



## Ensuring the Stability of Banks During Covid-19 Pandemic

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### Abstract

Such a precarious situation that continues around the world today is causing major shifts in the economies of any large, sufficiently developed country. At the same time, the spread of the COVID-19 virus in Uzbekistan has led to a number of socio-economic and political changes in the country. Such pandemic conditions have caused the world economy to become inactive, stagnant. This, in turn, requires the country to mobilize all its resources to mitigate the impact of the negative consequences, in the event of low losses, that is, to get out of this situation rationally, using the available resources.

**Keywords:** Bank liquidity; risk; credit vacation; lending; operational risk; substandard credit; bad credit.

### 1. Introduction

The ongoing pandemic around the world has already had a significant impact on the banking system, which is the heart of the economy. This situation has led to a sharp decline in the level of solvency of banks as a result of disruptions in the activities of their customers, the failure to repay loans on time. With this in mind, banks were forced to grant credit leave to their customers based on government decisions. This, in turn, had a negative impact on the liquidity of banks.

First, the repayment of 19.5 trillion soums of loans to entrepreneurs and the population was postponed for 6 months. It is not classified as revised in terms of credit quality for banks. It is no exaggeration to say that this decision was exhausting for the bank's customers. However, this has a negative impact on the liquidity level of banks. This is because the funds that have reached the banks on time will not arrive on time, that is, they will be delayed. This will lead to some difficulties in carrying out operations with these funds, which the bank has planned in advance. As a result, the need for banks to attract additional resources will increase sharply. During the economic downturn, banks face the problem of forming a supply to meet this demand.

In addition, in the context of the pandemic, there has been a decrease in the amount of money flowing to banks, which is also likely to weaken the solvency of banks. In this context, with a sharp increase in demand for food among the population, there is a decrease in payments for other secondary needs. The government's control over the sale of basic necessities minimizes the income of entrepreneurs. This can also be described as a side effect for banks.

Banks, unlike other economic and financial services organizations, are characterized by the fact that they are required to take into account any expected probabilities in their activities. That is, banks will also try to manage

future losses as they continue to operate. That is, they will have assessed the risks and developed a management strategy. This is evidenced by the fact that the pandemic is over, and the number of negative consequences for the banks, as to whether the Uzbek banks are properly managed in the conditions or whether there is a need to conduct research on them. It is no exaggeration to say that the COVID-19 virus serves as a “test” for the situation in each area for each country “visited”. At the same time, despite the criteria of the ten most developed countries in the world, the poorest, the hottest, the best geographical location, etc., it gives the impression of “waking up from a deep sleep” in front of the virus. China, the homeland of the virus, has been able to partially defeat the virus in 3-4 months due to its strict discipline and economic strength. The United States, which has the world's greatest power, has been unable to contain the virus due to a slight delay in assessing the virus, and has the highest number of casualties (in terms of casualties and illness). European countries, such as Italy and Spain, were forced to move to a strict total quarantine regime without correcting the situation due to indifference. In addition, developed countries such as Korea, the Russian Federation, and Iran are experiencing economic inactivity due to the pandemic. It is absolutely correct to say that this has had a negative impact on the world economy, the world economy. For example, many large companies have been forced to shut down as a result of the sharp drop in oil prices on the world market and the growing demand for medical devices and medical devices and equipment used to fight the virus. Therefore, it is natural that the pandemic will not bypass Uzbekistan, as it did to the whole world. Measures taken on the basis of government decisions in both the economic and socio-political spheres allow us economists to estimate the possible negative consequences in the future. Therefore, we must take measures to mitigate the negative consequences of the pandemic on the economy of Uzbekistan.

In our opinion, we are likely to see the following negative consequences in the future:

- high growth of the existing unemployment rate as a result of economic inactivity;
- Complicating the lending process in banks;
- unconventional rise in the exchange rate, devaluation of the national currency;
- termination or bankruptcy of business entities of a seasonal nature;
- Problems in the activities of enterprises due to delays in attracting investment, related to negotiations, training or, if necessary, travel abroad:
- Loss of investment attractiveness:
- budget deficit at the expense of losses (unexpected expenses) to the state budget:
- Delays or non-receipt of funds in the budget as a result of benefits created in the tax system, etc.

