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Current Issues of Ensuring the Liquidity of Commercial Banks' Assets

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Abstract

This article discusses the role of the central bank in ensuring the liquidity of banking assets, the impact of the state of the capital of commercial banks on their liquidity. At the same time, using econometric methods, the influence of asset quality on its liquidity, as well as deposits and own funds, was analyzed. The article examines the impact of commercial banks' own funds on the liquidity of bank assets, the impact of economic regulation indicators set by the central bank, and the impact of the central bank through monetary policy instruments using econometric models.

Keywords: *Commercial Banks; Bank Assets; Asset Liquidity; Commercial Bank Liquidity; Solvency; Financial Stability; Deposits; Liabilities; Liquidity Risk; Reserve Requirement; Refinancing*

Introduction

During the years of independence, a two-tier banking system, characteristic of a market economy, has been formed in Uzbekistan, which is regularly improved. The market element "competition" always operates in a market economy. One of the important tasks of banks on the path of economic competition is the ability to fulfill their obligations to their customers and counterparties.

In accordance with the Decree of the President of the Republic of Uzbekistan dated May 8, 2020 No. PF-5992 "On the strategy of reforming the banking system of the Republic of Uzbekistan for 2020-2025". Improving the quality of assets of commercial banks and ensuring their liquidity, increasing the level of capitalization and financial stability of banks were defined as priorities. In recent years, great efforts have been made to strengthen public trust in banks, to ensure liquidity, solvency and stability of bank assets.

Liquidity of bank assets - how quickly the assets of commercial banks turn into cash and thereby ensure timely, complete and continuous fulfillment of all monetary obligations of the bank, determines its reliability and adequacy of funds in accordance with the needs of economic development.

Liquidity of bank assets is the ability of commercial banks to fulfill their obligations to their depositors, creditors and shareholders on time, to attract free funds of legal entities and individuals, to develop lending and investment activities.

Also, (Basel Committee on Banking Supervision. (2021)) based on the Basel-3 requirements of the international Basel Committee on Banking Supervision, special attention was paid to the liquidity of bank assets, including the liquidity of commercial banks. Based on the recommendations of the International Basel Committee, new regulatory indicators were introduced to assess the liquidity of commercial banks. In particular, for commercial banks, in addition to the current liquidity and leverage indicators, the normative coefficient of liquidity coverage and the normative coefficient of net stabilization were introduced. By ensuring that commercial banks comply with these norms, the Central Bank will be able to control the liquidity of banks and the liquidity of bank assets at the level of established norms.

The stability of the liquidity of bank assets leads to an increase in the confidence of bank customers in the bank and thus to the expansion of the flow of financial funds in the banking system. When the liquidity of bank assets is unstable, the confidence of customers in banks decreases, which causes them to withdraw their funds from banks. This leads to an increase in non-bank turnover in the economy.

For this reason, it is necessary to study the factors affecting the liquidity of bank assets. It will be necessary to carry out precise analyzes on the level of influence of each factor on the liquidity of bank assets, by changing which factors the best results can be achieved.

Literature review

In the economic literature, the liquidity of bank assets is given almost the same definition by economists. In particular, the liquidity of bank assets (Yensu Joseph, Hadrat Yusif, 2021) is the degree of rapid conversion of bank assets into money. This is achieved by redistributing funds between banks through the money market. It is known that the liquidity of bank assets mainly depends on the quality of assets. Internal and external factors affect bank assets liquidity management.

Internal factors include:

- Quality of bank assets;
- Quality of deposits;
- Degree of dependence on external sources;
- Matching of assets and liabilities by terms;
- Image of the bank;
- Quality of bank management

The state of the commercial bank, as mentioned above, depends not only on internal, but also on a number of external factors, the main of which are:

- general economic and political situation in the country;
- the level of development of the securities market and the interbank market;
- the degree of organization of the refinancing system of the central bank;
- effectiveness of central bank control functions.

Research on banking governance (Marozva, 2015) has shown that bank asset liquidity is a bank's ability to attract cash from representative banks and the Federal Reserve System, which includes potentially liquid assets, purchases of federal funds, new certificates of deposit, stocks, Eurodollars, and defined as the ability to enter debt obligations into circulation.

In the research on bank management and financial services provided by the bank (Farag, Harland, and Nixon, (2013)), the liquidity of bank assets is defined as the ability to find liquid assets at a favorable price, in the required amount and at the right time.

