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Indicators to Assess Financial Security of the Banks

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Abstract*: Ensuring liquidity and sustainability of commercial banks enables to satisfy the needs for loans extended to individuals and legal entities, as well as to provide continuity of the payments in the economy. In turn, banking liquidity and ensuring solvency are considered to be a crucial precondition for ensuring their financial security. As far as we know in the world practice there is no single approach to the financial security of banks and the system of assessment indicators. Statistic data used in various countries required to the calculation of assessment indicators vary in different countries. This, in turn, does enable to entirely assess the financial security of banks. Methodology of the study was based on modern foreign scientist`s research works. In the article was used indicators coefficients and the data provided from the Central Bank of the Republic of Uzbekistan. In this regard this article is devoted to the research of scientific-theoretical aspect of financial security. In addition, the article specifies the indicators used to assess financial security of commercial banks. The research has been conducted on the case-study of joint-stock commercial bank "Asaka" operating in our republic. Moreover, the article presents assessment of the financial security of "Asaka" JSCB, as well as determines the problems associated with ensuring financial security. In addition, the article contains scientific proposals aimed at eliminating the problems specified above. In terms of the method available, the indicators used for assessing financial security are fit for the enterprises, however, such indicators haven't been developed for banks. In the method proposed in this article, the indicators used for assessing financial security have been structured in terms of the peculiarities of commercial banks operating in the republic.

***Keywords* : commercial banks, liquidity, solvency, financial security, risk, transformation risk, non-performing loans, reserves.**

I. INTRODUCTION

Currently under modern economic conditions, financial security of the bank is considered to be one of the most crucial issues. It should be noted, that a number of factors may make a negative impact on the financial security of the national banking sector. In particular, the processes of globalization of the banking performance will strengthen a negative impact on the financial security of the bank and the imperfect corporate governance of the bank will lead to the occurrence of systemic risks in the banking system.

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In this regard each bank should set up its own security system against threats of external factors and internal risks.

Ensuring liquidity of banks, strengthening their financial stability, raising their capital and deposit base constitute a necessary prerequisite for ensuring macroeconomic stability and high economic growth rates. This fact primarily necessitates the need to ensure their financial security based on current regulatory requirements and relevant criteria. The reason for this is that inadequate financial security of the banking system can result in occurrence of unbalanced liquidity at commercial banks and insufficient capital of banks. It should be noted that developed countries have gained a rich experience of ensuring financial security of commercial banks. In particular, there is maintained adequate volume of commercial banks' deposits and the current liquidity of banks complies with the level of current regulatory requirements.

II. LITERATURE REVIEW

Economic literaturary sources provide various scientific and theoretical views on the financial security of banks and thee opinions sometimes contradict each other.

Issues of investing in the economy and increasing export potential in the regions of Uzbekistan were studied by academicians I. Iskandarov, scientific work by such economists as Khodiev B.Yu., Mustafakulov Sh.I. [16], Tursunov B.O. [17] and other economists. Financial frictions and export dynamics in large devaluations aspects were investigated by David Kohn, Fernando Leibovici, Michal Szkup [18] For example issues of stakeholder communication framework for business positioning among manufacturing were investigated by Mahadevan Krishman and Jamilah Ahmand. [16] In the opinion of A.Baranovkiy, the term "financial security of banks" implies the complex of such conditions which have no opportunity to make damage to the financial position of banks, their overall performance, property storage, as well as to reproduction and infrastructure. Moreover, financial security of banks can not set obstacles for the objectives determined in the bank charter and in this regard can be considered as a means of protection of the operating environment, financial stability and financial benefits of banks. [1] From the point of view of T.Bolgar, the term "financial security" concept means the condition of the banking institution characterized by the resistance to the external and internal threats, achieving the goals set and availability of the financial resources sufficient to ensure a stable development. [2] According to the research conducted by a group of scholars headed by A.Yepifanov, financial security of the bank is considered to be an important and indivisible structural part of the overall economic security of the bank because in order to be reasonably secured, a successful bank must possess adequate amount of resources and funds. [3] In this regard, on the basis of ensuring financial security of the bank, these funds can be divided into two (general and special) groups comprising of 14 principles. The first group includes the principles of comprehensiveness, objectivity, legality, continuity, confidentiality, purposefulness, expediency and compliance with the aim.

