

OPERATIONAL EFFICIENCY OF UKRAINE'S BANKING SYSTEM DURING THE WAR

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Abstract: The article evaluates the operational efficiency of Ukraine's banking sector in the conditions of the growing influence of risks and threats during the war. The specifics of ensuring the operational efficiency of the banking system and the indicators characterizing it are determined. An analysis of the assets and credit activity of Ukrainian banks since the beginning of the Russian aggression was carried out. The causes of structural changes in banking activity for the relevant period have been determined. The financial performance of the banking system of Ukraine during the war period was assessed. Ways to optimize banking activity are proposed to ensure the growth of the level of efficiency of the banking sector.

Keywords: efficiency of the banking system; operational efficiency; bank assets; bank profit.

1 Introduction

Ensuring the effectiveness of the functioning of the banking and financial sector in the conditions of the war caused by Russia's aggression against Ukraine raises many questions regarding the organization of the work of banking and financial institutions in difficult conditions, the growing demand for liquidity and the imbalance of payments for loans issued. As practice shows, the National Bank of Ukraine (NBU) managed to cope with the destabilization of markets in difficult conditions, and also managed to properly organize the work of banks and ensure the stability of the payment system of Ukraine. At the same time, the NBU's actions in the first days of the war, when panic was observed in the financial markets, require a thorough study of each operational direction in order to study the peculiarities of the stabilization of the situation in the country.

Specific features of the functioning of the banking system in the conditions of a systemic threat to the functioning of not only banks but also the regulator itself are absent in modern world practice in order to be able to take into account the practical experience of the organization of work under such developments. In addition, the specifics of the banking system itself, based on modern information and digital technologies, the predominance of cashless payments, and the low level of cash in the structure of money circulation – all this first came into the conditions of wartime instability. Therefore, the issue of ensuring continuous and efficient work of financial institutions, including the banking sector, is becoming particularly relevant at present. After all, the modern economy cannot exist without an effective banking system, one of the main tasks of which in such conditions is the effective provision of payments and, in general, the flow of money in the country. Moreover, as practice shows, it is extremely difficult to ensure such efficiency in the conditions of war, since the Russian aggressor destroys electronic communications and energy facilities, which negatively affects the stability of payment systems. However, currently, the banking system of Ukraine is quite successfully resisting these challenges of the war, which makes it necessary to study the reasons for its current operational efficiency.

2 Literature Review

The study of issues of ensuring the effectiveness of the functioning of the banking system is not new to modern economic science. At the same time, it should be noted that, mainly, the research on this issue relates to the issues of liquidity management and the general provision of financial stability of banking institutions, or ensuring the reliability of the functioning of payment systems used by banking institutions. In particular, significant methodological and applied research on this issue is widely covered in the works of such scientists and practitioners as I. Balaniuk [3], A. Boiar [5], Y. Chaliuk [15], M. Dziamulych [17-27], M. Kryshtanovych [30], O. Ramos [35], T. Shmatkovska [37-42], O. Shubalyi [44], O. Stashchuk [49-51], Ya. Yanyshyn [53], A. Zelińska [55].

At the same time, it should be noted that there is also a need to ensure the functioning of the banking system under conditions of financial crises and external challenges and threats. These questions are widely related to the problems of the economic and financial security of banks. At the same time, the main attention in the research is paid to the effectiveness of the banking system regulation tools from the side of its regulator. In this aspect, it is necessary to single out the works of such researchers as O. Binert [4], I. Britchenko [6-14], Y. Danshina [16], S. Koshova [28-29], N. Kunitsyna [31], Y. Pozdnyakov [34], J. Reitšpís [36], A. Shvorak [43], R. Sodoma [45-48], I. Yakoviyk [52], O. Yatsukh [54].

However, there are currently no practical studies of the specifics of the organization of the banking system in wartime, and there are also discussions regarding the rules of its regulation by the central bank in order to ensure its maximum productivity. All this makes it necessary to deepen existing theoretical studies in the field of ensuring the operational efficiency of the banking system in wartime conditions.

