



Strategic Priorities for Ensuring Commercial Bank Liquidity: A Business Intelligence and Data Analytics Approach to the Banking System of Uzbekistan

Azizjon Kholmatov^{1,*}

¹ Independent researcher at Tashkent International University, Tashkent, Uzbekistan

Email: azizjonkholmatov80@gmail.com

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ABSTRACT

This study identifies strategic priorities for ensuring the liquidity of commercial banks in Uzbekistan through a business data analytics framework that combines regulatory liquidity indicators with a structural analysis of bank funding. Using aggregate data published by the Central Bank of Uzbekistan and the International Monetary Fund for 2020–2025, the paper develops a descriptive, diagnostic, and scenario-based analytics pipeline comprising ratio analysis, a logarithmic decomposition of the loan-to-deposit ratio, a currency-specific funding-gap measure, a deposit run-off sensitivity test, and constant-growth scenarios. The results show that short-term buffers are ample: at the end of 2025 the liquidity coverage ratio stood at 207.5 percent, the net stable funding ratio at 119.9 percent, and high-quality liquid assets at 21 percent of total assets, enough to cover 1.96 times the outflows of a severe run-off scenario. The structural position is weaker. Loans still exceed deposits by 186.7 trillion soums, about 80 percent of this gap is denominated in foreign currency, and the gap is concentrated in state-owned banks. Scenario arithmetic indicates that the loan-to-deposit ratio declines only marginally unless deposit growth exceeds credit growth by a sustained margin. Seven priorities follow, ranging from stable deposit mobilisation and currency-matched funding to the risk-sensitive calibration of liquidity requirements, market and safety-net infrastructure, and bank-level liquidity analytics. The study shows how business intelligence built on publicly reported data can support evidence-based liquidity decisions by bank managers and supervisors.

Keywords: Business intelligence ▪ Business data analytics ▪ Bank liquidity ▪ Liquidity coverage ratio ▪ Net stable funding ratio ▪ Loan-to-deposit ratio ▪ Funding structure ▪ Dollarization ▪ Uzbekistan

1. INTRODUCTION

Liquidity is the capacity of a bank to fund increases in assets and to meet its obligations as they fall due without incurring unacceptable losses [1]. Because banks transform short-term, redeemable liabilities into longer-term and less liquid assets, they remain exposed to runs even when they are solvent [2]. The global financial crisis of 2007–2009 and the banking turmoil of March 2023 demonstrated that liquidity pressure can

materialise within days, faster than capital-based safeguards are able to respond [3], [4]. Ensuring liquidity is therefore not only an operational task of bank treasuries but also a strategic question of how a bank, and a banking system, chooses to fund itself.

The question is especially relevant for Uzbekistan, whose banking system has been transformed since 2017 by exchange-rate unification, new laws on the central bank and on banking, and the banking sector reform strategy for

2020–2025 [5]. Between the end of 2020 and the end of 2025 total bank assets grew from 366.1 trillion to 924.8 trillion soums, and deposits increased 3.6-fold [6]. Headline regulatory indicators are comfortable: the Central Bank of Uzbekistan (CBU) reports a liquidity coverage ratio (LCR) of 208 percent and a net stable funding ratio (NSFR) of 120 percent at the beginning of 2026, both well above the 100 percent minimum [6]. At the same time, the first Financial Sector Assessment Program (FSAP) for the country noted the high reliance of banks on non-deposit funding, the dominant position of nine state-owned commercial banks (SOCBs), and the need for liquidity requirements to reflect risks arising from external and foreign-currency funding [7].

This contrast motivates the present study. Compliance with minimum ratios is not equivalent to durable liquidity, since system-wide ratios may conceal mismatches in the maturity, currency, and institutional distribution of funding. The paper therefore addresses three questions:

1. How did the short-term liquidity buffers and the funding structure of commercial banks in Uzbekistan evolve between 2020 and 2025?
2. Where are the remaining structural liquidity vulnerabilities concentrated, by currency and by group of banks?
3. Which strategic priorities follow for banks and for the regulator, and over what horizon should they be pursued?

The study contributes in four ways. First, it combines regulatory ratios with structural funding indicators in a single diagnostic. Second, it quantifies the currency composition of the gap between loans and deposits and decomposes the change in the loan-to-deposit ratio. Third, it proposes two transparent scenario tools, a buffer coverage ratio and a convergence path for the loan-to-deposit ratio, which can be replicated from published data. Fourth, it translates the evidence into seven priorities that are aligned with the supervisory roadmap of the CBU for 2025–2028 [8]. The remainder of the paper reviews the literature, describes the data and methods, reports the results, discusses the priorities, and concludes.

