



LIQUIDITY ANALYSIS OF BANKS' BALANCE SHEET ACCORDING TO INTERNATIONAL FINANCIAL REPORTING STANDARDS

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Abstract

The article examines the analysis of the balance sheet liquidity of a commercial bank in accordance with international financial reporting standards in the context of banking system reform. A conclusion was made on the feasibility of carrying out operations in financial markets to solve current problems in the field of financial resource management, the directions for determining the capabilities of the banking sector in order to maintain its stability are substantiated.

Keywords: Banking system, commercial bank, reforms, financial markets, financial service, international financial reporting standards, balance sheet liquidity, solvency, financial condition, financial resource management, resource base, stability, liquid reserve.

Introduction

In the context of economic liberalization, one of the key objectives is to significantly improve the financial stability of commercial banks. It should be noted that the development and reform of the banking system of the Republic of Uzbekistan has significantly strengthened the resource base of commercial banks and significantly improved the quality of their services. Uzbekistan's banking system is characterized by reliability, stable development, and immunity to the negative impacts of external factors. To ensure high rates of growth in capital adequacy and liquidity in the banking system, the development of a methodology for analyzing the financial condition of commercial banks based on numerous analytical ratios is a growing challenge.



In the Republic of Uzbekistan, the main focus for further reform and strengthening the stability of the financial and banking system has been defined as increasing the financial stability and liquidity of banks in accordance with international standards, through further capitalization of commercial banks, attracting private capital, increasing the resource base and asset quality, and improving the banking sector.

Literature analysis of research topics

Issues of commercial bank credit policy, issues of financial analysis of bank activities, analysis of balance sheet liquidity, and solvency have been studied by many foreign and domestic scholars. However, the problems of financial analysis, in particular, issues of balance sheet liquidity and solvency analysis of commercial banks under IFRS, have not been adequately addressed in the domestic economic literature. Furthermore, the direct application of educational, methodological, and scientific works by Russian economists in the domestic banking system is hampered by the specific situation in the Republic of Uzbekistan. Unlike many foreign countries, in our country, the banking activities of commercial banks are strictly regulated by regulations of the Central Bank of the Republic of Uzbekistan, and there are signs of centralized monetary governance.

Research methodology

The research methodology was based on the Laws of the Republic of Uzbekistan, Decrees and Resolutions of the President of the Republic of Uzbekistan, Government Resolutions on money circulation, credit, and banking activities, regulatory materials of the Central Bank of the Republic of Uzbekistan on the regulation of commercial banks, as well as the works of foreign and domestic economists on banking supervision and monetary regulation.

Analysis and results

The liquidity of a commercial bank is defined as its ability to fulfill its payment obligations to clients. To meet its obligations to clients, a bank must constantly maintain a necessary and sufficient level of funds in correspondent accounts, cash

on hand, and readily marketable assets—in other words, it must skillfully manage liquidity. [5]

The overall liquidity of the banking system and the dynamics of savings and loans indicate that relatively tight monetary conditions remain. The dynamics of banking sector liquidity can be seen in Table 1 [6, www.cbu.uz].

Table 1 Liquidity dynamics of the banking sector of the Republic of Uzbekistan

Name of the indicator	01.11.2024 y.	01.11.2025 y.
Highly liquid assets (billion soums)	134809	151738
Ratio of highly liquid assets to total assets,%	17,9	17,9
Liquidity coverage ratio (min. value 100%)	196,2	197,5
Net Stable Funding Ratio (min. 100%)	116,3	116,8
Instant liquidity ratio (min. value 25%)	114,6	121,5

Liquidity trends in the banking sector of Uzbekistan in 2025 indicate a strengthening of the banking system, despite a slight decline in the number of terminals, which is offset by an increase in the number of ATMs with advanced features. The Central Bank continues to implement international standards and privatize state-owned banks.

A bank is considered liquid (solvent) if its cash and other liquid assets, as well as the ability to quickly mobilize funds from other sources, are sufficient to timely increase its debt and financial obligations. At the same time, the bank must have sufficient liquid reserves to meet any financial needs. To improve a bank's liquidity, the following key areas of activity can theoretically be identified:

- Demand loan repayment requirements;
- Expanding passive operations to attract customer funds;
- Not renewing loans with expiring maturity dates;
- Additional issuance of deposit certificates and bonds;
- Money market loans, in particular from the Central Bank of the Republic of Uzbekistan;
- Selling a portion of the primary reserve securities portfolio. It should be noted that, in order to maintain its stability, a bank must have a certain liquidity reserve to meet unforeseen obligations. These include the political and economic situation in the country, the state of the money market, the possibility of refinancing with the Central Bank, the development of the securities market, the



integrity of banking legislation, the bank's equity capital, the reliability of its clientele, etc.

