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V.N. KARAZIN KHARKIV NATIONAL UNIVERSITY**

Karazin Banking Institute

Department: **Banking Business and Financial Technologies**
Specialty: **072 Finance, Banking, Insurance and Stock Market**
Educational
program: **Financial Technologies and Banking Management**
Group: **AF-23M full-time mode of study**

QUALIFYING MASTER'S THESIS

on the topic:

**BANK'S LIABILITY MANAGEMENT MECHANISM AND
PRIORITY DIRECTIONS OF ITS IMPROVEMENT**

higher education student **Sun Yan**

The qualifying master's thesis was accepted for
defense by the decision of the Department of
Banking Business and Financial Technologies

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Faculty **Karazin Banking Institute**

Department **Banking Business and Financial Technologies**

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APPROVED

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« 25 » September 2024

**TASK
FOR THE QUALIFYING MASTER'S THESIS**

of Sun Yan

1. Topic of the work "BANK'S LIABILITY MANAGEMENT MECHANISM AND PRIORITY DIRECTIONS OF ITS IMPROVEMENT".

Scientific adviser Doctor of Economics, Associate Professor Karina Utenkova

(surname, first name, patronymic, academic degree, academic title)

Approved by order of the university dated September 17, 2024 No. 4601-5/1025.

2. Deadline for the student to submit the work November 18, 2024

3. List of issues to be developed:

In Chapter 1: to determine the essence, functions and principles of formation of bank assets; to consider the characteristics and structure of the bank's liabilities; to determine the direction of management of the bank's assets and liabilities.

In Chapter 2: to perform an analysis of bank assets; to assess the structure of banks' liabilities; to carry out an assessment of the efficiency of the mechanism for managing the assets and liabilities of banks.

In Chapter 3: to outline directions for improving the active operations of banks; to determine the methods of optimizing the passive operations of banks.

4. Work plan

No.	Name of work stages
1	The choice of the topic of the qualifying master's thesis
2	Approval of the plan and tasks of the qualifying master's thesis
3	Completion of a qualifying master's thesis
4	Submission of a qualifying master's thesis to the department to check for borrowings from other documents
5	Admission by the head of the department to the defense of a qualifying master's thesis
6	Defense of a qualifying master's thesis

5. Date of the task issue September 25, 2024

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ABSTRACT
ON THE QUALIFYING MASTER'S THESIS
"BANK'S LIABILITY MANAGEMENT MECHANISM AND PRIORITY
DIRECTIONS OF ITS IMPROVEMENT"
of Sun Yan

The qualifying master's thesis comprises 69 pages, 5 tables, 24 figures, 1 appendix, and a list of 40 references.

The **object of research** is the activity of domestic banks in the system of asset and liability formation within the banking services market.

The **subject of research** encompasses the theoretical and methodological aspects of the mechanisms for managing bank assets and liabilities, as well as directions for their optimization under modern conditions.

The **purpose of the qualifying master's thesis** is to substantiate the theoretical and practical aspects of the formation of a bank's asset and liability management mechanism and to develop priority directions for its improvement.

The **tasks of the qualifying master's thesis** are as follows:

- to determine the essence, functions, and principles of forming bank assets;
- to examine the characteristics and structure of bank liabilities;
- to identify the directions for managing bank assets and liabilities;
- to perform an analysis of bank assets;
- to assess the structure of bank liabilities;
- to carry out an assessment of the efficiency of the mechanism for managing bank assets and liabilities;
- to outline directions for improving the active operations of banks;
- to determine methods for optimizing the passive operations of banks.

Based on **the results of the research**, a comprehensive set of theoretical and practical provisions has been developed. These provisions are designed to address critical aspects of banking operations and are presented as concrete, actionable proposals aimed at enhancing the mechanisms for managing the bank's assets and liabilities. The proposals emphasize the importance of aligning asset and liability management strategies with current market dynamics, regulatory requirements, and the specific needs of financial institutions. They also include innovative approaches to

improving financial stability, profitability, and operational efficiency within the banking sector.

The obtained results can be applied to solving problems related to optimizing the mechanisms for managing banking assets and liabilities in financial institutions.

KEYWORDS: Banking Institution, Bank Assets, Bank Liabilities, Bank Loans, Loan Portfolio, Active Operations, Passive Operations.

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INTRODUCTION

The mechanism of managing assets and liabilities of banks in modern conditions is based on overcoming complex economic and military challenges, which largely affect both the banking system and the activities of banking institutions in general. Effective management of the bank's assets and liabilities makes it possible to ensure stability, liquidity, reliability and profitability, to provide individuals and legal entities with services that are necessary for the movement of funds. At the same time, the decision-making process regarding asset and liability management is based on adaptation to financial and economic changes, customer needs, and international requirements for the quality of banking services.

The economic and political crisis, which significantly shook the Ukrainian banking system, reduced the volume of banking institutions, reduced the level of loans and deposits, and most importantly forced to introduce restrictions on the provision of banking services. This situation forces us to analyze the directions and mechanisms of managing assets and liabilities of domestic banking institutions, to develop directions for their optimization, taking into account the crisis, and to ensure the introduction of innovative products. In this regard, the topic of qualification research is relevant and important.

The work of such Ukrainian scientists and economists as: O. Vovchak, O. Dzyublyuk, O. Lytvynyuk, M. Bobryk, N. Demchuk, N. Shevchenko, V. Zanko and others. However, the areas of asset and liability management of banks under the influence of crisis phenomena and wartime have not been sufficiently researched.

The purpose of the qualification work is to substantiate the theoretical and practical aspects regarding the formation of the bank's asset and liability management mechanism and the development of priority directions for its improvement.

Achievement specified in qualification work goals condition the need to solve the following tasks:

- determine the essence, functions and principles of formation of bank assets;
- consider the characteristics and structure of the bank's liabilities;
- determine the direction of management of the bank's assets and liabilities;
- perform an analysis of bank assets;
- assess the structure of banks' liabilities;
- to carry out assessment efficiency mechanism management assets and liabilities of banks;
- to outline directions for improving the active operations of banks;
- to determine the methods of optimizing the passive operations of banks.

