

# UZBEKISTAN IN BANKING PRACTICE: OPPORTUNITIES TO **USE FOREIGN EXPERIENCE TO ENSURE LIQUIDITY AND** SOLVENITY OF COMMERCIAL BANKS

## Bakhriddin Berdiyarov

DSc., Associate professor, Head of "Banking" department at Tashkent State University of Economics, Tashkent, Republic of Uzbekistan

bahriddin.bfa@gmail.com

its solvency. [1]

#### **ABSTRACT**

The purpose of the study is to develop scientific proposals and practical recommendations aimed at ensuring the liquidity and solvency of commercial banks of the Republic of Uzbekistan. In order to improve the system of assessment of liquidity and solvency of commercial banks of Uzbekistan, it is expedient to form this system on the basis of the system of indicators proposed by the International Monetary Fund (IMF) to assess the financial stability of commercial banks.

#### CCS CONCEPTS

• financial stability; • liquidity; • solvency; • commercial banks; • capitalization; • liquid assets.;

#### **ACM Reference Format:**

Bakhriddin Berdiyarov. 2021. UZBEKISTAN IN BANKING PRACTICE: OP-PORTUNITIES TO USE FOREIGN EXPERIENCE TO ENSURE LIQUIDITY AND SOLVENITY OF COMMERCIAL BANKS. In The 5th International Conference on Future Networks amp Distributed Systems (ICFNDS 2021), December 15, 16, 2021, Dubai, United Arab Emirates. ACM, New York, NY, USA, 15 pages. https://doi.org/10.1145/3508072.3508141

## 1 INTRODUCTION

According to the experience of developed countries, ensuring the liquidity and solvency of commercial banks is one of the necessary conditions for increasing the role of banks in the development of the national economy. Decreased liquidity and solvency of commercial banks lead to untimely payments between economic entities. This has a negative impact on the economic cycle. Ensuring the liquidity and solvency of commercial banks plays an important role in ensuring their current liquidity through the stability of investments and liabilities in highly liquid securities, as well as increasing the requirements for the adequacy of regulatory capital.

In particular, the share of investments in government securities in the total assets of Bank of America (USA) in 2018 amounted to 11.1%, while its current liquidity level in 2018 increased by 0.4 percentage points compared to 2014. The share of regulatory capital in the volume of liabilities of Barclays Bank (UK) in 2018 increased by

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for components of this work owned by others than ACM must be honored. Abstracting with credit is permitted. To copy otherwise, or republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee. Request permissions from permissions@acm.org.

ICFNDS 2021, December 15, 16, 2021, Dubai, United Arab Emirates

© 2021 Association for Computing Machinery. ACM ISBN 978-1-4503-8734-7/21/12...\$15.00 https://doi.org/10.1145/3508072.3508141

Dedicated to solving the problem of unbalanced liquidity in

0.9% compared to 2014, which played an important role in ensuring

commercial banks around the world, increasing the profitability of bank assets and capital, ensuring low and stable levels of overdue loans, increasing the capitalization of commercial banks, improving the resilience of banks to the effects of financial crisis scientific research is underway.

Ensuring liquidity and solvency of commercial banks of the country is an important issue. In particular, factors such as the mismatch between the assets and liabilities of banks in terms of maturity, volume and interest rates, lack of long-term resources in banks, poor performance of the deposit multiplier have a negative impact on banks' liquidity and solvency. The Action Strategy for the Development of the Republic of Uzbekistan for 2017-2021 identifies as one of the important directions "deepening and stabilizing the reform of the banking system, increasing the level of capitalization and deposit base of banks, strengthening their financial stability and reliability."

#### 2 LITERATURE REVIEW

Research on liquidity and solvency of commercial banks is carried out by the world's leading multinational banks, research centers and higher education institutions, including Bank of America (USA), Deutsche Vank (Germany), Barclays Bank (UK), Harvard University (USA), University of Bonn (Germany), University of Paris Sorbonne (France), Oxford University (UK), E.Gaydar Institute for Economic Policy (Institute of Economic Policy E.Gaydara, Russia). [1]

Global research on liquidity and solvency of commercial banks, including the following scientific results: the expediency of providing solvency based on increasing the stability of liabilities of commercial banks (Barclays Bank, UK); minimum capital adequacy requirements have been developed and are widely used in international banking practice as recommendations of the Basel Committee (Bank for International Settlements, Switzerland); the issues of ensuring the quality of the loan portfolio of commercial banks by ensuring the current liquidity of banks, improving credit risk assessment and management practices by ensuring a stable level of the share of primary reserves in total assets (Harvard University, USA); opportunities to increase the solvency of banks through the development of risk management systems (University of Paris Sorbonne, France); banks have indicators of capital adequacy, asset quality, profitability, liquidity and risk (International Monetary Fund); based on the expediency of increasing the liquidity and solvency of banks by improving the system of prudential standards established for commercial banks (Institute of Economic Policy

named after E. Gaydara, Russia). A number of priorities in international banking practice aimed at improving the methodological, scientific, theoretical, methodological and practical basis for ensuring the liquidity and solvency of commercial banks, including the following priorities: ensuring the balance between liquidity and profitability of commercial banks' assets; improving liquidity risk assessment and management practices; increasing the role of monetary policy instruments in ensuring the liquidity of commercial banks; improving the use of economic and mathematical models of liquidity management; increase the level of capitalization and profitability of banks; achieving liquidity of the banking system by ensuring the stability of commercial banks; In accordance with the requirements of the Basel Committee on Banking Supervision, research is being conducted to support the liquidity ratio of commercial banks. Separate theoretical and practical aspects of ensuring the liquidity and solvency of commercial banks were studied by foreign economists - F. Mishkin [1], J. Sinki [2], I. Larionova, O. Lavrushin, V. Researched in the scientific works of Usoskin, E. Zhukov [5], E. Jarkovskaya [6], N. Valentseva [7], Lopomo Beteto Wegner [11], Dang V. D. [12], Littke H. [13], Becker C. [14], Gupta J. [15], Chen W.-D.[16], A. Tavasiev and others.

J. Sinki studied the sale of assets such as federal funds, certificates of deposit, the use of REPO transactions in ensuring the liquidity of commercial banks in the context of a developed stock market and the widespread application of the theory of expected income. F. Mishkin studied the issues of increasing the role of regulation and supervision of banks in ensuring the liquidity and solvency of commercial banks.

Liquidity of commercial banks and research of Uzbek economists Yuldashev N.K. [3], Eshov M. [4], Burkhanov A. [8], Zarova, E.V. [9], Aziz Ahmed et al. [10] and others some theoretical, practical, and methodological aspects of solvency have been explored. A.Abdullaev studied the methodology of increasing the liquidity level of commercial banks on the basis of liquidity risk management in banks. O. Sattarov analyzed the issues of improving the regulatory requirements for liquidity and capital adequacy of commercial banks. S.Abdullaeva studied the issue of strengthening the solvency of banks by increasing the share of time funds in the structure of liabilities.

## 3 ANALYSIS AND RESULTS

Research on liquidity and solvency of commercial banks is carried out by the world's leading multinational banks, research centers and higher education institutions, including Bank of America (USA), Deutsche Vank (Germany), Barclays Bank (UK), Harvard University (USA), University of Bonn (Germany), University of Paris Sorbonne (France), Oxford University (UK), E.Gaydar Institute of Economic Policy (Institute of Economic Policy named after E.Gaydara, Russia).