2. LITERATURE REVIEW

The theoretical foundations of bank liquidity rest on the view of banks as providers of liquidity insurance. Diamond and Dybvig show that maturity transformation creates value and, simultaneously, the possibility of self-fulfilling runs [2]. Diamond and Rajan argue that this fragility disciplines bankers and is therefore inherent in liquidity creation [9], whereas Kashyap, Rajan, and Stein explain why deposit-taking and lending commitments are combined in one institution that shares a common buffer of liquid assets [10]. Holmström and Tirole establish the role of public liquidity supply when private supply is insufficient [11]. Subsequent work distinguishes funding liquidity from market liquidity and describes how the two reinforce each other under stress [12], how liquidity shocks propagate through interbank claims [13], and why illiquidity has several dimensions that a single metric cannot capture [14]. Drehmann and Nikolaou define funding liquidity risk as the possibility that a bank becomes unable to settle obligations with immediacy and propose measuring it from central bank auction bids [15].

Empirical research confirms that the structure of funding matters at least as much as the stock of liquid assets. Berger and Bouwman measure liquidity creation on and off the balance sheet and show that it is concentrated in large banks [16]. During the 2007–2009 crisis, banks that relied on core deposits and equity continued to lend, while those dependent on wholesale funding cut credit and hoarded liquid assets [17]. Vazquez and Federico find that banks with weaker structural liquidity and higher leverage before the crisis were more likely to fail [18]. Abundant liquidity is not costless either: Acharya and Naqvi demonstrate that large deposit inflows can weaken lending standards and sow the seeds of later crises [19].

The regulatory response consisted of the principles for sound liquidity risk management [1] and two quantitative standards under Basel III, the LCR [20] and the NSFR [21]. Evidence on their effects is mixed but informative. Liquidity regulation substitutes for the incentives of banks to hold buffers and makes holdings less dependent on bank-specific characteristics [22]; banks subject to tighter requirements raised high-quality liquid assets and stable funding without reducing lending to the real economy [23]; and many banks managed structural liquidity towards internal targets before any rule required it [24]. However, the LCR and the NSFR have limited power to predict individual bank failures, which depend strongly on systemic liquidity conditions [25], and compliance carries costs for net interest margins [26]. Liquidity and capital decisions interact [27], and liquidity requirements also alter the implementation of monetary policy [28]. The 2023 turmoil added two lessons: uninsured and concentrated deposits can leave at unprecedented speed [4], [3], and the value of a deposit franchise depends on the interest-rate environment [29].

For partially dollarized economies, an additional strand of research is relevant. Deposit dollarization is associated with greater financial fragility [30], in part because the central bank cannot act as an unlimited lender of last resort in foreign currency [31]. Liquidity in domestic and in foreign currency must therefore be assessed separately.

Research on Uzbekistan has largely focused on compliance with prudential ratios and on asset and liability management in individual banks. Sattorova reviews liquidity-risk strategies, regulatory approaches, and practical tools used by commercial banks in Uzbekistan [32]. The assessments of the IMF and the CBU provide stress-test evidence and regulatory recommendations [7], [6]. What remains less developed is an analysis that connects the currency composition of the funding gap, the heterogeneity of bank groups, and forward-looking scenarios with a sequenced set of priorities. The present paper addresses this gap.

3. RESEARCH METHODS

3.1 Data

The analysis uses annual aggregate data for the commercial banking sector of Uzbekistan from the end of 2020 to the end of 2025, where each observation refers to 1 January of the following year. Total assets, loans, deposits, high-quality liquid assets (HQLA), and the maturity and currency structure of deposits and loans are taken from the statistical bulletins

and financial stability reports of the CBU [6], including the consolidated bank balance [33]. The LCR and NSFR series combine the financial soundness indicators reported by the IMF for 2019–2024 [7] with the CBU figure for 2025. Indicators by group of banks refer to the end of 2024 and are taken from the FSAP [7]. Regulatory parameters follow the liquidity regulation of the CBU [34] and its summary in [7]. Because the unit of observation is the banking system, the results describe aggregate conditions and do not support inference about individual banks.

3.2 Indicators

Short-term resilience and structural funding are measured by the two Basel III standards [20], [21]:

$$\text{LCR} = \frac{\text{HQLA}}{\text{NCO}_{30}} \geq 1, \quad \text{NSFR} = \frac{\text{ASF}}{\text{RSF}} \geq 1 \quad (1)$$

where NCO30 denotes total net cash outflows over a 30-day stress period, and ASF and RSF are the available and required amounts of stable funding. These ratios are complemented by the loan-to-deposit ratio (LDR) and the funding gap:

$$\text{LDR}_t = \frac{L_t}{D_t}, \quad G_t = L_t - D_t \quad (2)$$

where L_t and D_t are outstanding loans and deposits. Both indicators are also computed separately for the national and the foreign currency, using the loans and deposits denominated in each. The change in the ratio between two dates is decomposed exactly into the contributions of credit and deposit growth:

$$\Delta \ln \text{LDR}_t = \Delta \ln L_t - \Delta \ln D_t \quad (3)$$

3.3 Scenario tools

To relate the stock of liquid assets to potential deposit outflows, a buffer coverage ratio is defined as

$$C = \frac{(1-h)H_t}{\alpha D_t^d + \beta D_t^s} \quad (4)$$

where H_t is the stock of HQLA, h is a haircut on its liquidation value, D_t^d and D_t^s are demand deposits and time and savings deposits, and α and β are the corresponding 30-day run-off rates. Four scenarios of increasing severity are applied (Table 4). The mild scenario is of the same order as the 3–10

percent run-off rates that the LCR standard assigns to retail deposits [20], and the others are progressively more severe. The measure is deliberately simple. It ignores cash inflows, wholesale and off-balance-sheet outflows, and the distribution across banks, and it cannot replace supervisory stress tests; its purpose is to make the direction and the drivers of change visible.