3 Materials and Methods

In order to carry out an analytical assessment of the effectiveness of the banking system of Ukraine, it is necessary to form a statistical information base, which consists of four groups of the main indicators of banking activity, namely:

- Net profit;
- Gross income (interest and non-interest);
- The average size of assets;
- Equity.

At the same time, the first two groups of indicators characterize the bank's cash flow for a certain period and are determined by reporting on the financial results of banking activities. The other two groups of indicators are determined by the balance of funds on the corresponding balance sheet items on a specific date. To ensure comparability of the data of the specified groups of indicators, assets, and capital are calculated as the arithmetic average of the balances at the beginning and end of the period [2].

In order to assess the operational efficiency of the banking system, the specified methodology was supplemented with operational efficiency indicators, namely:

- The ratio of net interest income and average annual total assets (net interest margin);
- The ratio of net non-interest profit and average annual total assets (net non-interest margin);
- The ratio of operating profit and average annual total assets (net operating margin and others).

The use of these coefficients in the assessment of the operational efficiency of the banking system will make it possible to properly assess the efficiency with which the banking system generates income. At the same time, if it is necessary to carry out an in-depth analysis of operational efficiency, one needs to

compare such coefficients with industry standards, which will make it possible to compare the efficiency of individual banks and individual banking groups with the operational efficiency of the banking system as a whole.

4 Results and Discussion

As it is known, ensuring financial stability is one of the key functions of the National Bank of Ukraine. At the same time, it was identified as one of the main ones in the process of structural reform of the financial sector of Ukraine during 2015-2017. Accordingly, the activity of the NBU to ensure financial stability is aimed not only at the banking but also at the non-banking financial sector, which allows it to fully cover the entire financial market in crisis conditions and to apply the available management tools to overcome the crisis arising in the market. Thus, it can be argued that from a practical point of view, the NBU must constantly analyze the state of financial markets, identify the presence of risks and threats to the stability of the banking system, and determine the tools for responding to them [1]. As evidenced by the practice of the NBU during the war, its important tasks are ensuring the ability of commercial banks to restore the proper level of capitalization, as well as ensuring active support of the national economy from the banking sector. As practice shows, in this aspect, commercial banks need to actively go through the process of adaptation to work in wartime.

According to statistical data, the results of the work of Ukrainian banks according to the results of the III quarter of 2022, the banking sector is currently still in the process of constant adaptation to crisis conditions, which lags behind the manufacturing sector, that went through this process faster and more efficiently. At the same time, it should be noted that commercial banks in Ukraine throughout the entire time since the beginning of hostilities have maximally supported the operation of their branch network. In addition, it should be noted that during the period of September - November 2022, the process of restoring the activities of banking institutions in the regions of Ukraine freed from Russian occupation took place quite quickly.

If we talk about the liquidity of the banking system, we should emphasize that, starting from the 3rd quarter of 2022, its growth was recorded in connection with the restoration of trust in the banking system, which caused a general increase in the inflow of clients' funds into bank accounts. A positive factor in the functioning of the banking system was the increase in the volume of time deposits of clients. It should be noted that at the same time an increase was recorded not only in hryvnia deposits but also an increase in the volume of time deposits in foreign currency, despite the generally insignificant amount of interest rates on foreign currency deposits.

As for the volume of the net loan portfolio of commercial banks, its volume has significantly decreased since the beginning of the war. The exception was the increase in the volume of lending by state banks, which was caused by the implementation of targeted state programs aimed at supporting the national economy during the war and stabilizing industrial production, in particular, the defense-industrial complex of Ukraine. In the field of lending to individuals, an increase in the volume of problem loans was recorded, which is connected with the increase in the number of unemployed, especially in those regions that were most affected by military operations. Thus, in general, it can be asserted that the operational efficiency of the banking system of Ukraine will be ensured in 2022.

Tracking the dynamics of their assets receives special attention in the aspect of researching the effectiveness of the functioning of commercial banks in the difficult conditions of wartime since namely the direction of their change is the most reliable indicator of the bank's stability. Therefore, we will consider the dynamics of the assets of commercial banks of Ukraine from the beginning of the war to the end of the year (Figure 1).