It should be noted that assessing a bank's liquidity is one of the most complex tasks determining its financial stability. The answer to the most important question that arises for virtually all groups of financial information users (bank creditors, internal and external auditors, banks analyzing counterparties, and rating agencies) is whether the bank is able to meet its obligations [2].

Therefore, to most accurately assess a bank's liquidity, it is necessary to conduct a comprehensive analysis of all aspects of the bank's financial condition. Thus, a bank's ability to meet obligations is influenced by the state and changes in the resource base, asset recovery, financial results, the size of the bank's equity, and the extent of the bank's management. A bank's balance sheet liquidity analysis under IFRS involves assessing assets and liabilities to determine the bank's ability to meet its obligations in a timely manner. This is achieved by calculating liquidity ratios, analyzing cash flows, and assessing asset and liability conversion timing, taking into account the specifics of IFRS.

The analysis is conducted using IFRS, which implies specific rules for classifying assets and liabilities, recognizing revenue (IFRS 16), and valuing financial instruments (IFRS 9).

A commercial bank's liquidity is based on continuously maintaining the required balance between its three components—the bank's equity capital, attracted funds, and invested funds—through the operational management of their structural elements. Therefore, in global banking, liquidity is commonly considered as either "stock" or a "flow." Measuring liquidity in terms of stocks involves assessing assets that can be converted into cash. In this case, determining the adequacy of liquid assets requires comparing existing stocks with liquidity requirements. However, this calculation does not take into account liquid assets that can be obtained in credit markets and through income inflows. When liquidity is considered as a cash flow, it takes into account not only the ability to convert less liquid assets into more liquid ones, but also the bank's ability to obtain credit and generate cash from operating activities.

Widely used in international banking practice, liquidity assessments based on the concept of cash "stock" are analyzed using the following liquidity ratios:



K1 - for resources with limited liquidity (funds in demand accounts and term deposits with maturities of up to 6 months);

K2 - for resources with average liquidity (funds in term deposits with maturities from 6 months to 12 months);

K3 - for resources with high liquidity (funds in term deposits with maturities of more than 12 months).

The above mentioned liquidity ratios can be calculated using the formula:

Where: LD– outstanding loans $K_1 = \frac{LD}{AD} \times 100$, f up to 6 months, from 6 months to 1 year, and over 1 year

AD – deposits attracted, respectively, with the specified coefficients.

The value of this ratio should be below one, since at high ratios, banks are not interested in, say, investing in lending and investment operations. Banks typically begin to raise interest rates as liquidity deteriorates. The rising value of liquidity ratios is explained by banks' desire to address liquidity issues through liability management, i.e., by borrowing missing funds on the market, rather than by regrouping assets [3]. Another liquidity indicator based on the concept of "reserve" is the ratio characterizing the share of liquid assets in the bank's liabilities:

$$K_2 = \frac{\text{Availability}}{\text{Amount of deposits}}$$

This indicator is more sophisticated than K1, as it directly indicates the ratio of liquid assets to deposits. A disadvantage of this indicator is that it does not take into account other liquid assets or allow banks to attract funds from other sources. In economic literature, the two concepts of bank balance sheet liquidity and solvency are sometimes confused. The concept of "solvency" is relative, based on the assumption that depositors will not withdraw funds from their accounts simultaneously.

However, the situation in the country may be such that the likelihood of a significant number of claims being met simultaneously becomes real, and banks will inevitably fail. Since failed banks are linked to many others through the interbank market, this will trigger a chain of bankruptcies, which could disrupt money circulation and risk a crisis for the country's monetary system, and



subsequently the economy as a whole. Therefore, to maintain the required level of liquidity, a bank must always anticipate the possibility of a drain on demand deposits, as well as "unreliable" time deposits, etc. A sufficient level of bank liquidity must be ensured through the distribution of assets and liabilities. This is done by compiling tables of all liability accounts and determining what portion of each liability should be allocated to liquid asset items to maintain specific liquidity ratios.

Thus, a commercial bank's balance sheet is considered liquid if its condition allows it to cover its term liabilities through the sale of assets. In other words, the maturity of a liability determines the maturity of an asset, ensuring a balance between the amount and maturity of the asset's cash flow and the amount and maturity of the upcoming payment on the bank's obligations.