Research has also been conducted on Russian bank asset liquidity problems (Vadova, 2013). The origin of liquidity problems, the factors affecting it and the ways out of the liquidity problem are studied, the bank's liquidity is defined as the ability of the bank to fulfill its obligations and customer's credit requirements on time and at the lowest cost.

Research was also conducted on how to restore the liquidity of Russian banks (Prokofeva, 2019), in his research, he divided the factors affecting bank liquidity into internal and external, and with a broader approach to the concept of bank liquidity, the ability to fulfill the bank's debt, financial and off-balance sheet obligations. defined as ability.

Research has also been conducted on financial management in commercial banks (Nair, Anand, 2020), in which banks' liquidity, unexpected changes causing liquidity problems to the bank, the importance of deposits in the structure of bank liabilities, as well as meeting customer requirements for loans have been studied, and bank liquidity is mainly explained that it is necessary to be able to meet the demand for deposits and loans.

Russian economists (Abdullazanova, Kalacheva 2020), focusing on the liquidity of bank assets, say that in practice, a bank can always fulfill its liquidity requirements not at the expense of its existing assets, but also by attracting resources from the interbank credit resources market, and bank liquidity is one of the generalized indicators, and banking activity shows reliability and defines the bank as liquid if it can fulfill its obligations to customers on time and without any losses.

In an article devoted to banking, establishing a commercial bank (Mashamba, (2018)) expressed an opinion taking into account that the liquidity of banks is controlled by the central bank and expressed the opinion that bank liquidity is an indicator of the health of a bank, and the appearance of problems in this regard is the first diagnosis that shows its violation.

Liquidity of the bank's assets is important for the bank to meet its current and future obligations and payments, as well as the requirements of customers for loans.

Now, if we talk about the scientific researches and theories of bank liquidity management, there are scientific views and theories of foreign and domestic scientists on this topic.

As a result of several repetitions of financial crises in the economy, banks face increasing liquidity risk, which in turn has a negative impact on the activity of banks. At such a time, when liquidity risk occurs in the bank's assets, in the process of managing the liquidity situation, if the liquidity is in balance or falls into a negative state, by making a single important strategic decision, it is possible to prevent the deterioration of the bank's liquidity situation and achieve full fulfillment of obligations (Mukherjee, Pana, 2018)..

The existing strategies for managing the liquidity of bank assets are highlighted in the article written on bank asset liquidity management (Bakhriddin Berdiyarov (2021) within the framework of bank management. This article shows that liquidity management is based on asset management, only liability management, and both at the same time, that is, asset and liability management. Also, taking into account that each control method has its own advantages and disadvantages, an opinion was expressed that it should be used depending on the nature of the operations performed by each bank.

In the article written on the management of liquidity of bank assets (Nure, 2019), it is emphasized that a number of methods of liquidity management have been developed when liquidity problems arise in the operation of the banking system. According to it, we can see that liquidity management is based on the management of assets, liabilities or both instruments at the same time. He also emphasized that the method of managing liquidity through asset management is a relatively old method, according to this method, the bank envisages placing assets in fast-selling securities, and if there is a demand for liquid funds, the bank will sell its assets until the demand for cash is met.

This strategy of liquidity management is usually called asset transformation, because liquid funds are created by turning non-monetary assets into cash.

The liquidity of the banking system (Challoumis, 2019) is ensured by the volume of highly liquid funds, the uninterrupted operation of the payment system, the establishment of general control by the central bank, as well as the stability of macroeconomic indicators.

The effectiveness of banks' activity is determined by their ability to fulfill their obligations to clients on time. It is known from history (Abdullaeva 2003) that when money changers could not pay their obligations and debts or fulfill assignments, did not justify their trust and were irresponsible in their work, their desks were broken and they were declared "banco rotto", i.e. bankrupt.

There are several factors that influence the increase of bank liquidity risks, which require special attention to bank liquidity and continuous monitoring of bank liquidity risk. Therefore, banks are forced to maintain liquidity, even if they lose their income.

On the other hand, if the resources are directed to increase the profitability of banks, then this will affect the liquidity of the bank. Therefore, the liquidity and profitability of banks are shown in an inverse proportion.

The liquidity of bank assets is affected by the liquidity of commercial banks, the level of use by the central bank of monetary policy instruments and the effectiveness of the control functions of the central bank.