Global research on liquidity and solvency of commercial banks, including the following scientific results has been obtained: the feasibility of providing solvency based on increasing the stability of liabilities of commercial banks (Barclays Bank, UK); minimum capital adequacy requirements have been developed and are widely used in international banking practice as the recommendations of the Basel Committee (Bank for International Settlements, Switzerland); studied the issues of ensuring the quality of the loan portfolio

of commercial banks by ensuring the current liquidity of banks, improving credit risk assessment and management practices by ensuring a stable level of the share of primary reserves in total assets (Harvard University, USA); opportunities to increase the solvency of banks through the development of risk management systems (University of Paris Sorbonne, France); banks have indicators of capital adequacy, asset quality, profitability, liquidity and risk (International Monetary Fund); based on the expediency of increasing the liquidity and solvency of banks by improving the system of prudential standards established for commercial banks (Institute of Economic Policy named after E. Gaydara, Russia).

There is a large and rich experience in ensuring the liquidity and solvency of commercial banks, which is of great scientific and practical importance to justify their creative use in the banking practice of Uzbekistan.

The liquidity of commercial banks in US banks is assessed by the current liquidity ratio.

$$L1 = \frac{Primaryreserves}{Deposits} \ge 0, 1$$

The lowest normative level of this coefficient is set at 10%.

In US banking practice, primary reserves include cash assets of commercial banks, ie cash on hand, funds in the Nostro correspondent account of the commercial bank with the Central Bank (FZT), funds in the bank's Nostro correspondent accounts with other banks and deposits with other banks.

In the United States, the requirements of the Basel Committee apply when assessing the capital adequacy of commercial banks and setting minimum requirements.

Characteristically, the U.S. Federal Reserve System (FZT) has put into practice all three existing standards of the Basel Committee. At present, the latest Basel-III standard of the Basel Committee has also been introduced into banking practice. In particular, the liquidity coverage ratio and the net sustainable financing ratio have been introduced as prudential standards. In addition, commercial banks are obliged to form a protective conservation buffer of capital and a countercyclical buffer.

U.S. banks also regularly monitor changes in asset return (ROA) and equity return (ROE). In the example of Bank of America, one of the largest transnational banks in the United States, we assess the liquidity and solvency of commercial banks.

According to Figure 1, the Bank of America met the regulatory requirement for the current liquidity ratio in 2014-2018. This indicates that the bank is sufficiently liquid. Also, the current liquidity level of Bank of America in 2018 increased by 0.4 percentage points compared to 2014, and in 2015 increased significantly compared to 2014. This is explained by the fact that the growth rate of primary reserves in this period was significantly higher than the growth rate of deposits. The growth rate of primary reserves in 2015 compared to 2014 was 14.9%, while the growth rate of deposits in this period was 7.0%.

As the current liquidity of Bank of America is provided by liquid assets in the form of primary reserves, we assess the dynamics and level of its liquid assets.

According to Table 1, the amount of liquid assets of the Bank of America in the form of primary reserves in 2018 increased by 28.0% compared to 2014. This is a significantly higher growth rate, which

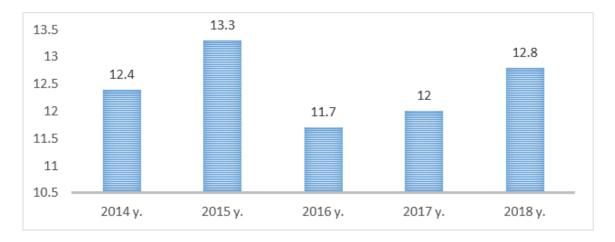


Figure 1: Bank of America's current liquidity level, in percent

Table 1: In the form of primary reserves of the Bank of America dynamics and level of liquid assets, in percent

Indicators	2014 y.	2015 y.	2016 y.	2017 y.	2018 y.	Changes in 2018 compared to 2014
Liquid assets, billion dollars	138,6	159,4	147,7	157,4	177,4	128,0 %
Share of liquid assets in gross assets,%	6,6	7,4	6,8	6,9	7,5	0,9

is a positive situation in terms of ensuring the bank's liquidity. Also, the share of liquid assets of the bank in the form of primary reserves in gross assets in 2018 increased by 0.9 percentage points compared to 2014. This is also a positive situation in terms of ensuring the bank's liquidity.

The amount of liquid assets of the bank in the form of primary reserves in 2016 compared to 2015 decreased significantly. This is a negative situation in terms of ensuring the bank's liquidity.

According to statistics, a relatively high share of Bank of America's total liquid assets in the form of primary reserves was occupied by the bank's deposits with other banks, cash on hand and a small share of the bank's Nostro correspondent accounts with other banks. This is explained by the following reasons:

- deposits placed with other banks bring interest income to the bank;
- Deposits to other banks are assets with a lower level of risk than lending;
- cash is a non-profit asset;
- Demand for cash is low in the United States due to the highly developed system of cashless payments;
- Cash on the bank's Nostro correspondent accounts is a nonprofit asset.

Because, first, the U.S. Federal Reserve does not pay interest on funds in commercial banks' Nostro correspondent accounts; secondly, other banks do not pay interest on the working balance of Nostro correspondent accounts opened by Bank of America on their balance sheets. Admittedly, investments in U.S. government securities play an important role in ensuring the liquidity of U.S. commercial banks.

U.S. government securities are highly liquid securities. At the same time, these securities are a reliable and risk-free investment object.

According to Table 2, the amount of Bank of America's investments in government securities in 2018 increased by 36.6% compared to 2014. This is a significantly higher growth rate, which is a positive situation in terms of ensuring the bank's liquidity.

The share of investments in government securities in the gross assets of this bank in 2018 increased by 2.0 percentage points compared to 2014. This is a positive situation in terms of ensuring the liquidity of the bank.

To assess the solvency of Bank of America, we analyze the share of its regulatory capital in the volume of liabilities and return on assets.

According to Table 3, the growth rate of Bank of America's liabilities in 2018 compared to 2014 was 11.9 percent, while its regulatory capital growth rate was 9.1 percent. This is a negative situation in terms of ensuring its solvency Also, the share of regulatory capital in the total liabilities of the Bank of America in 2018 decreased by 0.2 percentage points compared to 2014. This is a negative situation in terms of ensuring its solvency. Because the higher the share of regulatory capital in the volume of liabilities, the higher the level of solvency of the bank. As shown in Table 3, the level of regulatory capital in the total liabilities of Bank of America in 2014-2018 is not

Indicators	2014 y.	2015 y.	2016 y.	2017 y.	2018 y.	Changes in 2018 compared to 2014
Investments in government securities, billion dollars	191	192	198	212	261	136,6 %
Share of investments in government securities in gross assets,%	9,1	8,9	9,1	9,3	11,1	2,0

Table 3: Liabilities of Bank of America, regulatory capital and its share in liabilities, as a percentage

Indicators	2014 y.	2015 y.	2016 y.	2017 y.	2018 y.	Changes in 2018 compared to 2014
Liabilities, billion dollars	2104	2144	2187	2281	2354	111,9 %
Regulatory capital, bln. doll.	243	256	266	267	265	109,1
Share of regulatory capital in liabilities,%	11,5	11,9	12,2	11,7	11,3	- 0,2

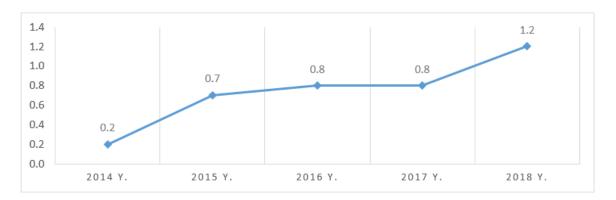


Figure 2: Return on assets of Bank of America (ROA), in percent

less than 11%. This is a positive situation in terms of ensuring its solvency.