## 2. Methods

In general, this list could go on for a very long time, but given the aspects that have been achieved in a way that requires nothing due to the pandemic, it will be easier for us to accept and take action.

In doing so, the whole of humanity analyzes the damage done to nature in the course of its own achievements by nature without human beings, the restoration of lost values in human life, the restoration of relationships, and the “pause” caused by the pandemic. conditions have been created for them to be more attentive to future mistakes and omissions.

The Bank carries out financial operations during its activity. In this process, banks face various risks and try to protect themselves from them. This requires studying the circumstances that create the conditions for the emergence of risks in banks and taking measures to identify them in advance.

The fact that economic factors cause banking risks has been studied by many scholars and experts, and it may be possible to predict some of them. Non-economic factors reflect the urgency of the issue, such as the inability of the bank to forecast its activities and economic measures to eliminate it. Uzbek scientists Sh.Abdullaeva, O.Abdurahmonov, A.Amonov, B.Berdiyarov, T.Bobokulov, N.Jumaev, N.Idiev, T.Karaliev, N.Karimov, J.Majidov, F.Mirzaev, E.Muminova, D.Nafasov, V.Pshenichnikov, M.Tojiev [1] in their scientific works focused on various components of banking risks. For example, prof. Abdullaeva studied credit risks and recommended the active use of credit scoring methods in their prevention. Prof. F. Mirzaev studied the risks associated with the financial market and described the approaches to their assessment. Dots. E. Muminova, on the other hand, has formed a scientific conclusion on the risks of mortgage lending.

We believe that the government is taking all necessary measures to mitigate the negative consequences of the pandemic on our economy in the future. At the same time, we believe that we can reduce the damage caused by the quarantine regime if we do the following. First, a sharp decline in the solvency of the population during the long-term quarantine period will lead to a sharp increase in the number of unemployed after quarantine after the depletion of bar stocks, ie the use of funds. Although officially considered unemployed, the number of people in Uzbekistan who earn money by participating in the shadow economy on a daily basis is almost 70%. For this

reason, we believe that the government should now introduce social support packages and provide the necessary products. Because only then will the state show that it is the main reformer.

Second, the activities of entrepreneurs, enterprises and large companies have also come to a standstill due to the introduction of self-isolation in a pandemic. This forced the company to take its employees on temporary paid leave, some at their own expense. The requirements of quarantine rules have been strengthened for entrepreneurs who continue their activities. This in itself creates unexpected costs. Due to this, it is necessary to introduce tax benefits for a large number of entrepreneurs (taxpayers to the budget). This will save not only the activities of entrepreneurs, but also future tax payments to the budget.

Third, the development of a normative document for entrepreneurs engaged in tourism activities, which will be in force until the resumption of special flights, will also allow to maintain the activities of existing tour companies.

Fourth, we believe that digitization should be implemented without hesitation in all systems, regardless of the type of activity, in education, health, taxation, public services, banking, education, culture, communication and so on. In this way, it is possible to see the existing shortcomings and opportunities in the transition to digitalization in the relevant areas. This will serve as a "rehearsal" for us to introduce the digital economy and new innovations, which we set ourselves in early 2020. It will be possible to eliminate the shortcomings in each area until the full transition to digitalization, and to prepare the population for this level and opportunities, to show its advantages.

As we continue our research, we will try to consider some of the economic factors that may pose banking risks. Participation of commercial banks in REPO operations of the Republic of Uzbekistan. According to the Central Bank as of July 15, 2020, the weighted average interest rate on REPO operations is 15%. The fact that this rate is less than 15.5% of the current inflation expectation in the country [2] has an impact on reducing the interest of commercial banks in the financial market. In other words, commercial banks may face the risk of devaluation of their assets by purchasing Central Bank bonds. Also, the seasonal nature of inflation expectations remains one of the factors contributing to the risks in the activities of banks. For example, in Uzbekistan, a decrease in price expectations for agricultural products or, conversely, an increase in them during the winter months affects the value of banks' assets.