The medium-term dynamics of structural funding are examined with constant-growth paths. If loans and deposits grow at annual rates g_L and g_D , then after n years

$$\text{LDR}_{t+n} = \text{LDR}_t \left(\frac{1+g_L}{1+g_D} \right)^n \quad (5)$$

and the deposit growth rate required to reach a target ratio LDR^* within n years is

$$g_D^* = (1+g_L) \left(\frac{\text{LDR}_t}{\text{LDR}^*} \right)^{1/n} - 1 \quad (6)$$

3.4 Derivation of priorities

The diagnostic results are mapped against the Basel principles [1], the recommendations of the FSAP [7], and the supervisory roadmap of the CBU [8]. A priority is retained when the evidence indicates a material vulnerability, an instrument is available to address it, and the measure is consistent with international standards. The priorities are then ordered by the horizon over which they can realistically be implemented.

4. RESULTS

4.1 Short-term liquidity buffers

Table 1 summarises the main indicators. Throughout the period the banking system held liquid buffers well above the regulatory floor. The LCR never fell below 164.8 percent and the NSFR never below 109.9 percent, against minima of 100 percent that apply in national and in foreign currency, a floor of 10 percent for the ratio of HQLA to total assets, and an instant liquidity ratio of at least 25 percent [7], [34].

Figure 1 shows that the path was not monotonic. In 2023 loans grew by 20.9 percent while deposits increased by only 11.5 percent, the share of HQLA in assets fell from 19.4 to 14.9 percent, and the LCR lost almost 47 percentage points in a single year. The subsequent recovery was driven by deposits. In 2025 HQLA expanded by 42 percent, mainly

Table 1. Liquidity and funding indicators of the banking system, end of year

Indicator	2020	2021	2022	2023	2024	2025
Assets, trn UZS	366.1	444.9	556.7	652.2	769.3	924.8
Loans, trn UZS	277.0	326.4	390.0	471.4	533.1	604.0
Deposits, trn UZS	114.7	156.2	216.7	241.7	308.7	417.3
HQLA / assets, %	14.2	17.7	19.4	14.9	17.3	21.1
LCR, %	224.5	189.6	211.6	164.8	193.8	207.5
NSFR, %	109.9	115.4	115.6	111.8	115.3	119.9
Demand deposits, %	46.9	44.3	46.5	36.4	34.0	30.9
LDR, %	241.4	209.0	180.0	195.0	172.7	144.8
Funding gap, trn UZS	162.2	170.2	173.3	229.7	224.4	186.7
Gap / assets, %	44.3	38.3	31.1	35.2	29.2	20.2



Figure 1. Liquidity coverage ratio and net stable funding ratio of the banking system, 2019–2025 (percent). Source: IMF [7] and CBU [6].

through claims on the CBU (27 percent) and holdings of treasury bonds (81 percent) [6]. The improvement is not evenly distributed: the LCR of domestic systemically important banks (D-SIBs) was 182 percent, below the system-wide figure, while their NSFR equalled 120 percent [6].

4.2 Funding structure

Structural funding improved substantially but from a weak starting point (Figure 2). Over five years assets grew at a compound annual rate of 20.4 percent, loans at 16.9 percent, and deposits at 29.5 percent. The LDR accordingly fell from 241.4 to 144.8 percent. According to the decomposition in equation (3), the logarithm of the ratio declined by 0.51: credit growth added 0.78, and deposit growth subtracted 1.29. The funding gap peaked at 229.7 trillion soums in 2023 and narrowed to 186.7 trillion in 2025, or from 44.3 to 20.2 percent of assets.

The composition of deposits also became more stable. The share of demand deposits declined from 46.9 to 30.9 percent, and deposits with a maturity of more than one year reached 156.7 trillion soums, or 37.6 percent of the total [6]. Nevertheless, deposits still account for only 53 percent of bank liabilities, less than in the other countries of the Caucasus and Central Asia [6]. The episode of 2023, when one year of weak deposit growth raised the LDR by 15 percentage points, shows that the improvement is reversible.