The object of the study is the activity of domestic banks in the system of formation of assets and liabilities in the market of banking services.

The subject of the research is the theoretical and methodological aspects of researching the mechanisms of bank asset and liability management, as well as directions for its optimization in modern conditions.

The following research methods were used in the qualification work: observation to determine the nature and classification of assets and liabilities of banks; synthesis for researching directions and means of managing bank assets and liabilities; the functional-systemic approach method was used to analyze the state and trends of asset and liability management of banks in modern conditions; method of graphical display of research results through graphs and drawings, diagrams; generalization for the formation of relevant conclusions and research results.

Scientific novelty of the received results:

- the classification of factors affecting the effectiveness of the bank's asset and liability management has been supplemented, in particular: war in the country, the introduction of martial law, significant amounts of funding for military needs, a decrease in the population's income level, high loan rates,

significant reduction of branches of banking institutions, banking restrictions on cash transactions;

- the main areas of increasing the volume of liabilities have been improved through the optimization of interest rates, an individual approach to deposit products, the development of banking applications and innovative products, which will ensure an increase in the profitability of banks in the future.

In the first section of the qualification work, the theoretical foundations of the formation and management of bank assets and liabilities are investigated. In the second part of the work, an analysis of the effectiveness of management of assets and liabilities of banks was carried out. In the third section, the main directions for improving the management of assets and liabilities of modern banking institutions are proposed.

The qualification paper consists of an abstract in Ukrainian and English, an introduction, three sections, conclusions, a list of used sources (40 names on 4 pages) and 2 appendices. The total volume of the work is 72 pages, of which the main text is 60 pages, the work contains 27 figures and 5 tables.

CHAPTER 1. THEORETICAL BASICS OF THE BANK'S ASSETS AND LIABILITIES MANAGEMENT MECHANISM AND PRIORITY DIRECTIONS FOR ITS IMPROVEMENT

1.1. The essence, structure and principles of formation of bank assets

In banking practice, the formation of a high-quality structure of the bank's assets is a primary task, as it ensures a high level of trust on the part of the bank's clients and increases the bank's income. The level of formation and management of the bank's assets ensures the development of its potential in the long-term and short-term periods, determines the directions of development of active operations and services.

N. Demchuk defines bank assets as important resources that are controlled by the bank and are the result of past events (bank operations), but will lead to financial benefits in the future [2].

According to A. Moroz, the bank's assets form the active part of the bank's balance sheet, which is divided into two main categories: the first - that which is actively implemented and brings the bank's income (cash transactions, loans, investments), the second - real, which is necessary for functioning, but does not bring the bank's income (fixed assets, real assets, etc.) [16].

In general, assets are important economic resources of the bank, which are at the bank's disposal, and provide it with active operations for the purpose of obtaining profit during the reporting period. The bank's assets provide directions for the placement and use of the bank's resources, which are either at the disposal of the bank itself, or are provided by clients (individuals and legal entities) at the disposal of the bank on mutual terms and requirements.

The bank's assets allow the banking institution to provide the following types of active operations:

- provision of various credits and loans;

- making investments on your own behalf and on behalf of the client;
- purchase and sale of securities, formation of securities portfolios;
- investment in commercial projects;
- factoring, leasing, insurance services;
- other active operations [2, 16].

According to the Resolution of the Board of the National Bank of Ukraine "On approval of the instruction on the procedure for drawing up and publishing financial statements of banks of Ukraine" [20], the structure of the bank's assets includes (Figure 1.1).