The second group includes the principles of compromise, volatility, prudence, flexibility, transparency, synergy, constancy. An economist A.Khitrin describes financial security of the bank as such a dynamic condition under which the bank possesses its inherent peculiarities to perform its functions in terms of legal and technical aspects and actually performs these functions; ensures strong protection of social and economic benefit of citizens, economic entities, society and the government against the internal and external threats; possesses the relevant potential in terms of both quantity and quality, as well as the mechanisms required to implement this potential by the own will. [4] In the opinion of Z.Sorokivskaya, financial security of the bank is the complex of measures aimed at protection and rational use of the resources disposed by the banking institution intended to prevent the treats to its performance in order to get a maximum profit. [5] N.I. Zubok interprets financial security of the bank as the stable performance ensuring protection of internal and external stabilization factors irrespective of the conditions for the banking performance with the aim of obtaining basic benefits and aims. [6] In addition to the financial security of the banking institution, it also considers the threats inherent in banking sector. The author of the article divides the threats existing in the banking sector into internal (direct) and external threats occurred as the result of the environmental impact on the bank. Currently bank managers challenge the tasks to detect these threats in due time, to mitigate them and, if possible, to prevent them. According to Professor J. Sinky of the University of Georgia, the USA, deepening globalization processes raise the exposure of commercial banks to systemic risk, i.e. risk of default. [7]

This conclusion of J. Sinky is that under high growth rates of the operations of commercial banks at the international financial markets, there is a high possibility of occurring credit risk, currency risk and stock risk.

A famous Russian economist O.Lavrushin supposes that the following factors are crucially important when ensuring financial security of commercial banks:

- regulation of commercial banks' performance through economic standards and norms;
- development of the supervision system over the banking performance;
- warning system of banks against the crisis;
- improving the practice of financial rehabilitation of commercial banks. [8]

Thus, financial security of the bank is interpreted as the level of capital adequacy; protection of the interests of customers, society and the government; financial stability, i.e.the level of stability against internal and external risks.

In this regard it is required to undertake appropriate measures aimed at assessing and ensuring financial security of banks on a regular basis.

III. RESEARCH METHODOLOGY

Significant increase in capital adequacy requirements of commercial banks set by the Central Bank of Uzbekistan constitutes one of the necessary conditions for their financial security (Table 1). As it is obvious from the data provided in Table 1, the Central Bank of the Republic of Uzbekistan is gradually increasing requirements for the regulatory capital and tier 1 capital of commercial banks by January 1, 2019. This fact will definitely enhance the level of financial security of commercial banks.

Table-I: Requirements to the capital adequacy of commercial banks of Uzbekistan, in percent [9]

Effective date of the requirement	Requirement to the regulatory capital	Requirement to tier 1 capital
by September 1, 2015	10,0	5,0
September 1, 2015	10,0	7,5
September 1, 2016	11,5	8,5
January 1, 2017	12,5	9,5
January 1, 2018	12,5	9,5
January 1, 2019	13,0	10,0

It should be noted that Decrees of the President of the Republic of Uzbekistan PD №1438 "On the further reformation of the financial-banking system and raising stability of the republic, as well as prior directions for achieving high international rating indicators for 2011-2015" as of November 26, 2010 and PD №2344 "On the measures for further increase of financial stability of commercial banks and development of their resource base" as of May 6, 2015 set definite objectives to introduce the requirements of the Basel Committee on the banking supervision in the domestic banking practice. With the aim of executing these objectives the Central Bank of the Republic of Uzbekistan on July 22, 2015 adopted the instruction №19/14 "On approving the Regulation on the requirements to the liquidity management at commercial banks" (registered at the Ministry of Justice of the Republic of Uzbekistan by №2709 on August 13, 2015) and on June 13, 2015 it adopted the instruction №14/3 "On approving the Regulation on the requirements to the capital adequacy of commercial banks" (registered at the Ministry of Justice of the Republic of Uzbekistan by №2693 on July 6, 2015).

IV. FINDINGS

According to the statutory acts specified above, financial security of commercial banks is assessed by means of the following indicators:

1. Liquidity Coverage Ratio (LCR). This indicator is determined according to the following formula:

$$\mathbf{LCR} = \frac{\mathrm{HLA}}{\mathrm{30d.\,TNO}}\mathbf{x100\%}$$

where:

HLA – high liquidity assets;

30 d. TNO –total net output within 30 subsequent days.