Central banks play an important role in ensuring the liquidity of bank assets, and thus the liquidity of the banking system. They influence the liquidity of banks through their monetary instruments, set liquidity standards for commercial banks and monitor their performance.

Research Methodology

The data analyzed in the article is mainly obtained from the data of annual reports of commercial banks, as well as data from the Central Bank of the Republic of Uzbekistan, the "Ahbor-Rating" rating agency.

In the article, the 6 largest commercial banks of the banking system of Uzbekistan ("Asakabank" joint-stock commercial bank; "Uzsanoatqurilishbank" joint-stock commercial bank; "Ipotekabank" joint-stock commercial bank; "Kishloq kurilish bank" joint-stock commercial bank; "Hamkorbank" joint-stock commercial bank; “Agrobank” joint-stock commercial bank) main indicators were used. The total assets of the above commercial banks make up more than 60% of the assets of the banking system. We believe that it is possible to use the results of the above main indicators of commercial banks to ensure the liquidity of bank assets. However, it should be taken into account that most of the above commercial banks are state-owned banks.

In most of the literature, the effect of commercial banks’ asset quality, deposits and own funds on the liquidity of bank assets has not been fully analyzed by econometric methods. We formulated a number of research questions during the research of our article:

What is the effect of commercial banks’ own funds on the liquidity of bank assets?

What are the effects of economic regulatory indicators established by the Central Bank on the liquidity of bank assets?

How can the liquidity of bank assets be affected by the monetary policy instruments of the Central Bank?

In order to find answers to the above questions, mainly quantitative methods were used during the research. Because the main indicators of the banking system (6 large banks that make up more than 60% of the assets of the banking system), analysis of the amount of assets, capital, liquid assets and net profit and their influence on each other were studied in the research topic. The study included a 5-year analysis of the main indicators of the banking system. All data were collected and analyzed quarterly.

Also, the article analyzed the change dynamics of the research problem by selecting the object as the unit of analysis and studying the data for several years using the methodology of longitudinal cross-section (longitudinal) research as an analytical study.

Analysis and Results

As mentioned above, the liquidity of bank assets mainly depends on the quality of assets and the level of risk. Liquidity of bank assets is the ability of the bank to quickly turn assets into cash at the right time and in the right amount without incurring losses in order to meet current and future obligations and payments, as well as credit customer requirements.

Central banks play an important role in ensuring the liquidity of bank assets, and thus the liquidity of the banking system. They influence the liquidity of banks through their monetary policy instruments, set liquidity standards for commercial banks and monitor their implementation.

Now, we will study the analysis of the main indicators of the banking system of Uzbekistan and the impact of these indicators on the liquidity of bank assets, that is, the impact of the quality of assets of commercial banks, own funds and deposits on the liquidity of commercial banks.

We analyze the main indicators of the 6 commercial banks under study and consider the impact of these indicators on the liquidity of bank assets. The total assets of these 6 commercial banks make up more than 60% of the assets of the banking system. We believe that the results of the main indicators of these banks are the basis for drawing conclusions about the state of the republic’s banking system. Therefore, the extent to which changes in the quality of assets, deposits, and own funds of these banks affect the change in the share of liquid assets of commercial banks is the basis for drawing conclusions about the effects of these indicators on the banking system.

In order to consider whether the share of income-generating assets in the total balance sheet (X1), the share of non-income-generating assets in the total balance sheet (X2), the share of deposits in the total balance sheet (X3), the share of own funds in the total balance sheet (X4) depends on the change in the share of liquid assets in the total balance sheet (Y) we perform correlation-regression analysis.

Regression Analysis	
Plural R	0,983773
R-squared	0,967809
Normalized R-squared	0,967178
Standard error	0,040235
Observations	209

As can be seen from this table, with the number of observations being 209, R2 = 0.9678. This indicates that it is a high-accuracy approximation and means that this model fully represents the process.

Analysis of variance					
	df	*SS*	*MS*	*F*	*Importance F*
Regression	4	9,928456	2,482114	1533,28316	6,1373E-151
The rest	204	0,33024	0,001619		
Total	208	10,2587			

The aspect we look at in analysis of variance is the F (Fisher coefficient) test. It is the coefficient that indicates that the analysis has meaning and that there is a relationship between the variables. If this coefficient is less than 0.05, the analysis makes sense. In our analysis, we can see that this coefficient is much less than 0.05. This shows that our analysis makes sense.