4.3 Currency composition of the funding gap

Aggregation across currencies hides the most persistent imbalance. As reported in Table 2 and Figure 3, the LDR in national currency converged rapidly towards balance, from 212.5 to 111.3 percent, whereas the ratio in foreign currency remained close to 270 percent and exceeded 290 percent in

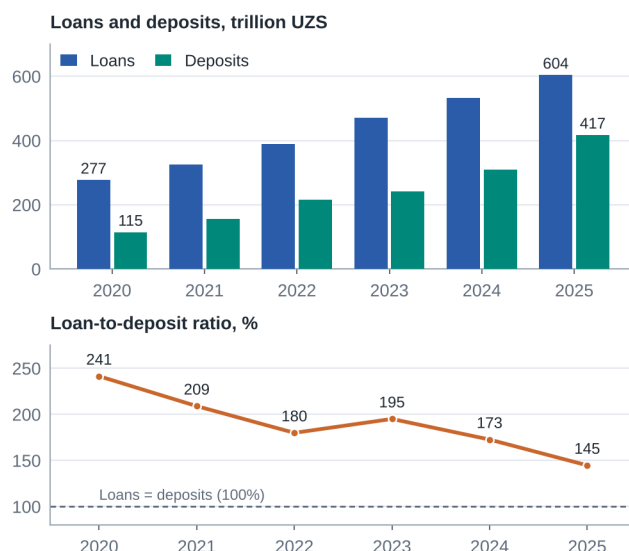


Figure 2. Loans, deposits, and the loan-to-deposit ratio of the banking system, 2020–2025. Source: author's calculations based on CBU data [6], [33].

2023 and 2024. The de-dollarization of deposits, from 43.1 to 20.9 percent, outpaced that of loans, from 49.9 to 39.2 percent. As a result, the foreign-currency gap widened from 88.8 to 149.6 trillion soums, and its share in the total gap rose from 54.7 to 80.1 percent.

Foreign-currency lending is thus funded largely by non-deposit resources, above all external borrowing. Bank liabilities to non-residents amounted to 13 percent of GDP at the end of 2025, and net foreign assets were negative at 178.3 trillion soums [6]. Two qualifications apply. First, a significant part of this funding is long-term and provided by international financial institutions, and the cash-flow stress test of the FSAP found a larger surplus in foreign than in national currency [7]. The exposure is therefore one of refinancing and repricing rather than of an immediate run. Second, conditions are changing. External financing costs rose in early 2026, with the 12-month EURIBOR about 0.5 percentage points higher in April than at the start of the year; foreign-currency deposits grew by 21 percent in dollar terms in 2025; and the CBU notes that the liberalization of capital movements makes it more likely that depositors redirect funds to foreign assets [6].

4.4 Heterogeneity across groups of banks

The structural gap is concentrated in state-owned banks. Table 3 shows that at the end of 2024 SOCBs held about two-

Table 2. Currency composition of loans, deposits, and the funding gap

Indicator	2020	2021	2022	2023	2024	2025
FX loans, %	49.9	49.8	47.5	45.0	42.9	39.2
FX deposits, %	43.1	38.8	39.2	29.9	25.1	20.9
LDR in UZS, %	212.5	171.4	155.4	153.0	131.7	111.3
LDR in FX, %	279.5	268.2	218.1	293.6	295.2	271.5
Gap in UZS, trn UZS	73.5	68.3	73.0	89.9	73.2	37.2
Gap in FX, trn UZS	88.8	101.9	100.3	139.9	151.2	149.6
FX share of gap, %	54.7	59.9	57.9	60.9	67.4	80.1

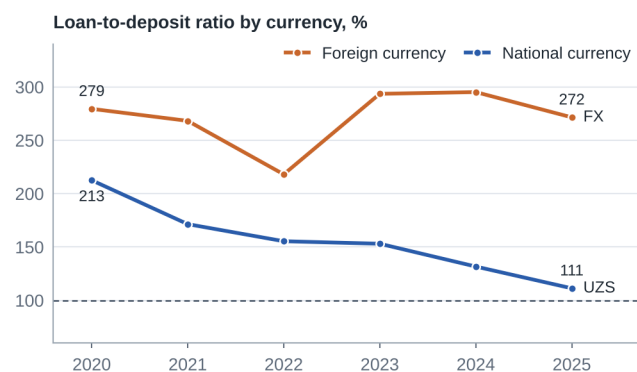


Figure 3. Loan-to-deposit ratio in national and in foreign currency, 2020–2025 (percent). Source: author's calculations based on CBU data [6], [33].

Table 3. Funding and liquidity indicators by group of banks, end of 2024 (percent)

Indicator	System	SOCBs	Private	Foreign
Share of system assets	100.0	65.5	23.5	11.1
Loans to deposits	172.7	237.2	101.0	126.6
Liquid assets / total assets	18.7	14.3	25.9	28.8
Liquid assets / short-term liabilities	42.6	35.1	52.1	59.5
Non-deposit borrowing / liabilities	43.3	53.2	18.0	32.8
FX loans / total loans	42.9	48.3	33.1	26.7
Preferential loans / total loans	29.5	38.4	3.1	20.2
Return on assets	1.4	0.1	5.1	1.3

thirds of system assets, lent 2.4 soums for every soum of deposits, and obtained more than half of their liabilities from non-deposit borrowing. Their liquid assets covered 35.1 percent of short-term liabilities, compared with 52.1 percent in domestic private banks and 59.5 percent in foreign-owned banks. The pattern persisted in 2025, when the LDR of banks with a state share was 190.2 percent against 97.5 percent in other banks [6].