In our view, higher inflation expectations than interest rates in the financial market will lead to a further increase in the risks of commercial banks, which will have a significant impact on the decline in the value of bank assets.

Second, the unstable relationship between deposit interest rates, inflation and the exchange rate does not create the conditions for banks to effectively implement risk management strategies.

The fact that the annual amount of deposit rates is equal to or partially different from the annual rate of inflation has a significant impact on the financial attractiveness of the deposit. This puts banks at risk of attracting funds through deposits. Also, a significant increase in exchange rate devaluation processes will weaken the population's desire for deposits. For example, the appreciation of the US dollar against the national currency increases the desire of the population to keep their savings in foreign currencies rather than in deposits. This is reflected as a second factor that reduces the attractiveness of deposits.

### **3. Results**

It should be noted that in 2019, the growth of deposits in foreign and national currency in the first half of the year had a stable dynamics. By August 2019, it can be seen that the devaluation of our national currency against foreign currency has increased significantly. In the fourth quarter of 2019 and January 2020, deposits in foreign currency increased, while deposits in national currency decreased.

From February 2020, there has been a downward trend in foreign currency deposits. In our opinion, the main factor of this trend can be explained by the cases of temporary loss or decline in income of the population as a result of the emergence of a pandemic situation in the world. The reason is that the decline in incomes of the majority of the population in the national currency has further accelerated the trend of selling foreign currencies. As a result, foreign currency deposits decreased.

In general, the development of downward trends in the volume of deposits in both foreign and national currencies is leading to a decrease in the practice of banks to raise funds. This affects the risk of passive operations of banks.

In our view, the instability of the country's balance of payments in terms of current operations is having an impact on the devaluation process. At the same time, the fact that inflation expectations remain high also has a negative impact. This, in turn, serves as a factor that negatively affects the stabilization of the attractiveness of commercial banks in attracting passive operations or deposits. We believe that non-economic factors also play a role in the occurrence of risks in banks and should be taken into account. We will look at some of them below.

Level of financial literacy. Increased costs or time-consuming factors in the activities of banks is a matter of literacy in the organization of bank-customer relations. The category of financial literacy has become one of the most pressing issues in Uzbekistan. In this regard, the Central Bank of the Republic of Uzbekistan is also taking significant measures. In particular, the launch of a portal aimed at increasing financial literacy ([www.finlit.uz](http://www.finlit.uz)) is of particular importance. It is also planned to join the Alliance for Financial Inclusion of Uzbekistan by the decision of the Board of the Central Bank of Uzbekistan dated August 17, 2018. It is known that since the last days of the first quarter of 2020, quarantine measures have been introduced in Uzbekistan. As a result, it was required to remotely meet the demand for financial services of individuals and legal entities.

In general, the following problems with the Internet may occur:

- There is a risk of incomplete delivery of existing remote banking services due to disruptions in the Internet;
- the risk of "disruption" in the bank-customer relationship due to the lack of full online transfer of banking services in a pandemic;
- risks associated with repayment of consumer loans issued by banks as a result of non-use of online services by a large segment of the population;
- The occurrence of an emergency interruption of the Internet does not create conditions for the termination of banking services.

In this regard, PhD Z. Mamadiyarov cites the following scientific conclusions [3].

- Ensuring the quality of Internet services and increasing the speed of the Internet in all regions of the country;
- to see the possibility of connecting "Mobile-banking" and "SMS-banking" services for individuals not only through bank plastic cards, but also directly to deposit accounts in the bank;
- The low level of provision of external services in the country, ie the sharp increase in the number of bank cards and equipment servicing them (payment terminals, info kiosks and ATMs) in the regions [15, 16].