Figure 2 below shows that Bank of America's asset yield has an upward trend in 2014-2018. This is a positive situation in terms of ensuring the solvency of the bank.

The Swiss National Bank influences the liquidity of commercial banks through direct REPO and reverse REPO operations as part of an open market policy.

In a direct REPO operation, the Swiss National Bank sells Swiss government securities, bonds of commercial banks, certificates of deposit and savings to the country's banks on the condition of repurchase.

In a reverse REPO operation, the Swiss National Bank buys Swiss government securities, commercial bank bonds, deposits and savings certificates from the country's commercial banks on the condition of resale. The Swiss National Bank draws temporarily vacant funds belonging to the government and commercial banks into its time deposit accounts and pays them interest.

More than 90% of banks in Switzerland use the services of the Swiss interbank electronic payment system directly. Banks that do not have direct access to the services of this payment system may use the services of representative banks to make payments through this system. In this case, the representative bank connected to the interbank payment system makes any type of payment for its representative bank and its customers.

Commercial banks that are not connected to the main Swiss payment system via electronic means can also use the system by telephone.

Foreign banks try to get permission to use overdraft loans from Swiss banks in establishing representative relations with Swiss banks. That is, an overdraft loan is the most reliable way to solve

Indicators	2014 y.	2015 y.	2016 y.	2017 y.	2018 y.
Deposits, bln. euro	532	566	550	581	564
The share of deposits in total liabilities,%	32,5	36,3	36,1	41,3	44,1

Table 4: Deutsche Bank deposits and their the share of total liabilities [18]

the problem of temporary lack of currency in the correspondent account "Nostro". In the event of a shortage of foreign currency by a foreign bank, the representative shall immediately lend the bank within the established limit. An overdraft loan is repaid upon receipt of money on the Nostro correspondent account of the borrowing bank.

It should be noted that in a number of countries overdraft lending is prohibited by law. However, there is no such ban in Switzerland, on the contrary, the practice of overdraft lending has improved.

The Swiss National Bank divides commercial banks into 6 groups:

1. Cantonal banks.

ZKB Bank is the largest in terms of assets of cantonal banks and has the highest AAA rating.

As of December 31, 2016, the share of cantonal banks in the assets of Swiss commercial banks was 31.6%.

2. The largest banks.

There are 2 major banks in Switzerland - Union Bank of Switzerland (UBS) and Credit Suisse Group AG.

- 3. Regional banks.
- 4. Private banks.

Private banks are involved in consumer lending and trust operations.

- 5. Foreign banks.
- 6. Small banks.

The amount of loans issued by Swiss banks has been declining in recent years. This is explained by a decrease in demand for loans.

In recent years, there has been an increasing trend in the amount of mortgage loans issued by Swiss commercial banks. This is explained by the growing demand for housing.

We use the current liquidity ratio to assess the current liquidity of Deutsche Bank. According to this methodology, the current liquidity of the bank is determined by dividing the highly liquid assets by the total amount of deposits. Its standard rate is set at 30%.

According to statistics, in 2016-2018, the current liquidity of Deutsche Bank was higher than the generally accepted normative level (30%) in international banking practice. This is a positive situation in terms of ensuring the bank's liquidity. However, in 2014 and 2015, the actual level of this indicator was lower than the normative demand level. This is explained by the fact that the growth rate of deposits in these periods is higher than the growth rate of highly liquid assets.

It should be noted that deposits account for a relatively high share of Deutsche Bank's liabilities (Table 4).

According to Table 4, in 2014-2018, deposits had a relatively high share in the structure of Deutsche Bank's liabilities. Also, in 2016-2018, the share of deposits in the total volume of Deutsche Bank liabilities tended to grow.

One of the main factors influencing the liquidity of commercial banks is the level of reserve allocations to cover losses from loans.

The level of reserve allowances (Kzar) for loan losses is determined as follows:

$$Kzar = \frac{The amount of reserve allocations}{The average amount of bank assets} \times 100\%$$

In turn, the average amount of assets of a commercial bank is determined by the arithmetic mean method, which is divided by two, adding the amount of assets at the beginning of the analysis period and the amount at the end of the analysis period.

Reserve allocations to cover losses from loans are made entirely at the expense of the commercial bank, and the taxable base of the bank is reduced by the amount of reserve allocations.

According to the experts of the International Bank for Reconstruction and Development, the normative level of the reserve for loan losses is 1%

According to Figure 3, the level of reserve allocations at Deutsche Bank to cover loan losses in 2014-2018 did not exceed the normative requirement. This is a positive situation in terms of ensuring its liquidity.

It is noteworthy that in Germany there is no prudential norm on the current liquidity of banks. That is, there is no mandatory requirement for the current liquidity of commercial banks within the banking supervision system. Each commercial bank determines the demand for current liquidity.

The change in the amount of reserve allowances for loan losses is directly related to the change in the composition of classified loans. The change in the level of reserve allocations to cover losses from loans depends on the relationship between the growth rate of reserve allocations and the growth rate of the bank's gross assets.

Through this table, we assess the level of solvency of Deutsche Bank. The solvency of Deutsche Bank is regulated by prudential standards and internal regulations set by the European Central Bank. In this case, the prudential norm means the norms established by the banking supervisory authorities and must be complied with by commercial banks.

Table 5 shows that the amount of Deutsche Bank's liabilities in 2018 decreased by 27.1% compared to 2014, and the amount of regulatory capital decreased by 6.8%.

The decrease in the share of regulatory capital in the volume of liabilities is a negative situation in terms of ensuring the solvency of a commercial bank. Also, during the analyzed period, the share of regulatory capital in the volume of liabilities was low. This is also a negative situation in terms of ensuring the solvency of a commercial bank.

In order to deepen the analysis of Deutsche Bank's solvency, we assess the return on its assets and capital.

The return on assets and capital of commercial banks is expressed as a percentage, in which the return on assets is defined as the ratio

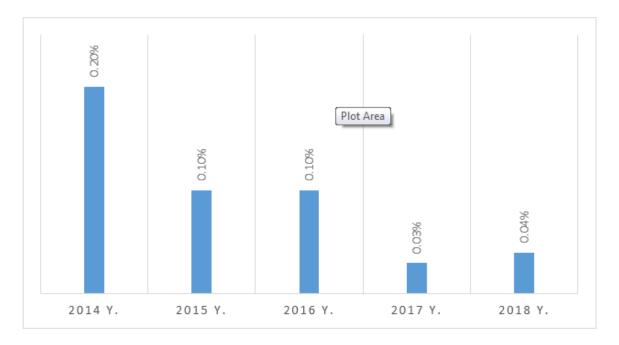


Figure 3: Deutsche Bank's level of reserve allocations to cover loan losses [18]

Table 5: Deutsche Bank's liabilities, regulatory capital and its share in liabilities, percent [18]

Indicators	2014 y.	2015 y.	2016 y.	2017 y.	2018 y.	Changes in 2018 compared to 2014
Liabilities, billion dollars	1708	1629	1590	1474	1348	78,9 %
Regulatory capital, bln. doll.	73	67	64	68	68	93,2 %
Share of regulatory capital in liabilities,%	4,3	4,1	4,0	4,6	5,0	0,7

Table 6: Return on assets and capital of Deutsche Bank, percent [19]

Indicators	2014 y.	2015 y.	2016 y.	2017 y.	2018 y.
Return on assets	0,1	0,04	0,0	0,0	0,03
Return on capital	2,3	1,0	0,0	0,0	0,5

of net profit to gross assets, and the return on capital is defined as the ratio of net profit to regulatory capital.