A number of factors influence a bank's balance sheet liquidity. First, the structure of its assets. The higher the proportion of first-class liquid assets in total assets, the higher the liquidity of the bank's balance sheet. Second, balance sheet liquidity depends on the degree of risk associated with individual asset transactions. The higher the proportion of high-risk assets on a bank's balance sheet, the lower its liquidity. Third, the creditworthiness of bank borrowers influences the timely repayment of loans and, therefore, the liquidity of the bank's balance sheet: the higher the proportion of high-risk loans in a bank's loan portfolio, the lower its liquidity. Fourth, liquidity also depends on the structure of its balance sheet liabilities. While demand deposits allow depositors to withdraw funds at their convenience, term deposits are held by the bank for a shorter or longer period. An increase in the share of demand deposits and a decrease in the share of term deposits reduces the bank's liquidity. Finally, the reliability and stability of deposits and loans received by the bank from other credit institutions also affects the liquidity of the bank's balance sheet. Their stability is even more important than maintaining the established ratio of the corresponding assets and liabilities by maturity. Based on their stability, a commercial bank's credit potential is classified as highly stable, stable, and unstable.

The most stable assets include: the bank's stable assets, funds deposited for a fixed term, and loans received from other banks. Stable assets are all deposited funds upon presentation to the bank's committees. Unstable assets are deposited funds that appear periodically and whose dynamics are very difficult to predict.

A commercial bank's assets are classified as liquid and illiquid assets, depending on their ease of conversion into cash. According to the degree of liquidity, assets are usually divided into four groups:

1. The most liquid assets, immediately available, or first-class liquid assets: cash on hand; precious metals; correspondent account balances; government securities.
2. Quickly liquid assets held by the bank that can be converted into cash: loans and payments to the bank with a maturity of up to 30 days; conditionally liquid securities listed on the stock exchange; other valuables.
3. Slowly liquid assets. These are items that are not included in other liquid assets. For example, short-term loans with a maturity of up to 1 year, investments in securities, etc.
4. Hard-to-liquid assets: overdue loans, unlisted securities; long-term loans, long-term investments; bad debts; bank buildings and structures; investments in real estate, intangible assets.

The optimal balance between the timing of raising and deploying resources implies a balance between the amounts and timing of cash releases from assets and the upcoming payments on the bank's liabilities.

Given the importance of this balance between these timings, banks must continually analyze them. For this purpose, the following grouping of assets and liabilities by timing can be used (Table 2).

Table 2. Grouping balance sheet asset and liability items to determine the liquidity of a commercial bank's balance sheet

Active		Passive	
Title of articles	term	Title of articles	term
Cash Desk Correspondent Account Correspondent Accounts with Other Banks	Poste restante	Balances of funds in settlement and current accounts; obligations for which payment is due	Poste restante
Short-term loans	Up to 30 days	Term deposits	Up to 30 days
Short-term loans	Up to 90 days	Term deposits	Up to 90 days
Short-term loans	Up to 270 days	Term deposits	Up to 270 days
Short-term loans	Up to 365 days	Term deposits	Up to 365 days
Long-term loans	Over 1 year	Term deposits	Over 1 year
Long-term loans	From 3 years and up There is no deadline	Long-term deposits (loans) Authorized capital. Reserve capital. Retained earnings of the bank	From 3 years and up There is no deadline
Bank's fixed assets	There is no deadline	Bank development funds	There is no deadline



The data in Table 2 are based on the actual maturities of claims and liabilities. However, this table cannot be completed using data from the bank's financial statements. The breakdown of liabilities by maturity can be obtained from the balance sheet for the accounting accounts. Each bank, based on cash flow analysis, determines its own acceptable excess of assets over liabilities by maturity. Management decisions to align assets and liabilities are made based on the analysis of the table data. An excess of assets over liabilities for the corresponding items indicates a liquidity surplus, while an excess of liabilities over assets indicates a deficit (shortage).

The liquidity of a bank's balance sheet is assessed by calculating specific indicators that reflect the ratio of assets to liabilities and the asset structure. In international practice, liquidity ratios are most often used for this purpose [4].

The ratios represent the relationship of various asset items on the bank's balance sheet to specific liability items, or, conversely, liabilities to assets. It should be noted that liquidity ratios have different names and calculation methods in different countries, which is due to established practices and traditions, and depends on the specialization and size of banks, as well as their credit policies.