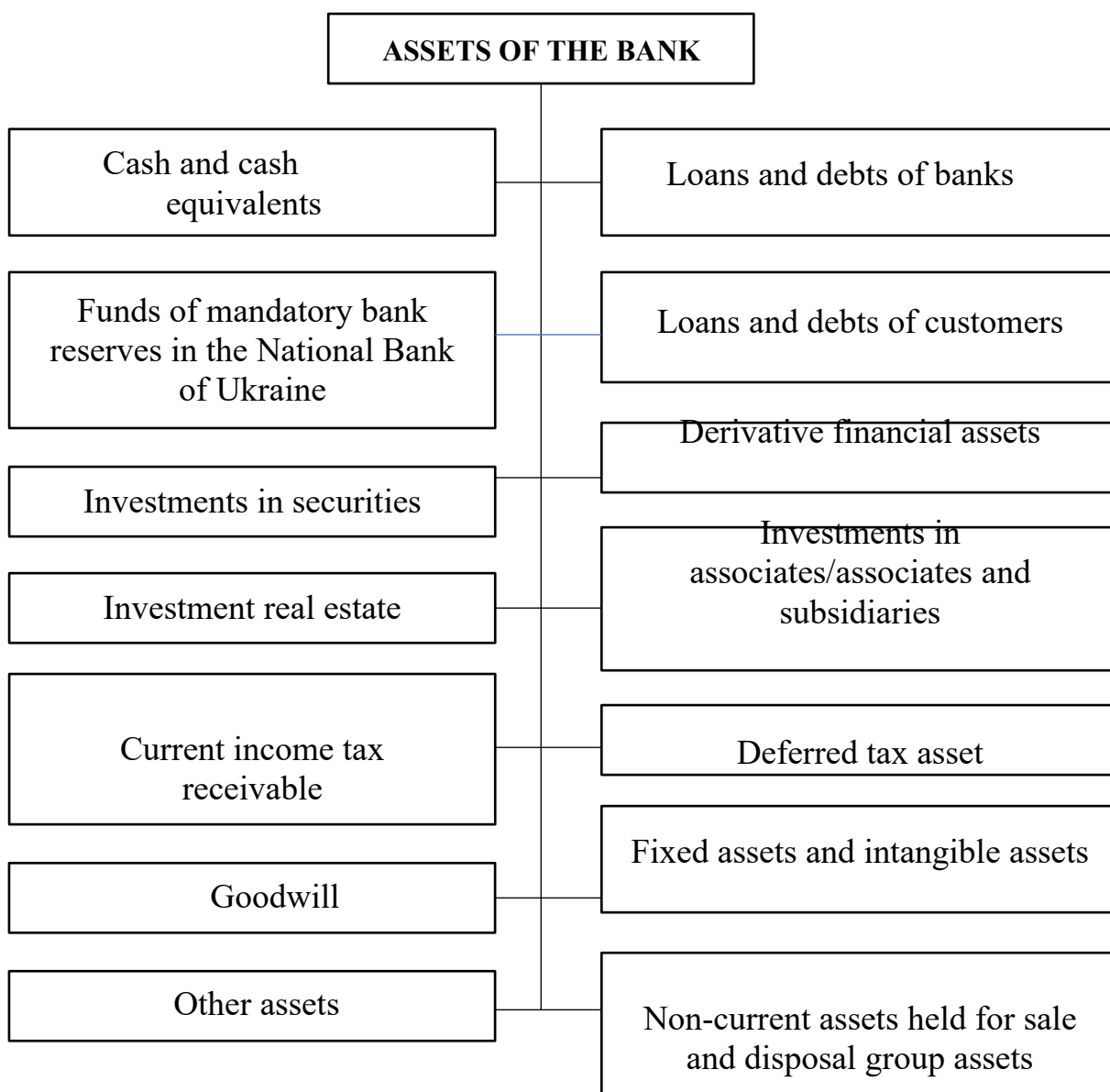


Fig. 1.1. The structure of the bank's assets in accordance with the Resolution of the NBU [20, 38]

The bank's assets involve the active placement and use of the bank's resources raised from individuals and legal entities for the purpose of obtaining further financial benefit - profit. At the same time, it is important to provide high-quality and transparent services that can meet the needs of the market and customers.

Bank assets are financial resources of the bank, which are provided to them for short-term or long-term use by individuals and legal entities, for further placement in order to obtain the highest level of profitability. As an economic category, assets perform the following functions:

- meeting the needs of clients by providing the necessary banking services and operations;
- expansion of the scope of financial services on the market of banking services in Ukraine;
- software profitability domestic banks through receiving interest and commission income;
- software high and permanent equal receiving profit during the reporting period;
- granting quality services depending from needs market, customers and innovative development of banking services;
- introduce new methods of attracting funds from individuals and legal entities for the purpose of obtaining income [1, 5, 14].

Assets provide the bank with only the targeted use of funds (financial resources) provided for their use, determine the level of profitability and liquidity of the bank, make it possible to form reserves to cover losses or crisis phenomena.

According to their structure, the bank's assets can be classified according to the following characteristics (table 1.1):

Table 1.1

Classification of bank assets [4, 10, 38]

Classification index	Characteristics of the classification
1. By appointment	1. Cash assets that ensure the bank's liquidity are intended for the daily uninterrupted fulfillment by banks of their obligations for cashless transfer of funds and for issuing cash from customer accounts. 2. Working assets - assets that bring income, have a relatively short period of rotation. 3. Investment assets - long-term investments of the bank in the form of direct or portfolio investments. 4. Non-current assets are intended to ensure the commercial bank's performance of its direct functions. 5. Other assets.
2. According to the terms of placement	1. Short-term - up to one year; 2. Medium-term - from one to three years; 3. Long-term - more than three years.
3. By liquidity	1. Highly liquid (cash, precious metals, funds in the Central Bank); 2. Liquid (loans and payments in favor of the bank with a term of up to 30 days, easily sold securities and other valuables); 3. Low liquidity (loans issued by the bank, placed deposits with a remaining maturity of more than a year); 4. Low liquidity (long-term investments, non-current assets, overdue debt, etc.).
4. By degree of risk	1 group (percentage of risk - 0) is cash; funds in the NBU; debt securities refinanced by the NBU in the bank's portfolio for sale and investment, etc.; 2 group (percentage of risk - 10) - short-term and long-term loans granted to central state administration bodies; 3 group (percentage of risk - 20) - short-term and long-term loans granted to local government bodies, and accrued income from them, etc.; 4 group (risk percentage - 50) - demand funds in other banks; time deposits in other banks (except overdue debt and overdue accrued income); 5 group (risk percentage - 100) - all other active accounts.

Considering the value of individual items of the bank's assets, it is worth noting that the most important function is occupied by those items of the balance sheet, the value (volumes) of which make up the largest share, bring the highest level of income. These include: cash and their equivalents, loans and debts of banks and customers, investments in securities, investment real estate.

Cash and cash equivalents in the structure of the bank's assets show the availability of liquid assets (cash) for effective implementation of own settlement operations and client transactions. Also, cash helps bank clients to provide settlements through correspondent accounts, to exchange national currency for foreign currency and vice versa, to develop financial relations with various business entities [16].

One of the most important components in the structure of the bank's assets is occupied by loans, which ensure the highest level of profitability of the bank. From an economic point of view, a bank loan is a written obligation of the bank to provide the borrower with the amount specified in the loan agreement with a clearly established repayment term and interest.

The classification of bank loans (Appendix A) provides for their division by: methods of granting, methods of repayment, number of creditors, object of lending, security, economic subjects-borrowers, by currency, terms of use. At the same time, it is important to observe the following lending principles:

- targeted use of loan funds;
- maturity - timeliness of repayment;
- ensuring the return of loan funds;
- payments;
- software-differentiated approach;
- reliable lending;
- return in full [5, 30].

At the same time, the constituent elements of lending are presented in Figure 1.2.