According to Table 6, the return on assets and return on equity at Deutsche Bank in 2014-2018 were unsatisfactory. This is a negative situation in terms of ensuring the bank's solvency.

Characteristically, there is a normative level of return on capital (15%), but there is no normative level of return on assets. Therefore, the method of comparative analysis of financial analysis is used to assess the return on assets of commercial banks.

In the UK, central bank loans play an important role in ensuring the current liquidity of commercial banks. The absolute majority

of the assets of the Bank of England, ie more than 95%, are loans to commercial banks and the British government.

In the total assets of the Bank of England, the second largest share is occupied by investments in securities. These are mainly investments in UK government securities.

Commercial banks in the UK have the potential to increase their primary reserves by placing deposits with the Bank of England.

The absolute bulk of the central bank's liabilities, more than 81 percent, are deposits of commercial banks and the British government. These deposits include:

 Funds in Vostro correspondent accounts opened with the Central Bank of British commercial banks;

Indicators	2014 y.	2015 y.	2016 y.	2017 y.	2018 y.
Highly liquid assets, billion pound sterling	142	131	192	248	254
Deposits, billion pound sterling	384	390	390	398	394
Ratio of highly liquid assets to deposits, %	36,9	33,6	49,2	62,4	64,5

Table 7: Barclays Bank's level of highly liquid assets, deposits and highly liquid assets in relation to deposits [19]

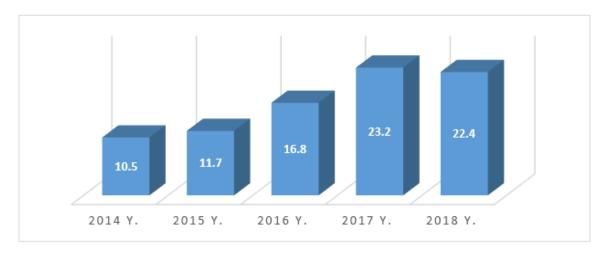


Figure 4: Change in the share of highly liquid assets in the total assets of Barclays Bank, percent [19]

- money in time deposit accounts of commercial banks with the Bank of England;
- Money in the current account of the Government of the United Kingdom opened with the Central Bank;
- Money in the term deposit account of the British government with the Central Bank.

Below we assess the liquidity and solvency of Barclays Bank, one of the largest transnational banks in the UK.

According to Table 7, Barclays Bank has seen an upward trend in the amount of highly liquid assets in 2015-2018. This is a positive situation in terms of ensuring its liquidity. Also, in 2018, compared to 2014, there was a high growth rate of deposits (78.8%). At the same time, the amount of deposits attracted by the bank had an upward trend in 2014-2017.

According to Table 7, Barclays Bank had a high level of highly liquid assets relative to deposits in 2014-2018. In 2015-2018, the growth trend of this indicator was observed. These circumstances are positive in terms of ensuring the liquidity of Barclays Bank.

In 2018, investments and loans in securities will make up the bulk of the total assets of Barclays Bank in the UK. The share of these two assets in total assets is over 80%. [19]

Cash and Barclays Bank's cash in the Bank of England also account for a significant share of assets.

Barclays Bank's cash at the Bank of England includes:

Money on Barclays Bank's Nostro correspondent account with the Central Bank;

Barclays Bank's time deposits with the Central Bank.

According to Figure 4, the share of highly liquid assets in the total assets of Barclays Bank in 2014-2018 was relatively high. In 2014-2017, an increase in this indicator was observed. This is a positive development in terms of ensuring Barclays Bank's liquidity.

The figure above shows that the share of highly liquid assets in Barclays Bank's gross assets in 2018 decreased compared to 2017. This decline is explained by the fact that the growth rate of gross assets in this period was higher than the growth rate of highly liquid assets.

Below we assess Barclays Bank's solvency.

According to this table, in 2018, compared to 2014, Barclays Bank's regulatory capital and liabilities increased by 2 billion. decreased to pound sterling.

Also, in 2018, compared to 2014, the level of regulatory capital of Barclays Bank relative to liabilities decreased. This is a negative situation in terms of ensuring Barclays Bank's solvency.

It should be noted that the highest share of Barclays Bank's liabilities is occupied by liabilities and deposits on securities issued by the bank. As of January 1, 2019, the share of liabilities on bank securities in total liabilities was 53.7%, and the share of deposits in total liabilities was 36.8%.

Funds and deposits from securities issued in the total volume of Barclays Bank's liabilities have a very high share. This is determined by the fact that these resources are the main source of financing the bank's active operations.

Table 8: Barclays Bank's regulatory capital, liabilities and ratio of regulatory capital to iabilities [19]

Indicators	2014 y.	2015 y.	2016 y.	2017 y.	2018 y.
Regulatory capital,	65	65	71	66	63
billion pound sterling					
Liabilities,	1291	1054	1141	1067	1069
billion pound sterling					
Ratio of regulatory capital to liabilities,%	5,0	6,2	6,2	6,2	5,9

Table 9: The main indicators of the Russian banking system, percent [20]

Indicators	2014 y.	2015 y.	2016 y.	2017 y.	2018 y.
The ratio of banking sector assets to GDP	98,2	99,9	93,1	92,5	90,6
The ratio of banking sector capital to GDP	10,0	10,8	10,9	10,2	9,9
The ratio of loans of commercial banks to	51,7	52,9	47,6	46,0	46,5
GDP					
The ratio of investments of commercial	10,6	12,2	11,5	11,5	11,1
banks in securities to GDP					
The ratio of deposits of commercial banks	29,6	32,6	28,3	27,0	27,0
to GDP					
Annual growth rate of assets of	35,2	6,9	- 3,5	6,4	10,4
commercial banks					
Annual growth rate of capital of commercial banks	12,2	13,6	4,2	0,1	9,3
commercial banks					

Regulatory capital has a small share in the volume of Barclays Bank's liabilities (Appendix 2). This is a result of Barclays Bank operating mainly on borrowed funds.

In turn, derivatives have a relatively high share in the securities issued by Barclays Bank. For example, as of January 1, 2019, the share of derivatives in the total volume of securities issued by Barclays Bank was 38.2%.

Barclays Bank's regulatory capital also has a relatively high share of issue income. This is explained by the high market price of Barclays Bank shares. The data show that the authorized capital has a relatively small share in the total regulatory capital of Barclays Bank. This is explained by the fact that the amount of authorized capital decreased in 2014-2018. For example, in 2014, the authorized capital of Barclays Bank amounted to 20.8 billion. In 2018, this figure will reach 4.3 billion pounds. pound sterling.

As an important indicator of Barclays Bank's solvency, we analyze the relationship between the growth rate of assets and the growth rate of net profit.

This figure shows that Barclays Bank's assets decreased in 2015 compared to 2014 and in 2017 compared to 2016. This is a negative situation in terms of ensuring the sustainable development of banking.