The lowest level of the Liquidity Coverage Ratio is determined as it follows:

* since January 1, 2016 - 80%

* since January 1, 2017 - 90%

* since January 1, 2018 - 100%.

2. Net Stable Funding Ratio (NSFR). This indicator is determined according to the following formula:

$$\mathbf{NSFR} = \frac{\mathrm{SFAA}}{\mathrm{SFRA}}\mathbf{x100\%}$$

Where:

SFAA – stable funding available amount;

SFRA - stable funding required amount.

Net Stable Funding Ration was introduced on January 1, 2018 and its lowest level was determined as 100%.

3. Deposit Adequacy of Commercial Banks (DAB). This indicator is determined according to the following formula:

$$\mathbf{DAB} = \frac{\mathrm{DD}}{\mathrm{TD}}\mathbf{x100\%}$$

Where:

DD – demand deposits;

TD – total deposits.

To ensure adequacy of the deposit base of commercial banks this indicator must not exceed 30%.

4. Current Liquidity (CL). This indicator is determined according to the following formula:

$$\mathbf{CL} = \frac{\mathrm{LA + N\ 30\ d\ RA}}{\mathrm{DD + Я\ 30\ к\ TM}} \mathbf{x100\%}$$

Where:

LA – liquid assets

N 30 d RA – Returnable assets within the nearest 30 days;

DD – demand deposits;

N 30 d PL – Payable liabilities within the nearest 30 days.

The lowest level of this indicator was determined by the Central Bank at 30%.

5. Normal level of overdue loans (NLOL). This indicator is determined according to the following formula:

$$\mathbf{NLOL} = \frac{\mathrm{OL}}{\mathrm{GL}} \mathbf{x100\%}$$

Where:

OL – overdue loans;

GL – gross loans.

If this indicator does not exceed 3%, the level of teh overdue loans is considered to be normal.

6. The Level of Loan Provisioning Reserves (LLPR). This indicator is determined according to the following formula:

$$\mathbf{LLPR} = \frac{\mathrm{LPA}}{\mathrm{AABA}} \mathbf{x100\%}$$

Where:

LPA – loan provisioning amount;

AABA – average amount of the bank assets.

The highest level of this indicator constitutes 0,5 per cent.

7. Bank assets profitability (BAP). This indicator is determined according to the following formula:

$$\mathbf{BAP} = \frac{\mathrm{GI}}{\mathrm{GA}} \mathbf{x100\%}$$

Where:

GI – gross income;

GA – gross assets.

The standard level for this indicator is not available. Therefore, the actual level of this indicator is comparable with the same level of other banks. If the bank's indicator is lower than that the same indicator of other banks, it is considered to be a disadvantage in terms of the bank's financial stability.

8. Net profit level (NPL). This indicator is determined according to the following formula:

$$\mathbf{NPL} = \frac{\mathrm{NP}}{\mathrm{ABAER}} \mathbf{x100\%}$$

Where:

NP – net profit;

ABAER – amount of bank assets exposed to risk.

This indicator of the amount of bank assets exposed to risk should be either equal or higher than 2%.

9. Indicator of expenditures/income (IE/I). This indicator is determined according to the following formula:

$$\mathbf{IE/I} = \frac{\mathrm{IfE}}{\mathrm{GI}} \mathbf{x100\%}$$

Where

IfE – interest-free expenses;

GI – gross income.

If this indicator does not exceed 45 percent, this situation is considered favourable.

V. RESULTS AND DISCUSSION

Based on the indicators specified above, we are assessing financial security of joint-stock commercial bank "Asaka" operating in our republic (Table 2).

Table II: Financial security condition of "ASAKA" JSCB[10]

Indicators	Years					
	2012	2013	2014	2015	2016	2017
Regulatory capital adequacy ratio of the commercial bank, in %	16,3	16,0	16,9	11,1	11,1	17,7
Tier 1 capital adequacy ratio, in %	16,2	15,4	16,5	10,3	10,4	17,3
Deposit adequacy of the commercial bank, in %	64,1	54,1	54,6	50,5	54,6	65,7
Current liquidity, in %	72,8	57,4	61,2	58,1	95,5	88,7
Overdue loans level, in %	1,03	1,1	0,7	1,3	0,7	0,3
The level of Loan Provisioning Reserves, in %	0,8	1,6	0,9	1,1	0,7	1,2
Bank assets profitability, in %	10,3	12,0	12,9	11,2	8,4	5,9
Net profit level, in %	1,5	1,7	1,9	1,4	1,3	0,3
Indicator of expenditures/income, in %	38,1	35,7	33,4	33,2	29,7	28,7

From the data provided in Table 2 it is obvious that financial security of "Asaka" JSCB has been ensured due to the following indicators: regulatory capital adequacy, tier 1 capital adequacy, current liquidity, level of overdue loans, and indicator of expenses/income.