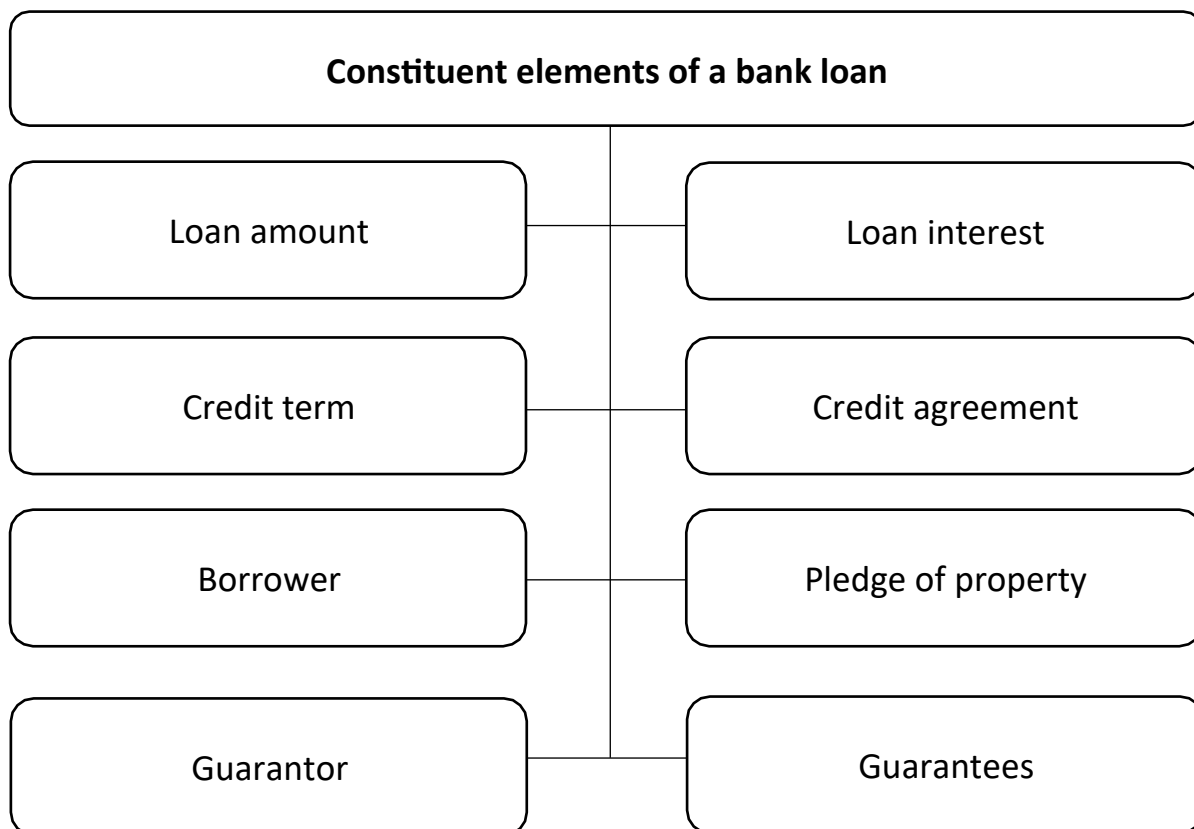


Fig. 1.2. List of mandatory loan components [4, 14]

The next place in the structure of the bank's assets is investment in securities. Modern banks make investments related to the following types of securities: equity, debt, derivatives (Figure 1.3). Investment activity is provided from two positions: first, investing according to one's own strategy and investing with client funds and client strategy.

Own investment strategy involves:

- issue of own securities (shares), less often bonds;
- formation of one's own portfolio of securities, according to one's own investment strategy and goals;
- repurchase by the bank, which were issued earlier with subsequent resale to shareholders or investors [11, 38].

Client operations with securities encompass a variety of activities that generate income for the bank's clients, both individuals and legal entities. These operations include the redemption of previously issued securities, underwriting, dealer activities,

depository and brokerage services, management of clients' securities portfolios, and the provision of consulting services. The consulting services focus on guiding clients in making informed investment decisions or forming a well-structured portfolio. Each of these services is tailored to meet the specific needs of the clients, ensuring both short-term and long-term financial benefits. The bank acts as a mediator and advisor, enhancing the value clients derive from their securities-related activities.

Investment in real estate, specifically classified as investment real estate, involves allocating funds to acquire properties intended for either future resale or rental income. This type of investment represents a strategic approach to diversify income streams and leverage real estate market trends. The goal is to maximize returns by capitalizing on market value appreciation or generating consistent rental income over time. It allows banks and clients to explore stable, tangible assets that often retain or increase value during economic fluctuations.

Goodwill represents the premium paid by a buyer when acquiring another company, which exceeds the buyer's share in the fair value of the purchased identifiable assets and liabilities at the acquisition date. This premium reflects the acquired company's reputation, brand value, customer relationships, and other intangible benefits. Goodwill is often seen as an indicator of a company's strategic value beyond its tangible assets.

Therefore, the bank's assets are essentially liquid financial resources that not only generate income during the reporting period but also serve a broader purpose. These assets ensure the provision of high-quality financial services and operations in the banking sector. They are instrumental in facilitating transactions, investment activities, and advisory services for individuals and legal entities. By efficiently managing these resources, banks maintain their position in the competitive financial services market, meeting the diverse needs of their clientele and contributing to economic growth.

1.2. Characteristics and classification of bank liabilities

The bank's liabilities are the bank's resources, which are involved in the implementation of the bank's activities, as well as credit, investment and other active operations of the bank [2].

The bank's liabilities consist (Figure 1.4) of own, borrowed and borrowed funds, which form the structure of the balance sheet and are divided into liabilities and the bank's own capital.