According to statistics, Barclays Bank's net profit in 2016 decreased compared to 2015. Also, the amount of net profit is very small compared to the amount of bank assets. For example, in 2018, the share of net profit relative to the total assets of Barclays Bank was only 0.5 percent. This is a negative situation in terms of ensuring Barclays Bank's solvency.

We analyze foreign experience in ensuring the liquidity and solvency of commercial banks on the example of the Russian Federation and the Republic of Kazakhstan.

The Russian banking system is two-tiered. The first tier of the banking system is the Central Bank of Russia, the second tier is commercial banks.

The Central Bank of Russia has a supervisory function and carries out both types of banking supervision (remote control and inspection control). In addition, the Central Bank of Russia regulates the activities of commercial banks through refinancing policy, mandatory reserve policy and open market policy.

Currently, the Central Bank of Russia provides overnight, over-draft, pawn and term loans to commercial banks.

It should be noted that pawnshops provided by the Central Bank of Russia, in contrast to the practice of the republic, are provided not only with highly liquid government securities, but also with debt securities of reputable Russian companies. This allows the Central Bank of the Russian Federation to increase the volume of pawn loans.

The Central Bank of Russia uses open market operations as a key instrument of monetary policy. It is noteworthy that the Central Bank of Russia uses the securities of large companies and banks, in addition to the securities of the Russian government, in conducting open market operations. Securities of large companies such as Gazprom, Rosneft, Rosnano and securities issued by major banks such as Sberbank, Vneshtorgbank, Gazprombank are objects of open market operations of the Central Bank of Russia.

According to Table 9, the assets of the banking sector in Russia have a significantly higher share than GDP. This indicates that the

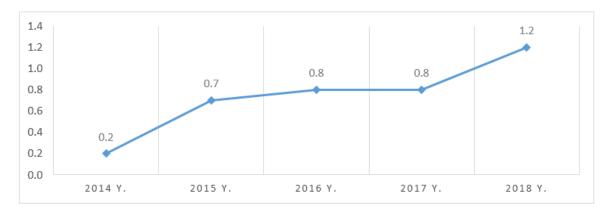


Figure 5: The level of highly liquid assets in Sberbank relative to customer deposits, percent [20]

role of the banking system in the development of the country's economy is significantly higher. However, in 2016-2018, there was a downward trend in the share of banking sector capital in GDP. This is a negative situation in terms of ensuring the liquidity of the banking system.

Also, in 2014-2018, the level of loans of Russian banks relative to GDP was high. However, in 2015-2017, there was a downward trend in this indicator. The level of investment of commercial banks in securities relative to GDP was stable in 2014-2018. At the same time, in 2015-2018, there was a downward trend in the level of deposits of Russian banks relative to GDP.

According to the data, in 2018, the annual growth rate of assets and capital of commercial banks was significantly higher. However, this figure was low in 2015-2017, and even in 2016, the amount of assets of commercial banks decreased compared to 2015.

The decrease in the amount of assets and capital of commercial banks is a negative situation in terms of ensuring the solvency of the bank. However, if the amount of capital does not decrease, the decrease in the amount of bank assets can have a positive impact on the solvency of a commercial bank.

Below we continue the analysis on the example of Sberbank, the largest bank in Russia.

According to Figure 5, the amount of assets in Sberbank had an upward trend in 2016-2018. However, in 2016, the amount of assets decreased significantly compared to 2015. This decrease is explained by the decrease in the amount of loans issued to corporate clients in 2016 compared to 2015. In 2016, Sberbank issued loans to corporate clients in the amount of 13633 billion rubles. However, in 2015, the amount of loans issued by Sberbank to corporate clients appealed to 14959 billion dollars. rubles.

According to Figure 5, in 2014-2018, the amount of Sberbank's capital had an upward trend. This is a positive situation in terms of ensuring the bank's liquidity and solvency.

To assess the liquidity of Sberbank, we analyze the change in the level of highly liquid assets relative to customer deposits.

The figure above shows that in 2014-2018, the level of highly liquid assets in Sberbank relative to customer deposits had a downward trend. This is a negative situation in terms of ensuring the liquidity of Sberbank.

Liquid assets of Russian commercial banks include:

- cash at bank cash desks;
- funds on the Nostro correspondent accounts of the commercial bank in national and foreign currencies;
- deposits of the bank with the Central Bank;
- deposits of commercial banks in other commercial banks;
- investments of the bank in highly liquid securities (government securities, securities of the Central Bank, securities guaranteed by the government).

Loans have the highest share in the total assets of Sberbank. This indicates that Sberbank plays an important role in lending to the real sector of the Russian economy.

Investments in securities and cash have a relatively high share in the total assets of Sberbank. This situation is explained by the following reasons:

Sberbank is an active participant in the Russian securities market; Sberbank keeps a certain amount of money in the correspondent account of the Central Bank "Nostro" and in the term deposit account of the Central Bank in order to ensure its current liquidity;

Sberbank has a wide range of representative relations with foreign banks.

It is noteworthy that customer deposits have a high share in the volume of liabilities of Sberbank. Therefore, the level of highly liquid assets relative to deposits plays an important role in ensuring the liquidity of banks.

It should be noted that the change in the share of transaction deposits in gross deposits plays an important role in ensuring the liquidity and solvency of commercial banks.

According to Table 10, in 2014-2018 there was an upward trend in the amount of Sberbank deposits. Also, the share of deposits in liabilities during this period was high. This increases the complexity of the bank's liquidity.

According to Table 10, in 2015-2018 there was a downward trend in the share of deposits in the total liabilities of Sberbank. This is explained by the fact that during this period the share of cash proceeds from the sale of securities issued by Sberbank in the amount of liabilities increased.

The following types of securities were issued by Sberbank:

- certificates of deposit;
- certificates of the fund;

Table 10: Amount of Sberbank deposits and share in liabilities, percent [20]
--

Indicators	2014 y.	2015 y.	2016 y.	2017 y.	2018 y.
Deposits, billion ruble	14027	17722	18684	19813	20897
The share of deposits in the volume of liabilities.%	64,5	78,0	73,7	73,1	66,9

Table 11: The amount of regulatory capital of Sberbank and its weight in liabilities, percent [20]

Indicators	2014 y.	2015 y.	2016 y.	2017 y.	2018 y.
Regulatory capital, billion ruble	1982	2328	2821	3436	3855
Share of regulatory capital in liabilities,%	9,1	10,3	11,1	12,7	12,4

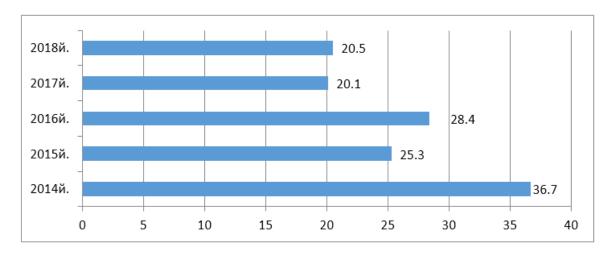


Figure 6: Current level of liquidity of JSC "Nurbank" [21]

- bonds;
- ordinary shares;
- preferred shares;
- subordinated debt obligations.

To assess the solvency of Sberbank, we analyze the share of regulatory capital in the volume of liabilities.

According to Table 11, in 2014-2018, the amount of regulatory capital of Sberbank had an upward trend. Also, the share of regulatory capital in the volume of Sberbank's liabilities in 2014-2017 also had an upward trend. This is a positive situation in terms of ensuring the solvency of Sberbank.