In short, the Internet also has an impact on bank risk creation. Therefore, the provision of online services across the country is closely linked to the quality of the Internet. Third, power outages. It is known that the full implementation of the activities of banks is largely due to the uninterrupted supply of electricity. For example, on January 8, 2020, the World Bank's report on economic growth summed up the trends in electricity supply in Central Asia. In particular, he notes that the probability of power outages in Uzbekistan is inversely proportional to its size [4].

The occurrence of this situation will have a serious impact on the provision of banking services. In this regard, it is advisable to take measures to provide alternative energy supply to the premises of each banking institution. Fourth, the occurrence of interruptions in the activities of the bank plastic card service (Uzcard). It is known that the service of plastic cards of commercial banks is carried out by Uzcard (Uzkard). In our country, these outages occur from time to time. In particular, this service can be seen in the March 2019 issue of the newspaper Khalq Sozi. On March 7, 2019 and from September 15 to September 17, 2018, it was out of order throughout the country. As a result, millions of Uzbeks lost their purchasing power in two days. The system's failure has affected the circulation of more than 18 million plastic cards in Uzbekistan. As a result of this failure, the state, according to various estimates, lost about 27 billion soums in three days [5]. It is obvious that the occurrence of these interruptions has a significant impact on the risks in the activities of banks. In our opinion, it is expedient to identify in advance the risks arising from the economic and non-economic factors mentioned above and to take measures to eliminate them. We also believe that the elimination of these risk factors will serve the financial stability of banks.

#### 4. Analysis

We try to analyze the credit practice of the most profitable operation of banks. In our study, what types of loans have the greatest impact on troubled assets (MA) in the activities of banks? we tried to find the answer through a correlation analysis of the question in the content. To do this, we performed our analysis of problem assets as a fixed factor, taking the volume of microcredits (Km) and loans to individuals (JK) as a variable.

We used the capabilities of Microsoft Excel for regression analysis. As a result, we obtain the relationship reflected in formulas 1 and 2)

$$M_a = 2995.3 \times K_m - 110864 \quad (1)$$

$$M_a = 205.4 \times J_k + 116169 \quad (2)$$

We can see that the impact of microcredit on small business ( $R^2 = 0.82$ ) is less than the impact of loans to individuals ( $R^2 = 0.75$ ). In general, it should be noted that the distribution of loans to individuals is consistent with the distribution of troubled assets. At the same time, it should be noted that the share of loans to individuals in each sum of the occurrence of problem assets is greater.

In general, we do not believe that all the factors are sufficient to overestimate the trends in asset management in Asaka JSCB and thereby reduce banking risks. The reasons for this are:

- Assets of substandard, doubtful and hopeless quality have been growing in recent years, leading to an increase in demand and risk for the bank's capital adequacy;
- The volume of non-performing assets is also on the rise;
- The increase in the volume of special reserves is formed in line with the increase in the total volume of assets;
- The volume of revised assets is stable compared to other quality assets and shows the stability of experience in concluding contracts;
- the share of non-performing assets in total assets is 2.3%;
- The impact of loans to individuals on the emergence of problem assets is greater than the impact of microcredits on small business. We believe that it is expedient to reconsider the terms of lending to individuals or to optimize the issuance of such loans in general.

Continuing our research, we consider the classification of TIF National Bank's asset quality and the factors that affect them. The data in Table 2 show that the share of standard classified assets in 2015-2019 remains around 93 percent and does not reflect a sharp change. If there is a decrease in substandard and related assets in 2019 compared to the previous year, it can be seen that the share of bad assets has increased. This can be attributed to the increase in unsatisfactory and doubtful assets in 2017-2018.