	Coefficients	*Standard error*	*t-statistics*	*Significance of "R".*	*Lower 95%*	*High 95%*	*Lower 95,0%*	*High 95,0%*
Y-variable	1,022343	0,021319	47,9556	4,91E-113	0,98031	1,064376	0,98030995	1,064375769
0,6264	-0,97697	0,019105	-51,136	2,73E-118	-1,014639	-0,939301	-1,01463868	-0,9393005
0,073999	-0,97175	0,044484	-21,845	2,581E-55	-1,059456	-0,88404	-1,05945634	-0,88404007
0,314294	-0,0051	0,021441	-0,2377	0,8123137	-0,047371	0,037176	-0,04737113	0,037176119
0,101861	-0,45917	0,104332	-4,401	1,736E-05	-0,664875	-0,253461	-0,66487502	-0,25346149

The indicator we should pay attention to in this table is the “R-value”. If this indicator is less than 0.05 units, it is appropriate to consider the influence of the analyzed independent variables and dependent variables. In our analysis, only the influence of the independent variable “X3” on the dependent variable “Y” is absent or very low.

Based on this, through the regression results, we build our model. In this:

Y=1,022-0,98X1-0,97X2-0,46X4.

This model shows that there is an inverse relationship between the dependent variable and the independent variable. So:

A change in the share of income-generating assets in total assets by 1 unit leads to a change in the share of liquid assets in total assets by 0.98 units;

A change in the share of non-earning assets in total assets by 1 unit leads to a change in the share of liquid assets in total assets by 0.97 units;

A change in the share of total capital in total liabilities by 1 unit leads to a change in the share of liquid assets in total assets by 0.46 units.

Now, we will analyze the main indicators of the banking system of Uzbekistan and consider the impact of these indicators on the liquidity of commercial banks.

Table 1, Information on the comparative indicators of commercial banks

Indicators	**01.01.18y**	**01.01.19y**	**01.01.20y**	**01.01.21y**	**01.01.22y**
Ratio of assets to liabilities, %	**114,2%**	**114%**	**123%**	**119%**	**119%**
Assets, billion soums	166 632	214 420	272 726,6	366 121,1	444 922,4
Liabilities, billion soums	145 956	187 741	221 696,0	307 769,8	374 004,8
Ratio of loans to deposits, %	**207,7%**	**188,5%**	**232,5%**	**141,4%**	**209%**
Loans, billion soums	110 572	133 751	211 581	276 974,8	326 385,5
Deposits, billion soums	59 579	70 001	91 009	114 746,9	156 189,8

As can be seen from the table, deposits of commercial banks have grown in the same proportion as credit flows. In particular, in 2021, commercial bank credit increased by 1.2 times, while commercial bank deposits, considered as its source, increase by 1.4 times. The growth of bank deposits can be seen as the expansion of sources of loan financing in banks.

In the period under analysis, the composition of the liabilities of the banking system, including loans and leases, total deposits and deposits, was studied. During the analysis period, the assets of commercial banks increased by 2.7 times, while their deposits increased by 2.6 times. And it was not bank deposits, but targeted funds attracted from international financial institutions and local funds that served as the source of the growth of commercial banks' assets.

Among the indicators affecting the liquidity of commercial banks, we will examine the share of highly liquid assets and the total capital of the bank in the assets of commercial banks.

Table 2, Financial of the banking system of the Republic of Uzbekistan stability indicators billion soums

Indicators	**01.01.18y**	**01.01.19y**	**01.01.20y**	**01.01.21y**	**01.01.22y**
Total assets	166 632	214 420	272 726,6	366 121,1	444 922,4
Highly liquid assets	37 775,5	20 202	30 873,8	50 475,7	75 992,2
Total capital	20 676	26 679	51 030,6	58 351,3	70 917,6
Liquid assets/ total assets, %	22,7%	9,4%	11,3%	13,8%	17,1%
Total capital/ total assets, %	12,4%	12,4%	18,7%	15,9%	15,9%

As can be seen from the table, while the bank's capital and liquid assets have a tendency to increase, we can see that commercial banks' capital growth rate as a share of total assets is high. During the analysis period, the share of liquid assets of banks in total assets decreased by 5.6% (from 22.7% to 17.1%), while the share of total capital in total assets decreased by 3.5% (from 12.4% to 15.9%). up to) we can see that it has increased.