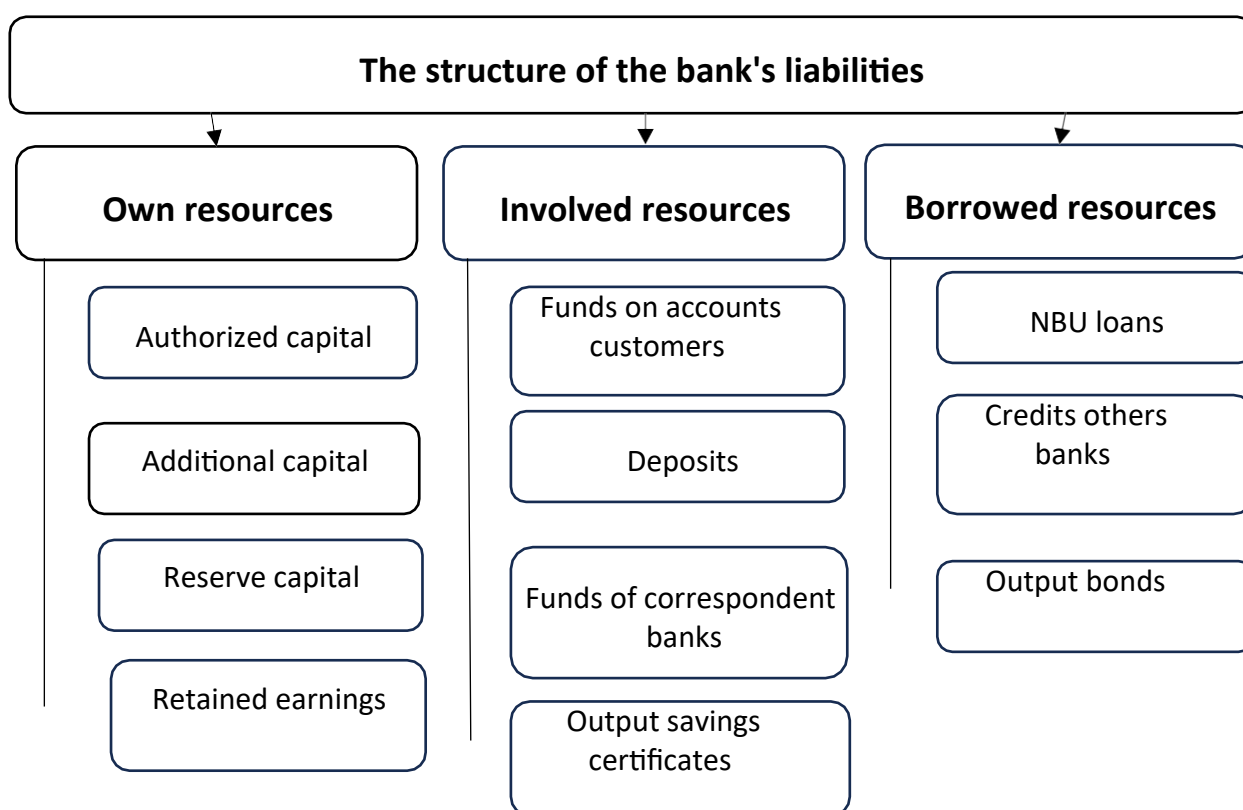


Fig. 1.4. The composition and structure of the bank's liabilities [2, 14]

Liabilities provide the bank with the possibility of obtaining additional funds, which are directed to providing active operations, maintaining profitability and obtaining additional liquid funds. The results of the bank's passive operations during the calendar year are reflected in the bank's balance sheet. The balance sheet structure of the bank's liabilities is presented in Appendix B.

So, liabilities are resources consisting of liabilities and equity of the bank. The bank's equity represents the residual value of assets

after deducting the amount of all liabilities. Equity includes the following components:

- authorized capital (share capital);
- emission differences;
- other additional capital;
- reserves and other funds of the bank;
- retained earnings or uncovered loss;
- other bank equity [16, 30].

The bank's own capital is formed for the purpose of establishing a bank, obtaining a license to carry out operations, and ensuring effective functioning. Own capital is formed in accordance with the requirements of the legislation, the requirements of the National Bank of Ukraine and the strategic goals set by the founders. Equity performs the following important functions:

- a protective function by insuring the interests of shareholders, investors, bank managers, as well as for the purpose of further covering possible losses or financial expenses (unforeseen);
- operative, ensures uninterrupted functioning of the bank in the market of banking services, provision of services and implementation of operations;
- accumulative - involves the formation of funds and reserves for insurance against possible financial losses;
- the regulatory provides the conditions and standards for increasing the bank's financial resources, the scope of services, the possibility of additional issuance, etc. [26, 29].

The bank's own capital is divided into main and additional. The basic capital of the bank includes share capital (authorized capital of the bank), various reserve funds, as well as the total amount of retained earnings of previous years. Additional capital includes the total amount of reserves for individual active operations of the bank and current profits.

An important component is the authorized capital (shareholding), the order of formation of which largely depends on the form of the bank's organizational structure. For the most part, Ukrainian banks are created in the form of an open joint-stock company, while the share capital is formed through an open issue (subscription) for bank shares, in a closed form - through the redistribution of shares among shareholders. The share (statutory) capital of the bank is formed by the issue of ordinary or preferred shares by decision of the owners and shareholders of the banking institution [2].

The reserve fund of the bank is formed to cover possible:

- future losses from banking and financial activities;
- force majeure regarding the payment of interest or commission;
- losses from activity with loans, deposits, investments or currency transactions;
- costs associated with inflationary crises, changes in currency units and the NBU discount rate;
- insufficiency of the profit level for immediate payments of dividends on bank shares;
- other types of circumstances (financial losses).

Formation of a reserve fund by the bank provides an opportunity to provide him with financial stability against negative external and internal factors, and also reduces the probability of his bankruptcy. The procedure for the formation of reserves is fixed in the bank's development strategy, it is ensured by deducting part of the bank's profit. Also, separate reserve funds are created to cover possible losses from active operations [30, 38].

The bank's profit is an internal resource of the bank that shows the efficiency of providing banking operations and services. The bank's profit is formed after deductions for various expenses, payment of taxes, deductions to funds and payment of dividends. The profit of the bank can be directed to replenishment of the statutory fund, to increase the bank's strategically important reserves or pay dividends on ordinary shares.

The bank's liabilities represent the total amount of borrowed and borrowed

money to ensure the bank's active operations. Raised funds are the total amount of funds in current and deposit accounts of individuals and legal entities, which are raised to obtain profitability, ensure liquidity and business activity of the bank. The main amount is the free financial resources of economic entities and individuals, which are placed in bank deposit accounts.

Deposits are bank accounts in which individuals and legal entities accumulate their own free funds. Deposit resources of the bank are borrowed resources that are formed on the principles of:

- payments;
- timeliness;
- returns;
- target use [1, 12].