Table 1: Asset quality structure of the National Bank, mln. sum

Indicator	2015	2016	2017	2018	2019
<b>Standard</b>	10 626 489	13 764 840	36 084 367	45 030 551	53 770 811
<b>Substandard</b>	524 096	375 262	2 144 871	1 693 625	1 871 910
<b>Unsatisfactory</b>	62 187	30 257	199 419	414 941	495 573
<b>Suspicious</b>	59 734	41 032	143 269	292 288	222 480
<b>Hopeless</b>	64 138	70 489	314 638	349 601	639 123

The volume of non-performing assets at the disposal of the TIF National Bank will reach 442.8 billion soums by 2019. soums, which is 97.1 bln. soums more than in 2018. soums. In general, it should be noted that there is a more positive approach to banking risk management in the activities of this bank. For example, it should be noted that the declining trend in assets whose terms have been revised has been significant.

In turn, just as we conducted a correlation analysis of some of the factors influencing the occurrence of problem assets in Asaka JSC, in TIF National Bank we will assess these indicators - the role of microcredits for small businesses and loans to individuals in the formation of problem assets. To do this, we again used the capabilities of Microsoft Excel. As a result, we determined the relationship reflected in formulas 3 and 4.

Table 2: National Bank assets and reserves, mln. sum

	2015	2016	2017	2018	2019
<b>Problematic assets</b>	175 092	149879	381428	539 872	442 779
<b>Special reserves</b>	150 343	136 132	650 100	766 060	1 074 219
<b>Reserves created for standard assets</b>	-	-	117 309	201 238	306 837
<b>Terms revised assets</b>	117 417	107 433	240 730	352 203	105 693
<b>Unsecured assets</b>	328 915	304 303	1 599 289	554 691	649 578
<b>Trusted assets</b>	-	-	-	-	-

$$M_a = 0,577 \times K_{\text{т}} + 165738 \quad (3)$$

$$M_a = 0,176 \times \mathcal{K}_x + 119873 \quad (4)$$

In this:

Ma - problem assets;

Km - microcredits for small business;

Jk - loans to individuals.

In contrast to Asaka ATB, although the impact of microcredit on small business ( $R^2 = 0.46$ ) is higher than the impact of loans to individuals ( $R^2 = 0.71$ ), we can see that the correlation in the formation of problem assets is below average. In general, it should be noted that the distribution of loans to individuals is consistent with the distribution of troubled assets.

## 5. Discussion

Based on the research, we were able to draw the following conclusions:

- There are various trends in the classification of asset quality in selected banks;
- Asaka JSC has some difficulties with asset quality management, which can pave the way for the formation of banking risks;
- TIF The quality of the National Bank's assets is relatively optimal, with 0.77% of non-performing assets in total assets reflecting financial stability;
- Regression analysis aimed at detecting asset instability in selected banks shows that there is a significant impact of loans to individuals;
- Achieving their consistency with capital in the effective management of the quality of bank assets. At the same time, we think it is important to take measures not to lag behind the amount of capital in relation to the volume of assets.

**6. Conclusion.** Ensuring the financial stability of banks prevents the scope of exposure to banking risks. As a result of our research, we came to the following conclusions:

- first, the high share of non-performing assets in total assets;
- second; the share of high-risk assets in total assets is very high;
- third, underdevelopment of investment operations of banks with securities;
- fourth; low return on bank assets (ROA).

After studying foreign experience (in particular, the banking systems of Germany and Japan), we developed the following proposals:

- to pave the way for banks to purchase and sell financial instruments, in particular securities, to ensure sustainable financial resources in order to ensure their financial stability;
- introduction of new methods of effective management of assets and liabilities of banks (for example, derivative weapons, widely used in Germany and Japan);
- extensive use of securitization methods widely used in Japanese and German practice to ensure financial stability;
- ensuring a balance between the maturity and volume of assets and liabilities.

When determining the creditworthiness of the client (individual) by the above calculation formulas, it is necessary to assess its fluctuations as follows. if the capacity is  $L_k \geq 0$ , it will be possible to provide credit to the customer. conversely, if  $L_k < 0$ , we recommend considering one of the following three solutions:

- consider the possibility of reducing interest rates on loans;
- consider the possibility of extending the term of the loan;
- non-provision of credit.