Analysis of liquidity ratios begins with N1, the current liquidity ratio. Its level depends on the total amount of current liquid assets (CLA) (cash and assets up to 30 days) and the amount of demand account liabilities up to 30 days (DAL).

The minimum acceptable value of this ratio is set at 0.3. Along with the current ratio (N1), a bank's instant liquidity ratio (N2) has been introduced, defined as the ratio of highly liquid assets (cash and non-cash) (LAM) to quickly turning demand liabilities (DLL).

The total liquidity ratio limits the overall risk of a bank's liquidity loss and determines the minimum ratio of liquid assets to the bank's total assets. This liquidity ratio (N5) determines the share of liquid assets in the total amount of assets.

The minimum acceptable value (H5) is set at 20%. This calculation is based on bank balance sheets and the actual values of established standards. If balance sheet liquidity is violated, commercial banks are required to implement financial recovery measures within a short period. Banks that systematically violate standards may be subject to economic sanctions, including increases in deposit ratios, restrictions on refinancing, and other measures.



Different countries use different bank liquidity standards, but one of the key ones is the core Basel Liquidity Coverage Ratio (LCR), which requires that the ratio of highly liquid assets to net cash outflows over 30 days be at least 100 percent. Liquidity standards in some countries are set by banking and currency control authorities, while in others, they are established by banking legislation. Their values are determined based on accumulated experience and specific local conditions. Basel standards play an important role because they are an international recommendation and are applied in many countries. Naturally, the committee's recommendations are not mandatory. In Russian banking, this ratio is set at 0.25, while in the banking system of the Republic of Uzbekistan, the minimum permissible current liquidity ratio is 0.3, which complies with the requirements of the Basel Committee on Banking Supervision.

In Uzbekistan, the balance sheet liquidity ratio for banks is set as the liquidity coverage ratio, which must be at least 100 percent. This means that the ratio of liquid assets to the sum of demand liabilities and liabilities with a maturity of up to 30 days must be no less than this value. Definition of the liquidity coverage ratio: The ratio is calculated as the ratio of liquid assets to the sum of demand liabilities and liabilities with a maturity of up to 30 days. All banks are also required to maintain a net stable funding ratio of at least 100 percent, which is determined as follows:

$$\text{Net Stable Funding Ratio} = \frac{\text{Affordable amount of stable financing}}{\text{The required amount of stable financing}} \geq 100$$

Available amounts of stable funding include:

- the bank's capital;
- bank liabilities with an effective maturity of 365 days or more;
- 30 percent of other deposits and borrowings with no maturity and/or with a maturity of less than 365 days.

Required amounts of stable funding include:

- all bank assets with a remaining maturity of 365 days or more;
- assets pending litigation and/or not collected in accordance with established procedures;



- 30 percent of other assets with a maturity of less than 365 days, excluding liquid assets.

Regardless of specific indicators, the overall goal of all liquidity ratios is to ensure the bank's financial stability and its ability to fulfill its obligations to clients and counterparties in a timely manner.

Conclusions and suggestions

In our opinion, the methodology for calculating liquidity ratios used in our banking practice requires some refinement in line with international standards. For example, we question the introduction of permanent liquidity standards. Therefore, to effectively regulate the liquidity level of commercial banks, it is necessary to periodically review the established standards depending on the overall economic situation, seasonal and market fluctuations. In addition to firmly established ratios, three-, six-, and nine-month liquidity ratios can be used for operational analysis. These ratios are calculated based on the ratio of active and passive items, taking into account funds attracted and placed before a certain term (3, 6, 9, etc.). Moreover, the shorter the term of the attracted deposit, the higher the liquidity ratio should be. A comparison of the maturities of asset and liability items should be made for each category of client, using analytical accounting data. Furthermore, significant factors in maintaining liquidity include limited loan sizes provided to one borrower and loan diversification, i.e., issuing them to the largest possible number of clients while maintaining the overall loan volume.

During the balance sheet liquidity analysis, deviations may be identified, either below or above the minimum acceptable values. In the former case, banks are required to bring their liquidity ratios into line with regulatory values within one month by reducing interbank loans and accounts payable, and increasing the bank's equity. It should be noted that raising additional capital through the issuance of new shares will reduce dividends.

The scientific and practical significance of the study lies in the fact that these scientific and methodological recommendations for improving the methodology and assessment of commercial banks' balance sheet liquidity and solvency under IFRS ultimately allow for a significant increase in the financial potential of banks and a more sound basis for management decisions regarding the improvement of banking operations.



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