This distribution reflects the business model of SOCBs, which finance long-term and partly directed lending with long-term, largely external, borrowing. Directed and preferential lending still represented 24 percent of total bank lending at the end of 2024, down from 39 percent in 2020 [7]. Private banks are close to balance, but the FSAP identified high depositor concentration in several of them as their principal liquidity vulnerability [7].

4.5 Buffer coverage under deposit run-off

Table 4 reports the coverage ratio of equation (4). At the end of 2025 the haircut-adjusted buffer covered the outflows of the severe scenario 1.96 times and those of the extreme scenario, in which almost one-third of all deposits leave within a month, 1.11 times. In 2020 and 2023 the extreme scenario would not have been fully covered.

The source of the improvement is instructive. HQLA were equivalent to 44.0 percent of all deposits in 2020 and to 45.3

Table 4. Buffer coverage ratio under deposit run-off scenarios

Scenario	Run-off rates (α, β, h)	Outflow (trn UZS)	Coverage C 2020 / 2023 2025
Mild	10 / 5 / 5	27.3	5.69 / 5.59 / 6.58
Moderate	20 / 10 / 10	54.6	2.70 / 2.65 / 3.12
Severe	30 / 15 / 15	81.9	1.70 / 1.67 / 1.96
Extreme	50 / 25 / 20	136.5	0.96 / 0.94 / 1.11

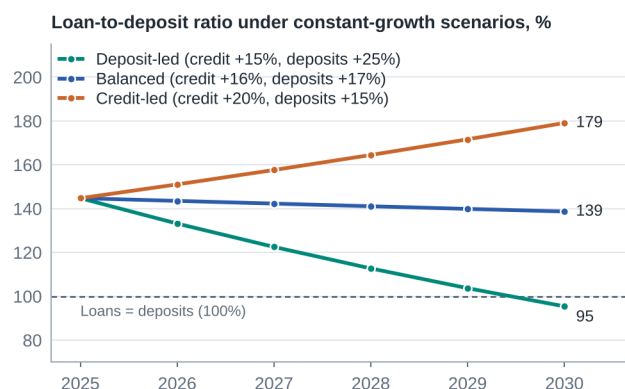


Figure 4. Loan-to-deposit ratio under constant-growth scenarios, 2025–2030 (percent). Source: author's calculations.

percent in 2025, which is practically unchanged, whereas their ratio to demand deposits rose from 93.8 to 146.7 percent. Higher coverage therefore stems mainly from the shift towards time deposits rather than from larger buffers relative to the deposit base. It is consequently only as robust as the behavioural stability of those deposits, which contractual maturity may overstate where early withdrawal is possible. The results are consistent with official stress tests: the CBU finds positive net cash inflows under its adverse scenario [6], and the FSAP finds positive cumulative cash-flow gaps for the system, with small shortfalls in several banks, the largest equal to 3.0 percent of assets [7].

4.6 Convergence scenarios

Figure 4 applies equation (5) to three combinations of credit and deposit growth. If deposits grow ten percentage points faster than credit, the LDR reaches balance by 2030. If the two growth rates are nearly equal, as in the balanced scenario, the ratio declines by only about six percentage points in five years, and it rises to 179.1 percent if credit growth again outpaces deposits.

equation (6) gives the corresponding requirement. With credit growth of 16 percent, deposits must grow by 18.5 percent per year to bring the LDR to 130 percent within five years, by 20.4 percent to reach 120 percent, and by 24.9 percent to reach balance. In static terms, a ratio of 130 percent at the current loan volume would require additional deposits of 47.4 trillion soums. These magnitudes should be compared with the macroeconomic outlook. The IMF's 2025 Article IV consultation projects credit to the economy to grow by 16.0 percent in 2026 and 14.0 percent in 2027, and broad money by 16.3 and 16.1 percent [35], which is close to the balanced scenario. The margins of 14.6 and 21.9 percentage points by which deposit growth exceeded credit growth in 2024 and

2025 were achieved under tight monetary conditions, with the policy rate at 14 percent since March 2025 and positive real interest rates supporting saving [36]. They cannot simply be extrapolated.

5. DISCUSSION: STRATEGIC PRIORITIES

Taken together, the results describe a banking system that is liquid in the regulatory sense but structurally short of stable, currency-matched funding. This combination is consistent with the finding that funding structure, rather than the level of liquid assets alone, determines resilience [18], [17], and with the limited information content of headline ratios [25]. Table 5 translates the evidence into seven strategic priorities, which are discussed below.