Deposits placed in banking institutions are generally divided into term and demand deposits. A more detailed classification of deposits of banking institutions is presented in Table 1.2. Demand deposits are placed on a bank current account and are used by owners (individuals and legal entities) to make current payments for transactions, services provided or received, etc. Funds from such an account can be withdrawn by clients at any time as needed, but not more than the amount placed on the account by the client himself.

Term deposits are funds placed in a bank account for a period of at least one month, and bank clients can receive them after the deposit expires. For banking institutions, time deposits are the best types of attracting additional cash resources, as they are stable, reliable, help to plan more clearly the system of distribution and use of such funds, as well as the possibility of receiving income [31].

Table 1.2

Classification of bank deposits [2, 16]

Classification index	Characteristics of the classification
In economic terms	active (placed), passive (involved)
According to the period of use	on demand (on demand), temporary
By opening currency	in national currency, in foreign currency
By categories of depositors	deposits: banks, at the expense of budget banks funds, legal entities, individuals
By definition form the owner	registered, bearer
By residency	deposits of residents and non-residents
For the intended purpose	income, guarantee
By the accrual period	annual, quarterly, annual accrual interest, advance deposits
According to the legal method design	issued by an agreement, with the provision of a savings account book or deposit certificate
According to the regime functioning	with the right of replenishment and without the right

Deposits, especially time deposits, are classified depending on the term of provision, the type of currency placed on the deposit account, interest rates (the longer the account opening period, the higher the interest rate). Provided that if the client prematurely terminates the terms of the fixed-term contract, interest is not accrued to him, or is accrued not in full.

Also, the main directions of attracting funds of banks include:

- opening and maintenance of current and demand accounts for individuals and legal entities (conclusion of contracts, charging of interest, replenishment, transfer of funds, closing of accounts, etc.);

- contributions to other types of bank accounts;
- issuance by the bank of its own debt securities, in particular promissory notes and bonds, with subsequent payment of interest and the value of the security after its expiration;
- attraction of various types of credits and loans from other banks [10, 30].

A common type of borrowed funds is the attraction of interbank loans, which create separate items of the bank's obligations in the current and future periods. Interbank loans can be granted in national and foreign currency under the following conditions:

- in a one-time procedure with the execution of a credit agreement and a clear definition of the amount, interest, the procedure for accrual and payment of interest, payment of the principal amount of the loan, responsibility under the credit agreement of the two parties;
- on a permanent basis in the form of a credit line, in which the terms of crediting and the amount of credit payments are determined according to clearly established payment times;
- in the presence of correspondent accounts and overdraft agreements concluded under them, taking into account possible conditions of international cooperation, international legislation, exchange rates, etc.;
- overnight loans.

Therefore, the passive operations of the bank ensure the formation of the required amount of liabilities and equity capital of the bank necessary for active operations, the formation of a sufficient amount of equity capital and reserves, obtaining a high level of profitability, providing transparent and high-quality services, transactions on the market of banking services, as well as ensuring clients' trust in banking institutions.

1.3. Areas of management of bank assets and liabilities

The management of bank assets is a complex process of purposeful determination of the areas of service provision in order to achieve the highest results of liquidity and profitability of the bank.

The main goal of bank asset management is to assess the rational structure of bank assets, determine ways to optimize banking services and operations that bring the highest level of profit, and increase the bank's profit potential.

The main areas of asset management should include the components presented in Figure 1.5.

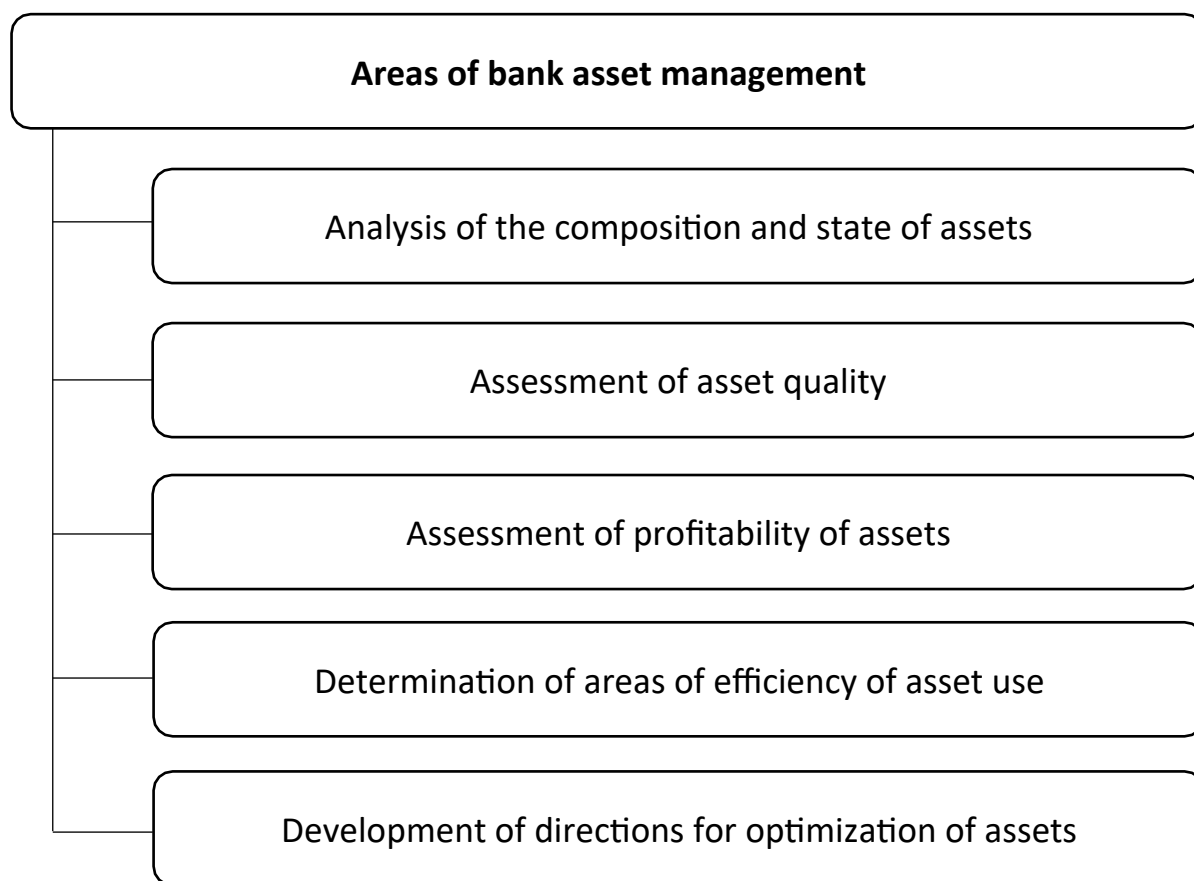


Fig. 1.5. List of areas of bank asset management (formed by the author on the basis of 11, 13)