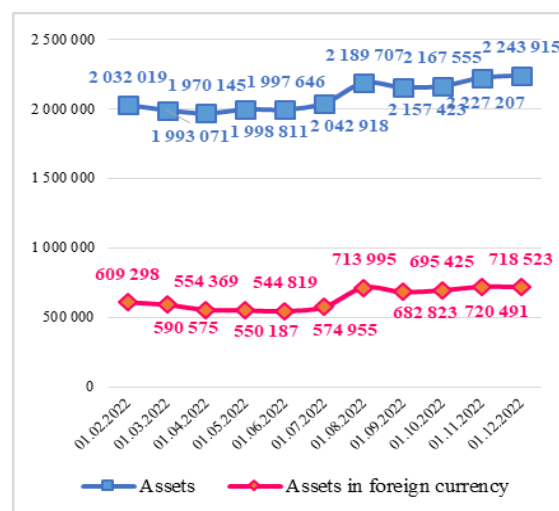


Figure 1. Dynamics of assets of Ukrainian banks for 2022, UAH million
Source: [32].

As we can see, since the beginning of the war, the volume of assets of Ukrainian banks has undergone a significant outflow of funds, which lasted until the beginning of April and totaled UAH 62 billion. At the same time, after the stabilization of the situation related to the turning point in the war and the successes of Ukraine in hostilities, the dynamics of bank assets also stabilized. Thus, already in May, an increase in the volume of funds both in UAH and in foreign currency was recorded. The largest change in the amount of bank assets was observed in August 2022, when the amount of bank assets exceeded their value compared to the last pre-war month. At the same time, the increase in assets was mainly due to investments of free bank funds in certificates of deposit of the National Bank of Ukraine. However, it is worth noting that such growth was also due to inflation and changes in the scale of prices that occurred in Ukraine after the war began. At the same time, the dynamics of assets in foreign currency, which is almost synchronous with the dynamics of assets in hryvnia, indicates the overall satisfactory state of the banking system of Ukraine due to the growth of its operational efficiency.

Another important criterion for the banking system's functioning is the credit portfolio of commercial banks. It is natural that in the conditions of the war it had to be reduced. Therefore, let us track the dynamics of the loan portfolio indicators of Ukrainian banks for the corresponding period (Figure 2).

As we can see, in general, since the beginning of the war in Ukraine, the net loan portfolio has decreased by UAH 17.64 billion. At the same time, this reduction occurred both due to a general decrease in the volume of lending to economic entities, and in connection with an increase in the share of problem loans, which led to the need for banks to increase the volume of reserves for loans, that during the war increased by 71.19 billion. UAH In general, it can be said that Ukrainian banks are experiencing significant credit losses as a result of the war.

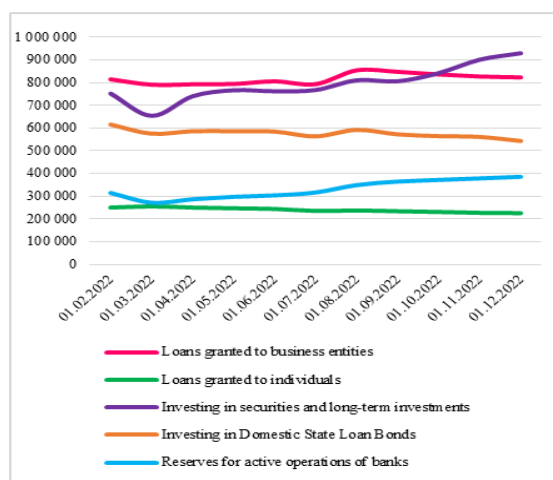


Figure 2. Dynamics of the loans volume granted by banks of Ukraine for 2022, UAH million
Source: [32].

At the same time, it is worth noting the efforts of banks to increase their operational efficiency by investing free resources in securities, which increased by UAH 177.3 billion from the beginning of February to December 2022 or by 23.6%. At the same time, investments in domestic state loan bonds by the banking sector fell by UAH 72.2 billion over the analyzed period, or by 12% since the beginning of the war.