We have formulated the following conclusions on the compatibility of capital and return on assets:

It was noted that the criterion set by the Central Bank of the Republic of Uzbekistan for capital adequacy is directly proportional to the return on assets and inversely proportional to the return on capital.

## References

- [1] Abdullaeva Sh.Z. Diversification of the loan portfolio of commercial banks in the context of banking risks: i.f.d. ... abstract. - T.: BMA, 2000. - 46 p.
- [2] The Central Bank of the Republic of Uzbekistan. Monetary Review 1st Quarter 2020. Electronic source: [https://cbu.uz/upload/iblock/c97/Monetary\\_Policy\\_Report\\_2020Q1\\_Uz.pdf](https://cbu.uz/upload/iblock/c97/Monetary_Policy_Report_2020Q1_Uz.pdf)
- [3] Mamadiyarov, Z. (2021). ANALYSIS OF FACTORS AFFECTING REMOTE BANKING SERVICES IN THE PROCESS OF BANK TRANSFORMATION IN UZBEKISTAN. Financial and Credit Activity Problems of Theory and Practice, 1(36), 14–26.

- <https://doi.org/10.18371/fcaptop.v1i36.227607>
- [4] World Bank. 2020. Global Economic Prospects, January 2020: Slow Growth, Policy Challenges. Washington, DC: World Bank. p. 89.
  - [5] Uzcard stopped working again. The company has stated the reasons for this. People's Word newspaper. March 7, 2019. <http://xs.uz/uzkr/post/uzcard>
  - [6] Yegorkin E.A. Foreign methodological approaches used to assess the financial stability of the regional banking system // Regional problems of economic transformation. - M.: 2014. - No. 11. S. - 143-147. [www.rppe.ru](http://www.rppe.ru)
  - [7] Jo'raev I.I. Strengthening the deposit base of commercial banks of the Republic of Uzbekistan: i.f.b.f.d. (PhD) dissertation abstract. - T.: TMI, 2020. - 56 p.
  - [8] Dodiev F.U. Ways to develop investment activity of commercial banks // Journal of Economics and Finance. - T.: 2014. - №3. B.23-29.
  - [9] Vyatkin V.N., Gamza V.A., Maevsky F.V. Risk management: Textbook. - 2nd ed., Rev. And add. - M.: Yurayt Publishing House, 2019.- 365 p.
  - [10] Gulyamov S.S., Zhumaev N.Kh., Rakhmonov D.A., Tashkhodzhaev M.M. Ijtimoiy sohada investimentlarning samaradorliga. Monograph. -T.: IQTISODIYOT, 2019. - 335 p.
  - [11] Bayborodina M.N. Mergers and acquisitions of credit institutions in the strategy of achieving leadership in the banking services market: abstract ... Ph.D. - M.: FGBOU VPO "State University of Management", 2012. - 32 p.
  - [12] Berdiyarov B.T. Issues of ensuring liquidity and solvency of commercial banks of the Republic of Uzbekistan. Monograph. - T.: Finance, 2020. -170 p.
  - [13] Nafasov D.B. Improving the theoretical and practical basis of risk management of commercial banks: i.f.b.f.d. (PhD) dissertation abstract. - T.: TMI, 2017. - 56 p.
  - [14] Otamurodov H. Issues of optimizing the loan portfolio management of commercial banks // Journal of Business Expert. - T. 2019. - №3 (135)-2019.
  - [15] Toshtemirovich Mamadiyarov Z. Risk Management in the Remote Provision of Banking Services in the Conditions of Digital Transformation of Banks //The 5th International Conference on Future Networks & Distributed Systems. – 2021. – C. 311-317.
  - [16] Toshtemirovich Mamadiyarov Z. et. al. Impact of Covid-19 Pandemic on Accelerating the Digitization and Transformation of Banks //The 5th International Conference on Future Networks & Distributed Systems. – 2021. – C. 706-712.