However, we can see that in terms of financial security "Asaka" JSCB hasn't been properly ensured by such indicators as the deposit adequacy ratio, Loan Provisioning Reserves, bank assets profitability and net profit.

In terms of financial security, the situation in "Asaka" JSCB can be characterized by the opportunity of covering inadequate amount of deposits directly due to demand deposits without compiling contracts on demand deposits. In addition, customers of this bank do not have residual amounts of funds in their current accounts to use as current expenditures. This fact justifies that "Asaka" JSCB tries to create some obstacles to raise the volume of term deposits and during some periods it is possible to observe the trend of reducing the amount of demand deposits. For example, in 2017 the amount of term deposits of "Asaka" JSCB reduced by 94 billion UZS in relation to 2016. [11]

According to the indicator of Loan Provisioning Reserves, financial security of "Asaka" JSCB cannot be considered as favourable in terms of changes occurring in loan composition.

By the results of 2016 the share of standard loans in the credit portfolio of "Asaka" JSCB accounted for 94,6 percent and in 2017 this indicator decreased and amounted to 92,0. [12] This fact illustrates quality reduction of the credit portfolio of the bank. According to the indicator of the assets profitability of "Asaka" JSCB during the analyzed period, the financial security of this bank was not properly ensured as the growth rates of gross income was lower than the growth rates of gross assets. For example, if in 2017 against 2016 the gross income of "Asaka" JSCB constituted 62,4 percent, the growth rates of gross assets accounted for 232,3 percent. [13]

In terms of the net profit indicator of "Asaka" JSCB, the financial security of this bank can be characterized as insufficient as the growth rates of the assets exposed to risk were higher than the growth rates of the net profit and in 2017 the net profit amount decreased in relation to 2016. For example, in 2016 the amount of assets exposed to risk of "Asaka" JSCB amounted to 119,7 percent in relation to 2015, but the growth rate of the net profit constituted 111,9 percent.

In 2017 the net profit of "Asaka" JSCB decreased by 44 388 million UZS in comparison with 2016. [14]

VI. CONCLUSION

Proceeding from the analysis specified above, with the aim of ensuring financial security of this bank it is recommended to undertake the following measures:

1. In our opinion, to ensure deposit adequacy of commercial banks, first of all, with the aim of providing the standard of the net interest spread indicator (1,25%) and at the same time preventing the increase in interest-bearing expenses on term and savings deposits it is necessary to raise the profitability level of loans; second, providing for the Central Bank of the Republic of Uzbekistan maintains the rates of determined reserve requirements in relation to the term and savings deposits in the national currency, the rate for the reserve requirements determined for demand deposits must be increased at least by 2,0 percentage points.

According to the current policy of the Central Bank of the Republic of Uzbekistan for reserve requirements, the rate for reserve requirements for term and savings deposits in the national currency attracted from individuals and legal persons for the period from 1 year up to 2 years is determined at 2%, and the rate for reserve requirements for demand deposits in the national currency is fixed at 4%. Under these circumstances the increase of the reserve requirements rate by 2% for demand deposits will enhance the interest of banks to attract funds to the term and savings deposits.

2. In order to ensure the standard of the Loan Provisioning Reserves at commercial banks, first of all, it is necessary to develop a complex of measures aimed at improving the composition of the credit portfolio of the bank. Second, standard loans must be exempted from compulsory reserve requirements.

3. By the indicator of assets profitability of commercial banks with the aim of ensuring financial security it is necessary to prevent the fact when the growth rates of gross profit lag behind the growth rates of the assets exposed to risk.

4. In order to ensure the financial security of commercial banks in terms of the net profit level, first of all, security it is necessary to prevent the fact when the growth rates of the net profit lag behind the growth rates of the assets exposed to risk; second, through the improvement of the composition of loans it is required to reduce the amount of Loan Provisioning Reserves.

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