Analysis of the composition and state of the bank's assets is carried out using horizontal and vertical analysis, analysis of the share of each type

assets in the overall structure of the bank's assets. This, in turn, makes it possible to assess the effectiveness of formation and the quality of assets.

The assessment of the qualitative composition of assets involves a general analysis of assets by degrees of risk and the calculation of indicators of liquidity, profitability, share in the structure of assets. The coefficient analysis of the bank's assets makes it possible to estimate:

- level of competitiveness of the bank;
- the level of profitability depending on the type of transaction or bank service;
- state of bank reliability;
- the state of development of the resource base;
- profitability of the bank [11, 40].

The qualitative composition of assets is largely characterized by the ratio between productive and non-productive assets and the bank's expenses for its own needs. The most important in the quality structure are the productive assets that have a high level of turnover and profitability among the bank's clients, provide the highest level of profitability in the short-term and long-term periods, and consist of the bank's credit and investment portfolio. The composition of the bank's assets is carried out in the following sequence:

- the general dynamics of changes in the structure of the bank's assets is determined with the help of a horizontal analysis of assets;
- is carried out analysis structures assets the bank by different classification features based on vertical analysis of assets;
- the relationship between is recognized separate types of assets with an aggregated indicator;
- analysis of growth rates and growth of asset indicators in the reporting period is carried out;
- an analysis and comparison of asset quality indicators for different time periods (different years) is carried out [13].

The assessment of profitability involves the analysis of the volume of income from the provision of services and operations in the market of banking services. Profitability indicators include the amount of interest and commission income received for each asset item. At the same time, it is advisable to use vertical analysis, which makes it possible to:

- to highlight certain types of active operations and give an assessment of their significance in the structure of the balance sheet;
- determine the degree of change in the scale of specific types of banking operations;
- to determine the change in movements of balances for certain types of accounts, to determine deviations by balance sheet items affecting the stability, profitability, productivity, profitability, and liquidity of the bank's active balance sheet items [29, 11].

It is important to use an integrated approach to managing both the bank's assets and liabilities, to consider them as a general component of the bank's effective activity on the banking services market, and to increase their profitability. At the same time, the essence of management involves the formation of a strategy that meets the bank's goals, principles of activity, the needs of the banking services market and the norms of the National Bank of Ukraine.

Modern banking institutions use various strategies for effective management of bank assets and include the following components: rational use of funds raised for granting loans and making investments, assessment of risks associated with active operations, assessment of the needs for the implementation of certain types of active services and operations, analysis of the structure by efficiency management, assessment of the influence of factors (external and internal) on the level of quality assurance of the provided operations.

At the same time, it is important to hire highly professional employees capable of providing transparent, profitable, reliable banking services.

The management of the bank's liabilities is grouped depending on the structure of the liabilities, and involves the management of the bank's liabilities and the bank's own capital separately. However, according to the purpose of formation, management, placement and use of such resources, they have completely different strategic goals and directions of management.

The components of liability management are determined by:

Liability management – involves the banking institution attracting a sufficient amount of cash with the lowest costs to finance active operations carried out by the bank (in particular, credit and investment operations).

Equity management - involves the implementation of the strategy of attracting and maintaining a sufficient level of equity capital to expand operations and maintain a high level of liquidity and investment attractiveness [13, 37].

The most important component of management is own capital, which forms the basis of banking activity, its stability and liquidity. In modern banking practice, two areas of equity management are used:

1. the method of using internal sources of capital replenishment;
2. the method of using external sources of capital replenishment [40].

According to the first method, retained earnings of the bank are used, which can be used through reinvestment. Using this approach makes it possible to provide self-financing in the cheapest way as soon as possible, and to expand one's activities. It is also one of the ways to leave existing shareholders without attracting new investors. Net profit that is directed to reinvestment can be directed to:

- ensuring a sufficient level of bank financing;
- ensuring the possibility of paying dividends to shareholders.

An important point regarding the management of retained earnings under the time of paying dividends is to set their amount, which will make it possible to increase the market value of the bank's shares on the stock market, increase the level of investment attractiveness. Such a position will make it possible to consolidate the position of the bank in the market of banking services, in the stock market and in the financial market as a reliable financial agent of the market.

The most optimal dividend policy of the bank is the one that maximizes the market value of the bank's shares on the market. For this, banks first of all need to implement an active policy and strategy of increasing net profit in order to further pay dividends and increase reserve funds [9, 30].

The management of the bank's liabilities is focused on the bank's attraction of a sufficient amount of resources of individuals and legal entities (on the bank's deposit accounts) for the purpose of financing the bank's active operations. At the same time, the level of efficiency of management of the funds involved is determined by the following factors:

- the ratio of the value of the funds involved is lower than the value of the funds placed, which will give an opportunity to receive a higher interest income;
- the amount of resources involved should be reliable and diversified, aimed at effective placement;
- mandatory formation of reserves for interest payments on deposits of individuals and legal entities.

Two methods are used to effectively attract and manage the bank's liabilities: pFig and non-pFig. Pricing methods are based on the use of the interest deposit rate as the main lever in the formation of the resources involved for different terms and in different currencies.

An increase or decrease in the interest rate allows you to control the demand for deposit resources, the amount of funds raised from individuals and legal entities, and determine the amount of free financial resources at the disposal of individuals and legal entities [29].