According to Table 11, the share of regulatory capital in the volume of Sberbank's liabilities in 2018 decreased significantly compared to 2017.

According to Table 11, the share of regulatory capital in the volume of Sberbank's liabilities in 2018 decreased significantly compared to 2017, percent.

Below we analyze the liquidity and solvency of the Joint-Stock Commercial Bank "Nurbank" of the Republic of Kazakhstan.

According to Figure 12, in 2014-2018, Nurbank's current level of liquidity was high. However, the level of this indicator in 2018 decreased significantly compared to 2014. This is explained by the fact that the growth rate of customer deposits in this period is higher than the growth rate of highly liquid assets in cash and is a negative situation in terms of ensuring the liquidity of the bank. The growth rate of Nurbank's highly liquid assets in 2018 compared to 2014 was 8.5%, while the growth rate of customer deposits during this period was 28.3%.

The fact that the growth rate of highly liquid assets is lower than the growth rate of deposits is a negative situation in terms of ensuring the liquidity of the bank.

According to Table 12, the amount of highly liquid assets of Nurbank in 2014-2018 was unstable. The amount of highly liquid assets of the bank in 2014 amounted to 44977 mln. In 2016, this amount increased sharply to 76,344 million tenge. tenge, and in 2018, it decreased sharply in 2018 compared to 2016, reaching 48,780 mln. tenge. There was also an upward trend in the share of highly liquid assets in the total assets of Nurbank in 2014-2016, but in 2018

Table 12: The amount of liquid assets of JSC "Nurbank" in cash and their share in gross assets, percent [21]

Indicators	2014 y.	2015 y.	2016 y.	2017 y.	2018 y.
Highly liquid assets, mln. tenge Share of highly liquid assets in gross assets,%	44977 15,2	52109 16,2	76344 20,0	41199 11,9	48780 13,5

Table 13: Regulatory capital of JSC "Nurbank" and its share in the volume of liabilities, percent [21]

Indicators	2014 y.	2015 y.	2016 y.	2017 y.	2018 y.
Regulatory capital, mln. tenge	40688	39928	40943	43487	44783
Share of regulatory capital in liabilities,%	13,7	12,4	10,7	12,7	12,4

the level of this indicator decreased sharply compared to 2016. We analyze Nurbank's share of regulatory capital in liabilities.

According to Table 13, the regulatory capital of Nurbank in 2018 increased significantly compared to 2014 (10.1%). At the same time, the amount of regulatory capital had an upward trend in 2015-2018. These changes are a positive development in terms of ensuring the solvency of Nurbank.

Also, the share of regulatory capital of Nurbank in the volume of liabilities had a downward trend in 2014-2016. This is a negative situation in terms of ensuring the solvency of Nurbank.

The National Bank of the Republic of Kazakhstan (Central Bank) has accepted the requirements of the Basel Committee on the formation of capital of commercial banks and ensuring its adequacy.

In accordance with the Instruction No. 170 of the National Bank of Kazakhstan dated September 13, 2017, the protective conservation buffer for commercial banks was set as follows:

1. For all commercial banks:

From January 1, 2015 - 1%;

From January 1, 2016 - 1%;

From January 1, 2017 - 2%.

2. For system banks:

From January 1, 2015 - 2.5%;

From January 1, 2016 - 2.5%;

From January 1, 2017 - 3%.

We estimate the return on assets and capital of Nurbank using the data in the figure below (Figure 6).

According to Figure 6, the return on Nurbank's assets was relatively low in 2014-2018, while the return on Nurbank's assets in 2015 and 2016 was only 0.1 percent. The return on Nurbank's assets increased significantly in 2018 compared to 2017, and this is a positive situation in terms of ensuring the bank's solvency. The increase in return on assets in 2018 compared to 2017 is explained by the fact that the growth rate of net profit in this period was higher than the growth rate of assets. The growth rate of Nurbank's assets in 2018 compared to 2017 was 12.6%, while the growth rate of net profit in this period was 5.8 times.

In our opinion, the following aspects of foreign experience in ensuring the liquidity and solvency of commercial banks can be positively used in the banking practice of Uzbekistan:

1. It is necessary to ensure the current liquidity of commercial banks by ensuring that the growth rate of primary reserves of commercial banks does not lag behind the growth rate of deposits, achieving a stable share of highly liquid assets in gross assets, relatively high and stable share of investments in government securities in gross assets.

The results of a study of the Bank of America's liquidity experience show that, first, the fact that the growth rate of primary reserves in 2014-2018 was higher than the growth rate of deposits played an important role in ensuring its current liquidity; second, the achievement of a stable level of the share of highly liquid assets in gross assets is ensured; thirdly, the relatively high and stable level of the share of investments in government securities in the volume of gross assets served to ensure the liquidity of the bank.

The results of a study of the Bank of America's liquidity experience show that, first, the fact that the growth rate of primary reserves in 2014-2018 was higher than the growth rate of deposits played an important role in ensuring its current liquidity; second, the achievement of a stable level of the share of highly liquid assets in gross assets is ensured; thirdly, the relatively high and stable level of the share of investments in government securities in the volume of gross assets served to ensure the liquidity of the bank.

Deposits of a commercial bank with the Central Bank and other commercial banks are highly liquid assets, but they are placed for a certain period, and their early withdrawal has a negative impact on the profitability of the bank's assets.

In order to achieve a stable level of the share of highly liquid assets in gross assets, the growth rate of highly liquid assets should not be allowed to be lower than the growth rate of gross assets.

Commercial banks usually try to keep the minimum (minimum) amount of money in Nostro correspondent accounts. For banks, money in Nostro correspondent accounts is a non-profit asset. Therefore, in the formation of the composition of primary reserves, commercial banks pay special attention to the high share of deposits in other banks in the volume of primary reserves.

Ensuring a relatively high and stable level of investment in government securities in gross assets requires attention to the following aspects:

- the government should be the largest issuer of securities;
- the growth rate of gross assets of a commercial bank should not exceed the growth rate of investments in government securities;

- the real value of investments in government securities should not decrease as a result of inflation and devaluation.
- The U.S. government is the issuer of the largest amount of securities. This is explained by the large amount of public external debt and the state budget deficit in the United States.
- The importance of U.S. government securities in ensuring the liquidity of U.S. commercial banks is reflected in the following:
- the government should be the largest issuer of securities;
- the growth rate of gross assets of a commercial bank should not exceed the growth rate of investments in government securities:
- the real value of investments in government securities should not decrease as a result of inflation and devaluation.

The U.S. government is the issuer of the largest amount of securities. This is explained by the large amount of public external debt and the state budget deficit in the United States.

The importance of U.S. government securities in ensuring the liquidity of U.S. commercial banks is reflected in the following:

If the FZT uses direct REPO operations to withdraw vacant funds from commercial banks' Nostro correspondent accounts, it will help solve the problem of unbalanced liquidity in commercial banks through reverse REPO operations. In other words, the FZT buys government securities on the condition of reselling them from commercial banks. As a result, Nostro correspondent accounts of commercial banks will receive money.

Neither the U.S. nor other commercial banks have an inflation problem. That is, the annual rate of inflation does not exceed two percent.

Many developing countries, including the Republic of Uzbekistan, have inflation problems. That is, the inflation rate is high. In addition, the depreciation rate of the national currency is high. This leads to a decrease in the real value of investments made by commercial banks in government securities under the influence of inflation and devaluation. As a result, it becomes difficult to ensure the investment attractiveness of government securities.