Stable deposit mobilisation. The first priority is to continue replacing borrowed funds with stable deposits. Equation (6) shows that this requires deposit growth to exceed credit growth by several percentage points every year, so the objective should be embedded in bank strategies as an explicit target band for the LDR that is differentiated by business model. Instruments include long-term savings products, deposit certificates, and bank bonds in national currency. Confidence in the new deposit insurance regime, which replaced the blanket guarantee in 2025 and extended coverage to legal entities [7], is a precondition, because depositors who consider themselves unprotected are the first to leave under stress.

Currency-matched funding. Since about 80 percent of the funding gap is in foreign currency, liquidity management must be conducted by significant currency. Banks should set internal limits on the foreign-currency gap and fund foreign-currency loans with resources of the same currency and of equal or longer tenor, while diversifying external creditors and maturities. The regulator already requires the LCR and the NSFR to be met in each currency [7]; publishing these ratios by currency would strengthen market discipline. The FSAP recommendation to refine both ratios so that they capture risks from external and foreign-currency funding [7] is directly supported by the evidence in Section 4.3, as is the literature on the limits of the lender of last resort in dollarized systems [31].

Risk-sensitive calibration. From 1 January 2026 the components of the LCR and the NSFR are to be fully aligned with Basel III [8]. The next step is to calibrate requirements to the risk profile and systemic importance of each bank, as the FSAP proposes [7], for example through Pillar 2 liquidity add-ons for banks with concentrated or volatile funding. Calibration should not aim at maximising buffers. Liquid assets carry an opportunity cost for margins [26], excess liquidity may encourage risk-taking [19], and the profitability of the system remains moderate, with a return on assets of 2.2 percent in 2025 [6].

Depositor concentration and run dynamics. Section 4.5 showed that higher coverage rests on the assumed stability of time deposits.

Supervisory stress tests should therefore include the withdrawal of the largest depositors, as foreseen in the roadmap [8], and banks should adopt internal concentration limits and behavioural models of deposit retention. The experience of 2023 indicates that concentrated and uninsured deposits can leave within hours through digital channels [3], [4].

Market and safety-net infrastructure. Liquid assets protect a bank only if they can be converted into cash. As HQLA are increasingly held in treasury bonds, the depth of the government securities and repo markets becomes part of the liquidity framework; the FSAP stress test already applied a 10 percent haircut to these bonds [7]. Completing the emergency liquidity assistance framework adopted in December 2024, including its collateral rules, and introducing early-warning and prompt corrective action mechanisms [7], [8] would give banks and the CBU a predictable backstop, in line with the role of public liquidity supply [11]. The IMF also links stronger system-wide liquidity management to better monetary transmission [35].

Bank-level governance and analytics. The 2023 episode shows how quickly ratios can deteriorate when credit growth is not coordinated with funding. Banks should operate an internal liquidity adequacy assessment alongside the capital assessment that the roadmap makes mandatory for systemically important banks [8], charge the cost of liquidity to business lines through funds transfer pricing, and maintain tested contingency funding plans [1]. The indicators used in this paper, namely currency-specific ratios, the coverage ratio, and the required deposit growth rate, can be computed daily from internal data and embedded in treasury dashboards with predefined triggers.

Reducing the structural role of the state. Because the gap is concentrated in SOCBs, liquidity policy cannot be separated from the reform of state banks. Directed lending should either be funded with resources of matching maturity and currency or be phased out, and its volume and performance should be disclosed, as recommended by the FSAP and reiterated in the 2025 Article IV consultation [7], [35]. Privatisation and the commercial transformation of the remaining SOCBs would align their funding models with those of private banks, whose loans are almost fully covered by deposits.

In terms of sequencing, measures that depend mainly on information and governance (priorities 2, 4, and 6) can be implemented in the short term. Priorities that require the development of markets or regulation (1, 3, and 5) correspond to the horizon of the roadmap to 2028, while the seventh priority is a long-term structural reform.

The study has limitations. It relies on aggregate annual data, so differences among individual banks and movements within the year are not observed. The scenarios are stylised and exclude inflows, wholesale funding, and off-balance-sheet commitments, and the liquidity ratios by currency are not published at the system level. Future research should use bank-level panel data to model deposit behaviour and to test the determinants of liquidity buffers econometrically.

