactivation, or calibration of macroprudential instruments is not determined solely by rigid rules, allowing the central bank to incorporate qualitative factors and informed expert judgement.

Insurance density

An indicator of the development of the insurance market in terms of insurance premiums per capita. It is calculated as total insurance premiums divided by the population.

Insurance penetration

An indicator of the size of the insurance sector relative to the economy. It is calculated as total insurance premiums as a share of nominal GDP.

Leverage ratio

A measure of the extent to which a bank's total assets are funded by capital. Unlike CAR, the leverage ratio does not take risk-weighted assets into account and provides a simple constraint on excessive growth in assets relative to capital.

Liquidity coverage ratio (LCR)

A liquidity requirement designed to strengthen banks' resilience to short-term liquidity shocks. It is calculated as the ratio of high-quality liquid assets to total net cash outflows over the following 30 days.

Loan-to-value ratio (LTV)

A measure of the ratio of a loan amount to the value of the asset pledged as collateral for the loan. Limiting the maximum loan amount relative to collateral value helps reduce credit risk.

Loss given default (LGD)

The financial loss incurred by a bank when a borrower is unable or unwilling to repay its debt. It represents the portion of the nominal value of a loan or collateral that remains unrecovered following a default.

Macro stress test

A set of tools used to assess the resilience of the financial system to severe but plausible macroeconomic scenarios and systemic risk factors, and to determine whether the system has sufficient capital and liquid assets to maintain stability under stress.

Macroprudential policy (MPP)

A set of actions aimed at strengthening financial system stability by limiting systemic risks, mitigating their adverse effects, and building buffers that support the stable functioning of the economy. Macroprudential policy has a system-wide scope and uses instruments primarily aimed at addressing sources of systemic risk.

Macroprudential policy tools

Instruments and constraints designed to achieve the intermediate and ultimate objectives of macroprudential policy.

Net stable funding ratio (NSFR)

A measure designed to promote stable funding over a longer-term horizon by requiring banks to finance longer-term assets with sufficiently stable liabilities, thereby limiting maturity mismatches.

Positive neutral countercyclical capital buffer (pnCCyB)

A macroprudential instrument that requires banks to maintain a pnCCyB when systemic risk is not elevated. The buffer is set during the standard-risk phase of the financial cycle to strengthen the resilience of the banking system to potential systemic risks.

Probability of default (PD)

The likelihood that a borrower will fail to repay a loan. The probability of default is used by banks to assess potential credit losses.

Regulatory arbitrage

The practice whereby financial market participants shift or initiate activities in less-regulated market segments to circumvent regulatory constraints and obtain relative advantages.

Risk profile

An assessment of an entity's exposure to and attitude towards risk, reflecting its risk appetite, capacity to absorb losses, and objectives.

Risk-weighted asset (RWA) density

A measure of the share of a bank's RWAs in its total assets.

Structural systemic risk

Systemic risk arising from the distribution of risks across the financial system, interconnections among financial institutions, and common exposures.

Systemic risk

The risk of widespread disruption to the provision of financial services arising from the failure or impairment of the financial system or a significant part of it, which could have serious adverse consequences for the real economy.

Systemic risk buffer (SyRB)

A macroprudential instrument used to address systemic risks that are not adequately covered by other macroprudential instruments, such as the countercyclical capital buffer or D-SIB capital buffers.

Too-big-to-fail institution

A systemically important institution whose failure could cause significant instability in the financial system and disrupt the broader economy.

Transmission channels of macroprudential policy

Channels through which macroprudential policy decisions affect financial sector resilience and the credit cycle. These include price, quantity, resilience, and expectations channels.

Contributing Authors

Author	Position	Department
Mr. Uchkun Djumanazarov	Director	Financial Stability
Mr. Shokhrukh Makhmudov	Head of Unit	Financial Stability
Ms. Zukhra Sadullaeva	Senior Economist	Financial Stability
Mr. Jamshid Abdukholov	Senior Economist	Financial Stability
Mr. Nurzod Yusupov	Lead Economist	Financial Stability
Mr. Sardor Urolov	Lead Economist	Financial Stability
Mr. Sanjar Abduganiev	Lead Economist	Financial Stability
Mr. Diyor Muminov	Lead Economist	Financial Stability
Mr. Adkham Nematov	Economist	Financial Stability