Thus, it can be argued that despite the overall reduction in the credit activity of Ukrainian banks and the increase in the share of problem loans by 7%, the banking sector of Ukraine continues to function relatively effectively, trying to compensate for losses due to the activation of operations on the securities market. All this testifies to the satisfactory operational efficiency of the banking sector.

However, if we talk about the integral indicator of the effectiveness of the banking system, it is definitely necessary to use the profit of banks as the quality indicator. Accordingly, we will analyze the dynamics of revenues and expenses of commercial banks in Ukraine since the beginning of the war (Figure 3).

As we can see from the results of the analysis, the banking sector of Ukraine received a total of UAH 19.43 billion in profit since the beginning of the year. At the same time, the banking system generated losses throughout the second quarter of 2022, as well as the first month of the third quarter. However, the expansion of banks' activity on the financial market allowed them to quickly compensate for previously received losses and arrive at an overall positive financial result at the end of the year.

It should be noted that the main reason for the increase in the profitability of the banking system of Ukraine was the general high operational efficiency of commercial banks. Due to the increase in the amount of interest income in their general structure and the general increase in the operating income of banks, it was allowed to ensure that they achieve proper financial efficiency of functioning. At the same time, it is necessary to note the increase in the volume of deductions to the loss reserves, which is caused precisely by the negative impact of military actions on the financial system of Ukraine [33].

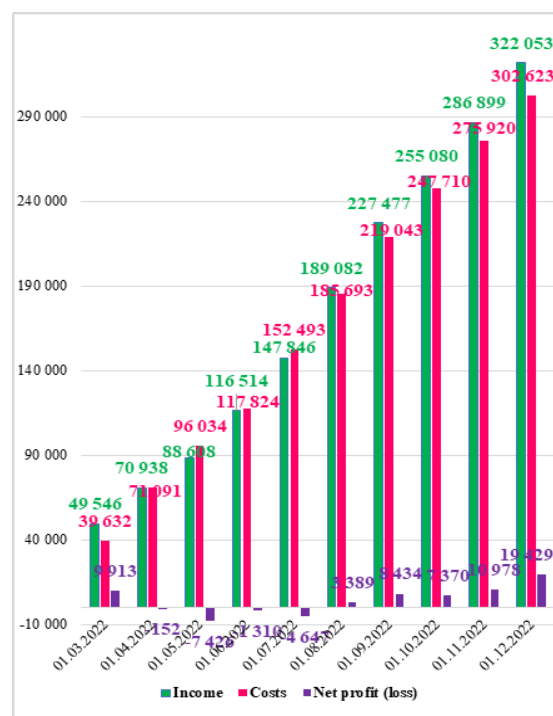


Figure 3. Dynamics of revenues and net profit of Ukraine's banks for 2022 cumulatively, UAH million
Source: [32].

It should also be noted that a real reliable assessment of the operational efficiency of the banking system of Ukraine should take place after an assessment of the real quality of assets, which will make it possible to realistically assess credit risk and identify threats to the financial stability of banks. However, such an assessment can be made only based on the results of the annual activity of banking institutions, which will take place only in 2023.

5 Conclusion

Thus, we see that ensuring operational banking efficiency is based on the optimization of asset and liability management, as there is a close relationship between sustainable profitability and, on this basis, increasing the resources of banks' own capital under the condition of optimizing the level of riskiness of banking activity.

Based on the analysis of the activity of the banking sector of Ukraine during the period from the beginning of the war to the beginning of December 2022, it can be stated that, in general, it has reached an appropriate level of operational stability and is able to ensure that commercial banks fulfill their functions of supporting the national economy. The financial results of the banking system allow us to positively assess the prospects of its functioning in the future. At the same time, it is necessary to note the appropriate level of effectiveness of the NBU's regulatory influence on ensuring the financial stability of the banking system of Ukraine in general. It can be argued that in wartime conditions, one of the key directions of ensuring the proper level of credit activity of commercial banks should be their admission to the implementation of targeted state programs aimed at supporting the national economy. It is also worth noting the presence of a significant surplus of liquidity in the banking system of Ukraine, which requires the intervention of the regulator to ensure the productive use of available funds by banks and, due to this, increases the level of operational efficiency of the banking system in general.

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Primary Paper Section: A

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