Also, in the absence of the problem of the state budget deficit, the government will not have the need to increase the volume of securities issues. This limits the ability of commercial banks to purchase government securities and the Central Bank to increase its open market operations. In this case, commercial banks will have to keep money in Nostro's correspondent accounts in order to meet the current liquidity requirement set by the Central Bank. This, in turn, has a negative impact on the return on assets.

It should be noted that in developed countries, the ability of commercial banks to make deposits with the Central Bank is limited. That is, some central banks (Central Bank of Japan, National Bank of Switzerland, European Central Bank) have introduced negative interest rates on time deposits of commercial banks. This virtually eliminates the possibility for commercial banks to make deposits with the Central Bank.

The purpose of the introduction of negative interest rates by central banks on time deposits of commercial banks is to increase the volume of loans and investments of commercial banks in the economy. Commercial banks, on the other hand, prefer to place free funds as deposits with the Central Bank due to their low risk level.

2. In order to ensure the solvency of commercial banks, it is necessary to ensure a stable level of return on assets by ensuring the stability of the share of regulatory capital in liabilities, the balance between the growth rate of net profit and gross asset growth.

The analysis of the solvency of Bank of America showed that in 2014-2018, the stability of the share of the bank's regulatory capital in the volume of liabilities was achieved. Also, the return on bank assets had an upward trend in 2014-2018.

Ensuring the stability of the share of regulatory capital in the total liabilities of commercial banks requires the following conditions:

- it is necessary to ensure that the growth rate of regulatory capital does not lag behind the growth rate of liabilities;
- it is necessary to ensure a relatively high and stable level of the share of issue income in the volume of regulatory capital by preventing the decline in market prices for shares of a commercial bank;
- it is necessary to ensure the stability of the share of retained earnings in the volume of regulatory capital;
- the growth rate of deposits should not be higher than the growth of regulatory capital.

Emission income as a source of sustainable financing plays an important role in increasing the size and sustainability of the regulatory capital of commercial banks.

Issue income occurs when a commercial bank issues a new share. Because newly issued shares are sold at market price, not at face value. As a result, the sale of newly issued shares results in the amount of the difference between their market value and nominal value. Therefore, the amount of issue income will depend on the market price of the shares. In turn, the prevention of falling stock market prices requires ensuring their investment attractiveness.

Admittedly, ensuring a balance between the growth rate of net profit and the growth rate of gross assets depends on the following factors:

- it is necessary to ensure the stability of the difference between interest income and interest expenses (according to the generally accepted criteria in international banking practice, the net interest margin in commercial banks should be 4.5%);
- it is necessary to ensure a balance between interest-free income and interest-free expenses;
- prevention of increase in the amount of reserve allocations to cover loan losses;
- high growth of high-risk assets should not be allowed.

In turn, ensuring the stability of the difference between interest income and interest expenses of commercial banks requires, first, ensuring the quality of the bank's loan portfolio and securities portfolios; secondly, it requires improving the structural structure of deposits.

Deterioration in the quality of the loan portfolio and securities portfolio of commercial banks leads to a decrease in the amount of net profit. Because, first, the deterioration in the quality of asset portfolios leads to a decrease in the amount of interest income derived from loans and investments in securities with a fixed rate;

second, the removal of overdue interest from the bank's balance sheet leads to a decrease in interest income (after the termination of interest on loans, overdue interest is deducted from the bank's balance sheet at the expense of interest income of a commercial bank); thirdly, when overdue loans reach the allowable limit (the amount of overdue loans is 5% of the loan portfolio), usually a certain part of overdue loans is written off from the balance of a commercial bank; fourth, an increase in the amount of reserve allocations to cover losses from securities will ultimately lead to a decrease in the amount of net profit.

In our opinion, improving the structure of deposits means:

- Ensuring the adequacy of the bank's deposit base (according to generally accepted criteria in international banking practice, the share of deposits required to ensure the adequacy of the deposit base of a commercial bank should not exceed 30% of gross deposits);
- It is necessary to ensure a high and stable level of the share of time deposits of the population in the total volume of time and savings deposits of commercial banks.

The results of the study of banking practice in developed countries showed that the interest rate on time deposits of the population is significantly lower than the interest rate on time deposits of legal entities.

At the current stage of economic development of the Republic of Uzbekistan, the relatively high rate of inflation and the depreciation of the national currency, as well as low incomes of the population have limited the ability of commercial banks to attract public funds to time deposits.

An increase in the amount of reserve allowances to cover losses on loans leads to a decrease in the amount of net profit. In turn, the increase in the amount of reserve allowances to cover losses from loans occurs as a result of deterioration in the composition of classified loans. In general, the deterioration in the composition of classified loans is understood as an increase in the share of doubtful and bad loans in the total volume of classified loans.

It is necessary to increase the level of solvency of commercial banks by ensuring a stable share of investments in highly liquid securities in the total volume of investments in securities by commercial banks, ensuring that the growth rate of highly liquid assets does not lag behind the growth rate of deposits.

According to the analysis conducted in paragraph 2.2 of this study, the fact that in 2014-2018 Sberbank had a downward trend in the level of highly liquid assets relative to customer deposits had a negative impact on its liquidity.

The analysis also revealed that in 2014-2018, the current level of liquidity of Nurbank (Kazakhstan) was high, and in 2014-2016, the share of highly liquid assets in the total assets of Nurbank increased.

While commercial banks' investments in corporate securities are an important source of income for them, their investments in highly liquid securities are an important factor in ensuring the current liquidity of banks. Therefore, in ensuring the current liquidity of commercial banks, it is important to ensure the stability of the share of investments in highly liquid securities in the total volume of investments in securities.

It should be noted that the investments of commercial banks in highly liquid securities include investments in government securities and investments in securities issued by the Central Bank.

In developed countries, proceeds from the sale of government securities are a non-inflationary way to cover the state budget deficit. Therefore, the main focus in covering the state budget deficit will be to attract funds to the state budget through the issuance of government securities.

When the funds received from the issuance of government securities are not enough to cover the state budget deficit, they are transferred to other sources of state budget deficit coverage. In turn, other sources of covering the state budget deficit include:

- Obtaining loans from the Central Bank;
- sale of state assets (sale of state-owned property, the share
  of the state in the authorized capital of commercial banks,
  official gold);
- Attracting financial grants from foreign countries;
- Attracting loans from foreign countries.

The attractiveness of government securities for commercial banks, in our opinion, is reflected in the following:

- Investments in government securities are taken into account by the Central Bank as a highly liquid asset in assessing the current liquidity of commercial banks;
- income from commercial banks' investments in government securities is not taxed;
- Investments in government securities bring interest income to commercial banks;
- government securities are a reliable investment object for commercial banks, as the probability of government default is extremely low;

Since there is always a stable demand in the securities market for government securities, the sale of them can solve the problem of temporary lack of funds in the correspondent account of a commercial bank "Nostro".

Ensuring the liquidity of commercial banks depends primarily on the level of highly liquid assets relative to deposits. The analysis of the bank's deposit base management practice plays an important role in this.

In our opinion, the analysis of the deposit base of commercial banks should cover the following areas:

- composition of deposits;
- Sufficiency of deposits;
- the share of time deposits of the population in total deposits;
- the level of stable balance of demand deposits;
- the level of stable deposits in relation to gross deposits;
- level and dynamics of interest paid on deposits;
- conditions for attracting and issuing deposits;
- change in the share of foreign currency deposits in total deposits.