Also, in order to assess the adequacy of bank capital, when classifying the assets of commercial banks according to the level of risk, non-performing problem assets are classified in the amount of 150%. As a result of these requirements of the Central Bank, commercial banks are encouraged to reduce non-performing assets in their assets and thus try to increase their liquidity.

In addition, the Central Bank will be able to influence the liquidity of the banking system through the refinancing rate. In particular, an increase in the refinancing rate leads to an increase in the cost of loans provided by commercial banks and a decrease in the amount of credit and leasing operations of commercial banks.

In recent years, there has been an increase in liquidity standards set by the Central Bank for commercial banks based on the recommendations of the International Basel Committee. Commercial banks have been fulfilling the requirements of the Central Bank while reducing their profitability. Below we examine the profitability indicators of the commercial banks we are researching.

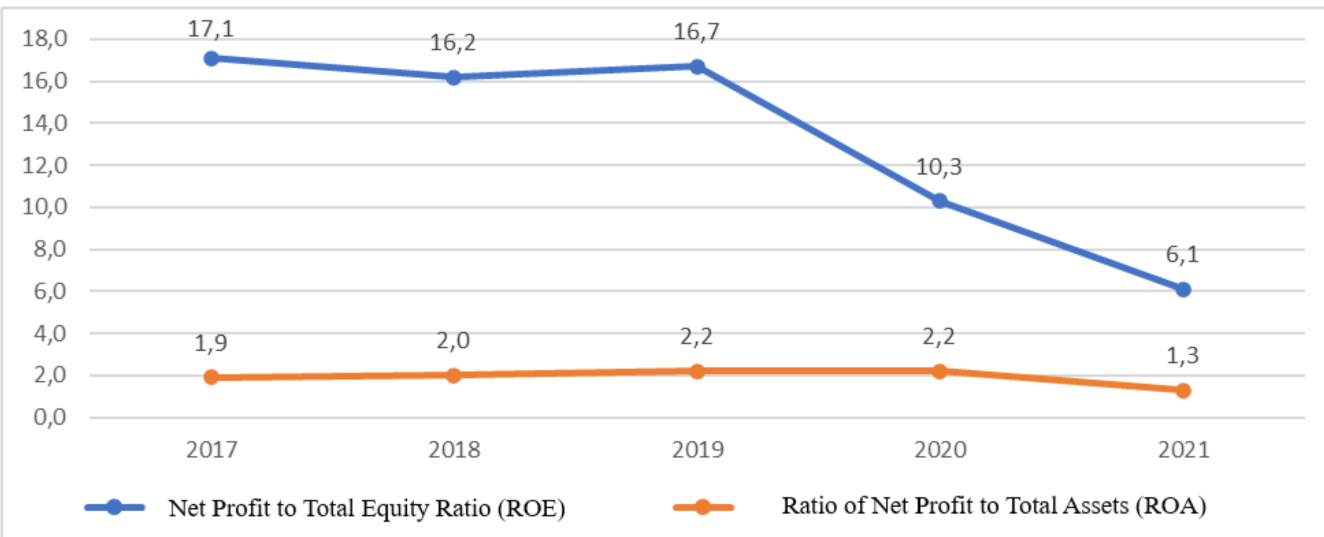

Figure 1. Profitability indicators of the banking system

As can be seen from the above picture, during the past period, due to increased liquidity requirements by the Central Bank, a decrease in assets and return on capital was observed. Currently, the Central Bank's open market operations with government securities also ensure profitability of liquid assets of commercial banks. This encourages commercial banks to purchase government securities to ensure their liquidity and profitability.

Conclusion

The liquidity of banking assets, as we indicated above, determines the timely, complete and uninterrupted fulfillment of all monetary obligations of the country's banking system, its reliability and sufficiency of funds in accordance with the needs of economic development.

The Central Bank plays an important role in increasing the liquidity of banking assets and ensuring it. While the Central Bank has direct influence on the liquidity of bank assets through monetary policy instruments, it controls the liquidity of bank assets, ensuring that the economic rules set for commercial banks are enforced. Each commercial bank, which is a member of the banking system, contributes to ensuring the liquidity of banking assets by meeting the economic normative indicators established by the Central Bank.