Table 5. Strategic priorities for ensuring commercial bank liquidity in Uzbekistan

Priority	Evidence, instruments, actors, and horizon
1. Stable deposit mobilisation and closure of the funding gap	Diagnostic evidence: LDR of 144.8%; gap of 186.7 trn UZS; deposits equal to 53% of liabilities Principal instruments: Long-term savings products, deposit certificates, and bank bonds in UZS; LDR bands by business model; operational deposit insurance Lead actors: Banks, CBU, DGA Horizon: Medium term
2. Currency-matched funding	Diagnostic evidence: LDR in FX of 271.5%; 80% of the gap in FX; non-resident liabilities equal to 13% of GDP Principal instruments: Liquidity ratios and gap limits by significant currency; same-currency and same-tenor funding; diversification of creditors; hedging instruments Lead actors: Banks, CBU Horizon: Short to medium term
3. Risk-sensitive calibration of liquidity requirements	Diagnostic evidence: Uniform minima of 100%; LCR of D-SIBs at 182% against 208% for the system Principal instruments: LCR and NSFR components aligned with Basel III; Pillar 2 liquidity add-ons; proportionality Lead actors: CBU Horizon: Medium term
4. Depositor concentration and run dynamics	Diagnostic evidence: Concentration flagged by the IMF in several banks; coverage gains driven by deposit mix Principal instruments: Concentration scenario in macro stress tests; internal limits on the largest depositors; behavioural deposit models Lead actors: CBU, banks Horizon: Short term
5. Market and safety-net infrastructure	Diagnostic evidence: HQLA increasingly held in treasury bonds (+81% in 2025); emergency liquidity arrangements still being completed Principal instruments: Repo and interbank markets; collateral framework; emergency liquidity procedures; early-warning and prompt corrective action Lead actors: CBU, MoEF Horizon: Medium term
6. Bank-level governance and liquidity analytics	Diagnostic evidence: LCR fell by 47 percentage points in 2023 within one year Principal instruments: Internal liquidity adequacy assessment; funds transfer pricing; contingency funding plans; dashboards with triggers Lead actors: Banks Horizon: Short term
7. Reduction of the structural role of the state	Diagnostic evidence: LDR of SOCBs at 237.2% (end of 2024); directed lending equal to 24% of loans Principal instruments: Privatisation; matched funding or phase-out of directed lending; transparency of policy lending Lead actors: MoEF, SOCBs Horizon: Long term

6. CONCLUSION

Commercial banks in Uzbekistan entered 2026 with strong short-term liquidity. The LCR and the NSFR are well above their minima, HQLA amount to about one-fifth of assets, and the aggregate buffer covers even severe deposit run-off scenarios. This position is the result of five years in which deposits grew considerably faster than loans and their maturity structure lengthened.

The structural position is less secure. Loans exceed deposits by 186.7 trillion soums, four-fifths of this gap is in foreign currency, and it is concentrated in state-owned banks that depend on borrowed funds. Scenario analysis shows that further convergence requires deposit growth to exceed credit growth persistently, which the current macroeconomic outlook does not guarantee.

Ensuring liquidity is therefore a matter of funding strategy rather than of holding ever larger buffers. The seven priorities identified in this paper, namely stable deposit mobilisation, currency-matched funding, risk-sensitive calibration of requirements, attention to depositor concentration, market and safety-net infrastructure, bank-level governance and analytics, and a smaller structural role of the state, form a coherent agenda for banks and for the regulator. Their implementation would convert the present cyclical strength into lasting resilience.

REFERENCES

- [1] Basel Committee on Banking Supervision, "Principles for sound liquidity risk management and supervision," Bank for International Settlements, Basel, Sep. 2008.