It should be noted that the quality of the deposit base of commercial banks directly depends on the composition of their customers, their financial condition.

#### 4 CONCLUSIONS

In US banking practice, the current liquidity ratio used to assess the liquidity of commercial banks is defined as the ratio of primary reserves to total deposits, and its minimum rate is set at 0.10 (10%).

As a result of studying and summarizing the experience of commercial banks of developed countries in ensuring liquidity and solvency, the following conclusions were drawn:

According to Bank of America:

- Fulfillment of the normative requirement on the current liquidity ratio in 2014-2018 shows that it is sufficiently liquid, also explained by the significant increase in 2015 compared to 2014, the growth rate of primary reserves during this period was higher than the growth rate of deposits;
- In 2014-2018, a relatively high share of total liquid assets in the form of primary reserves was occupied by bank deposits with other banks, while the share of cash and cash in the bank's Nostro correspondent accounts with other banks was low:
- The growth of investments in government securities in 2018 compared to 2014, the increase in the share of investments in government securities in the gross assets of the bank during this period is a positive situation in terms of ensuring its liquidity;

The fact that the growth rate of liabilities in 2018 compared to 2014 is higher than the growth rate of its regulatory capital is a negative situation in terms of ensuring its solvency.

According to Deutsche Vank:

- The fact that the current liquidity ratio in 2016-2018 is higher than the generally accepted normative level in international banking practice (30%) is a positive situation in terms of ensuring its liquidity;
- In the structure of liabilities in 2014-2018, deposits had a relatively high share, and in 2016-2018, the share of deposits in the total volume of liabilities had an upward trend;
- The fact that the level of reserve allocations to cover losses from loans does not exceed the normative requirement is a positive situation in terms of ensuring its liquidity;
- Unsatisfactory return on assets and capital in 2014-2018 is a negative situation in terms of ensuring its solvency. Barclays Bank:
- The high level of highly liquid assets in relation to deposits in 2014-2018 and the growth trend of this indicator in 2015-2018 is a positive situation in terms of ensuring its liquidity;

The decrease in the level of regulatory capital in 2018 compared to 2014 is a negative situation in terms of ensuring its solvency.

According to the results of the study and generalization of the experience of commercial banks of developing countries in ensuring liquidity and solvency:

- According to Sberbank:
- The tendency of highly liquid assets to decrease relative to customer deposits in 2014-2018 is a negative situation in terms of ensuring its liquidity;
- In 2014-2018, while the volume of deposits had an upward trend, it was observed that the share of deposits in the volume of liabilities was high;

 The fact that the amount of regulatory capital has an upward trend in 2014-2018 and the share of regulatory capital in the volume of liabilities in 2014-2017 has a positive trend in terms of ensuring its solvency;

## According to Nurbank:

- The current level of liquidity in 2014-2018, but a significant decrease in this indicator in 2018 compared to 2014 is explained by the fact that the growth rate of customer deposits in this period is higher than the growth rate of highly liquid assets in cash and is negative in terms of bank liquidity;
- Unstable volume of highly liquid assets in 2014-2018, an increase in the share of highly liquid assets in total bank assets in 2014-2016, but a sharp decline in this indicator in 2018 compared to 2016 is a negative situation in terms of ensuring the bank's liquidity;
- The fact that the regulatory capital increased significantly in 2018 compared to 2014 and the amount of regulatory capital has an upward trend in 2015-2018 is a positive situation in terms of ensuring the solvency of the bank;

While the return on assets was relatively low in 2014-2018, the fact that the level of this indicator increased significantly in 2018 compared to 2017 is a positive situation in terms of ensuring its solvency.

### REFERENCES

- Mishkin F.S. Economic theory of money, banking and financial markets. Per. with eng. - M.: OOO "I.D. Williams", 2013. - P. 880.
- [2] Sinky J. Financial management in the commercial bank and in the financial services industry. Per. with eng. M .: Alpina Publisher, 2017 .– 1018s .;
- [3] Yuldashev, N.K., Nabokov, V.I., Nekrasov, K.V., Tursunov, B.O. Modernization and intensification of agriculture in the republic of Uzbekistan. E3S Web of Conferences, 2020, 222, 6033.
- [4] Eshov, M. Influence assessment of enterprise management value based on coefficients methods under the risk conditions. Advances in Mathematics: Scientific Journal, 2020, 9(9), pp. 7573–7598;
- [5] Zhukov, E.F., Eriashvili, N.D. Banking business: textbook. 4th ed. M.: UNITI, 2011. - 687s.;
- [6] Jarkovskaya E.P. Financial analysis of the activities of a commercial bank. Textbook. M : Omega-L, 2010  $\cdot$  325 p :
- [7] Valentseva N.I., Larionova I.V. Assessment of financial stability and prospects for the activities of credit institutions. Educational aid. M .: KNORUS, 2018 . 242 p
- [8] Burkhanov, A.U., Tursunov, B.O. Main indicators of textile enterprises' financial security assessment. Vlakna a Textil, 2020, 27(3), pp. 35–40;
- [9] Zarova, E.V., Tursunov, B.O. Regional features of industrial production dynamics in the research of textile enterprises' financial security in Uzbekistan. Vlakna a Textilthis, 2021, 28(1), pp. 108–115
- [10] Aziz, Ahmed et al. 'Compressive Sensing Based Routing and Data Reconstruction Scheme for IoT Based WSNs'. 1 Jan. 2021: 19 – 35.
- [11] Lopomo Beteto Wegner, D. (2020). Liquidity policies and financial fragility. International Review of Economics & Finance, 70, 135–153. https://doi.org/10.1016/j.iref.2020.06.008
- [12] [Dang, V. D., & Huynh, J. (2022). Bank funding, market power, and the bank liquidity creation channel of monetary policy. Research in International Business and Finance, 59, 101531. https://doi.org/10.1016/j.ribaf.2021.101531
- [13] Littke, H. C. N., & Ossandon Busch, M. (2021). Banks fearing the drought? liquidity hoarding as a response to idiosyncratic interbank funding dry-ups. Journal of International Money and Finance, 119, 102474. https://doi.org/10.1016/j.jimonfin. 2021.102474
- [14] Becker, C. (2021). The liquidity mechanics of dealer banks in the market-based Credit System. Economic Modelling, 105, 105648. https://doi.org/10.1016/j.econmod.2021.105648
- [15] Gupta, J., & Kashiramka, S. (2020). Financial stability of banks in India: Does liquidity creation matter? Pacific-Basin Finance Journal, 64, 101439. https://doi. org/10.1016/j.pacfin.2020.101439
- [16] Chen, W.-D., Chen, Y., & Huang, S.-C. (2021). Liquidity risk and bank performance during financial crises. Journal of Financial Stability, 56, 100906. https://doi.org/ 10.1016/j.jfs.2021.100906

- [17] Ananou, F., Chronopoulos, D. K., Tarazi, A., & Wilson, J. O. S. (2021). Liquidity regulation and bank lending. Journal of Corporate Finance, 69, 101997. https://doi.org/10.1016/j.jcorpfin.2021.101997
   [18] Annual Reports. Concolidated Balance Sheet. www.db.com (Deutsche Bank)
- [19] www.barclays.com
- [20] www.cbr.ru [21] https://www.nurbank.kz.