Based on the above analysis and data, we consider the following directions for increasing the liquidity of bank assets:

1. Management of the liquidity of bank assets through the central bank refinancing rate. In this case, when the problem of liquidity of bank assets arises, the Central Bank should wait for the refinancing rate and thereby try to moderate the rate of growth of commercial banks' loans and money supply. If a surplus of liquid bank assets is observed, it affects the money supply and the liquidity of the banking system by lowering the refinancing rate and encouraging the population and economic entities to take loans.

2. A high refinancing rate leads to the use of the national currency as a means of accumulation. This means that commercial banks can attract free funds in the hands of the population to bank deposits and thus these funds to bank circulation. In this case, it is appropriate to attract these idle funds to long-term deposits of commercial banks. This serves to increase the liquidity of the banking system.

3. Through open market operations, the Central Bank affects the liquidity of bank assets. In this case, the Central Bank ensures that commercial banks' assets are both profitable and liquid at the expense of selling government securities to commercial banks. Through this, commercial banks are encouraged to maintain a sufficient amount of liquid assets in their assets. In particular, funds in the "NOSTRO" account of commercial banks can be directed to the purchase of government securities. This will increase the profitability of commercial banks.

4. The Central Bank controls the liquidity of the assets of commercial banks and thereby the liquidity of the banking system by ensuring the fulfillment of economic regulatory indicators set for commercial banks.

References

Abdullaeva Sh. (2003) "Banking", Tashkent, "Financial Institute", Textbook, 312 pages.

Abdullazanova K.Z., Kalacheva E.A. Analysis of the state of liquidity of the banking sector in Russia // Scientific research of the XXI century. 2020. № 1(3).p.112-118.Marozva, G. (2015). Liquidity and bank performance. The International Business & Economics Research Journal, 14(3), 453:462.

Bakhriddin Berdiyarov (2021). Uzbekistan in Banking Practice: Opportunities to Use Foreign Experience to Ensure Liquidity and Solvenity of Commercial Banks // ICFNDS 2021: The 5th International

Conference on Future Networks & Distributed Systems. December 2021, pp 378–392https://doi.org/10.1145/3508072.3508141.

Basel Committee on Banking Supervision. (2021). Basel III: International framework for liquidity risk measurement, standards and monitoring. Switzerland: Bank for International Settlements.

Challoumis, C. (2019). Theoretical Definition of the Velocities of Escaped Savings With Than of Financial Liquidity. SSRN Electronic Journal.

Decree of the President of the Republic of Uzbekistan dated (May 12, 2020), No. PD-5992 "On the strategy of reforming the banking system of the Republic of Uzbekistan for 2020-2025".

Farag, M., Harland, D. & Nixon, D. (2013). Bank capital and liquidity. Bank of England Quarterly Bulletin, 53(3), 201-215.

Mashamba, T. (2018). The effects of Basel III liquidity regulations on banks' profitability. Journal of Governance and Regulation, 7(2), pp.34–48.

Mukherjee, T. and Pana, E. (2018). The distribution of the Capital Purchase Program funds: Evidence from bank internal capital markets. Financial Markets, Institutions & Instruments, 27(4), pp.125–143.

Nair, A.R. and Anand, B. (2020). Monetary policy and financial stability: Should central bank lean against the wind? Central Bank Review.

Nure, G. (2019). High Liquidity or Low Liquidity Is Better to Achieve High Profitability? Evidence from Banks in Central and Southern Europa. International Finance and Banking, 6(2), p.1.

Prokofieva E.N. Liquidity of the Russian Banking Sector in Conditions of Instability: Formation Trends and Consequences for the Economy // Bulletin of the North Ossetian State University. K. L. Khetagurova. (2019). No. 2. P. 130-136.

Vodová, P. (2013). Liquid assets in banking: What matters in the Visegrad countries? E+ M Ekonomie a Management, (3), 113.

www.bis.org Official website of the international Basel Committee on Banking Supervision.

www.cbu.uz - the official website of the Central Bank of the Republic of Uzbekistan.

Yensu Joseph, Hadrat M. Yusif, Emmanuel Tetteh, George Asumadu, Daniel A. Atuilik. Main Determinants of Banks' Stability: Evidence from Commercial Banks in Ghana. Journal of Finance and Economics. (2021). Vol. 9. no. 2. P. 42-52.

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