- [2] D. W. Diamond and P. H. Dybvig, "Bank runs, deposit insurance, and liquidity," *Journal of Political Economy*, vol. 91, no. 3, pp. 401–419, 1983.
- [3] Basel Committee on Banking Supervision, "Report on the 2023 banking turmoil," Bank for International Settlements, Basel, Oct. 2023.
- [4] E. X. Jiang, G. Matvos, T. Piskorski, and A. Seru, "Monetary tightening and U.S. bank fragility in 2023: Mark-to-market losses and uninsured depositor runs?" *Journal of Financial Economics*, vol. 159, p. 103899, 2024.
- [5] President of the Republic of Uzbekistan, "On the strategy for reforming the banking system of the Republic of Uzbekistan for 2020–2025," Decree No. UP-5992, Tashkent, May 12, 2020.
- [6] Central Bank of the Republic of Uzbekistan, "Financial Stability Report for 2025," Tashkent, Jul. 2026.
- [7] International Monetary Fund, "Republic of Uzbekistan: Financial Sector Assessment Program—Financial system stability assessment," IMF Country Report No. 25/145, Washington, DC, Jun. 2025.
- [8] Central Bank of the Republic of Uzbekistan, "Roadmap aimed at further improving the bank regulation and supervision system in 2025–2028," Tashkent, Nov. 2025.
- [9] D. W. Diamond and R. G. Rajan, "Liquidity risk, liquidity creation, and financial fragility: A theory of banking," *Journal of Political Economy*, vol. 109, no. 2, pp. 287–327, 2001.
- [10] A. K. Kashyap, R. Rajan, and J. C. Stein, "Banks as liquidity providers: An explanation for the coexistence of lending and deposit-taking," *The Journal of Finance*, vol. 57, no. 1, pp. 33–73, 2002.
- [11] B. Holmström and J. Tirole, "Private and public supply of liquidity," *Journal of Political Economy*, vol. 106, no. 1, pp. 1–40, 1998.
- [12] M. K. Brunnermeier and L. H. Pedersen, "Market liquidity and funding liquidity," *The Review of Financial Studies*, vol. 22, no. 6, pp. 2201–2238, 2009.
- [13] F. Allen and D. Gale, "Financial contagion," *Journal of Political Economy*, vol. 108, no. 1, pp. 1–33, 2000.
- [14] J. Tirole, "Illiquidity and all its friends," *Journal of Economic Literature*, vol. 49, no. 2, pp. 287–325, 2011.
- [15] M. Drehmann and K. Nikolaou, "Funding liquidity risk: Definition and measurement," *Journal of Banking & Finance*, vol. 37, no. 7, pp. 2173–2182, 2013.
- [16] A. N. Berger and C. H. S. Bouwman, "Bank liquidity creation," *The Review of Financial Studies*, vol. 22, no. 9, pp. 3779–3837, 2009.
- [17] M. M. Cornett, J. J. McNutt, P. E. Strahan, and H. Tehranian, "Liquidity risk management and credit supply in the financial crisis," *Journal of Financial Economics*, vol. 101, no. 2, pp. 297–312, 2011.
- [18] F. Vazquez and P. Federico, "Bank funding structures and risk: Evidence from the global financial crisis," *Journal of Banking & Finance*, vol. 61, pp. 1–14, 2015.
- [19] V. Acharya and H. Naqvi, "The seeds of a crisis: A theory of bank liquidity and risk taking over the business cycle," *Journal of Financial Economics*, vol. 106, no. 2, pp. 349–366, 2012.
- [20] Basel Committee on Banking Supervision, "Basel III: The liquidity coverage ratio and liquidity risk monitoring tools," Bank for International Settlements, Basel, Jan. 2013.
- [21] Basel Committee on Banking Supervision, "Basel III: The net stable funding ratio," Bank for International Settlements, Basel, Oct. 2014.
- [22] C. Bonner, I. van Lelyveld, and R. Zymek, "Banks' liquidity buffers and the role of liquidity regulation," *Journal of Financial Services Research*, vol. 48, no. 3, pp. 215–234, 2015.
- [23] R. N. Banerjee and H. Mio, "The impact of liquidity regulation on banks," *Journal of Financial Intermediation*, vol. 35, pp. 30–44, 2018.
- [24] R. DeYoung and K. Y. Jang, "Do banks actively manage their liquidity?" *Journal of Banking & Finance*, vol. 66, pp. 143–161, 2016.
- [25] H. Hong, J.-Z. Huang, and D. Wu, "The information content of Basel III liquidity risk measures," *Journal of Financial Stability*, vol. 15, pp. 91–111, 2014.
- [26] M. R. King, "The Basel III net stable funding ratio and bank net interest margins," *Journal of Banking & Finance*, vol. 37, no. 11, pp. 4144–4156, 2013.
- [27] I. Distinguin, C. Roulet, and A. Tarazi, "Bank regulatory capital and liquidity: Evidence from US and European publicly traded banks," *Journal of Banking & Finance*, vol. 37, no. 9, pp. 3295–3317, 2013.
- [28] M. Bech and T. Keister, "Liquidity regulation and the implementation of monetary policy," *Journal of Monetary Economics*, vol. 92, pp. 64–77, 2017.
- [29] I. Drechsler, A. Savov, and P. Schnabl, "The deposits channel of monetary policy," *The Quarterly Journal of Economics*, vol. 132, no. 4, pp. 1819–1876, 2017.
- [30] G. De Nicoló, P. Honohan, and A. Ize, "Dollarization of bank deposits: Causes and consequences," *Journal of Banking & Finance*, vol. 29, no. 7, pp. 1697–1727, 2005.
- [31] E. Levy Yeyati, "Financial dollarization: Evaluating the consequences," *Economic Policy*, vol. 21, no. 45, pp. 62–118, 2006.
- [32] N. Sattorova, "Methods of ensuring liquidity of commercial banks in Uzbekistan," *International Multidisciplinary Journal for Research & Development*, vol. 1, no. 5, pp. 55–58, 2025.

-
- [33] Central Bank of the Republic of Uzbekistan, “Information on the main indicators of the banking sector as of December 1, 2025,” Tashkent, Dec. 23, 2025.
 - [34] Central Bank of the Republic of Uzbekistan, “Regulation on the requirements for liquidity management of commercial banks,” registered by the Ministry of Justice under No. 2709, Tashkent (as amended), Aug. 13, 2015.
 - [35] International Monetary Fund, “Republic of Uzbekistan: 2025 Article IV Consultation—Press Release and Staff Report,” IMF Country Report No. 25/143, Washington, DC, Jun. 24, 2025.
 - [36] Central Bank of the Republic of Uzbekistan, “At the meeting on December 11, 2025, the Board decided to keep the policy rate unchanged at 14 percent per annum,” Tashkent, Dec. 11, 2025.