Non-pFig methods are based on the use of customer incentive methods and are not related to interest rates. They include:

- advertising;
- improved level of customer service, individual approach;
- expansion of the scope of additional services and areas of service;
- individual approach to the client, production of special cards, etc.;
- adjustment of the bank's work schedule to the client's needs;

- availability of convenient and free banking applications.

Ukrainian banks use pFig methods of attracting funds to deposit accounts, considering it the most attractive method of obtaining the necessary amount for placement in assets. Also, liability management is based on principles that should ensure the banking institution's efficient allocation of resources, namely: focus on clients, openness, transparency, meeting the needs of the market and clients (individuals and legal entities), legality, and most importantly, profitability.

At the same time, liability management should ensure the ability of the bank to form a sufficient level of own capital in order to protect its own interests and ensure its own security, on the other hand, the formation of liabilities, the level of which must be constantly monitored and the effectiveness of their attraction calculated.

Therefore, the bank's assets represent financial and economic resources that are attracted by the bank for the purpose of providing active operations and services and obtaining bank income. The structure of the bank's assets includes: cash and their equivalents, funds of the bank's mandatory reserves in the National Bank of Ukraine, loans and debts of banks and customers, investments in securities, derivative financial assets, investments in associated/associated and subsidiary companies, investment real estate, current income tax receivable, deferred tax asset, goodwill and property, plant and equipment and intangible assets.

The main functions of the bank's assets are: satisfaction of customers' monetary needs; expansion of banking services; ensuring a high level of profitability; obtaining a high level of profit; provision of high-quality active services and operations; introduction of new methods of attracting funds of individuals and legal entities. At the same time, the formation of assets is based on the following principles: transparency, credibility, efficiency, reliability.

The bank's liabilities represent a set of own, borrowed and borrowed funds necessary for the bank to ensure reliability, liquidity, and ensure a sufficient level of active operations. The structure of the bank's equity capital includes: authorized capital (share capital); emission differences; other additional capital; reserves and other funds of the bank; retained earnings or uncovered loss; other equity capital of

the bank. The bank's liabilities are presented mainly in the form of deposits - borrowed funds of individuals and legal entities.

Effective management of the bank's assets and liabilities is not only optimization of its structure in accordance with market needs, but also ensuring its profitability, liquidity, diversification, formation of a sufficient number of reserves, ensuring investment attractiveness.

CHAPTER 2. ANALYSIS AND EVALUATION OF ASSETS AND LIABILITIES OF DOMESTIC BANKS

2.1. Analysis of bank assets

The current state of Ukrainian banks largely depends on the state of war, the economic and political situation in the country, the number of banks, state support of the banking system in the context of crisis phenomena, which negatively affects not only their number (Figure 2.1), but also the scope of their activities .

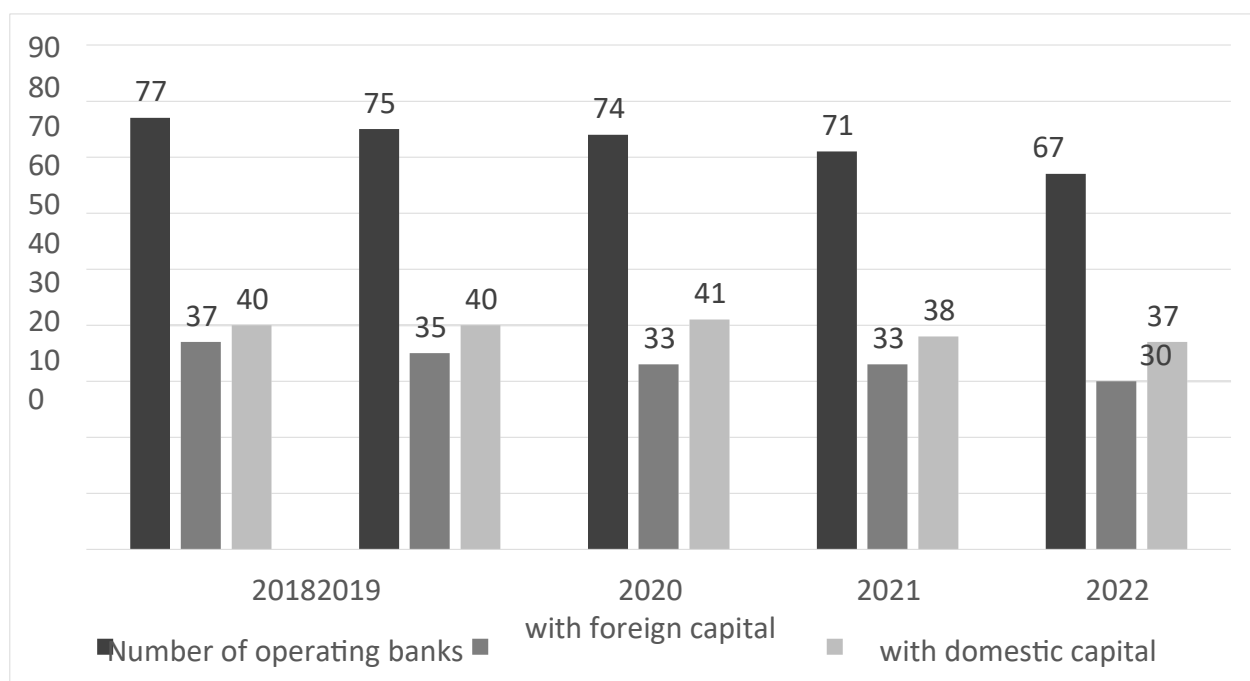


Fig. 2.1. Number of banks during 2018-2022, pcs. [34]

The total number of banks operating in Ukraine as part of its banking system decreased from 77 banks in 2018 to 67 banks in 2022. Three banks with foreign capital left the market due to the political and economic crisis, and a domestic bank declared itself bankrupt.

Despite the decrease in the number of banks, their assets during 2018-2022 are growing significantly and show a positive trend every year (Figure 2.2).

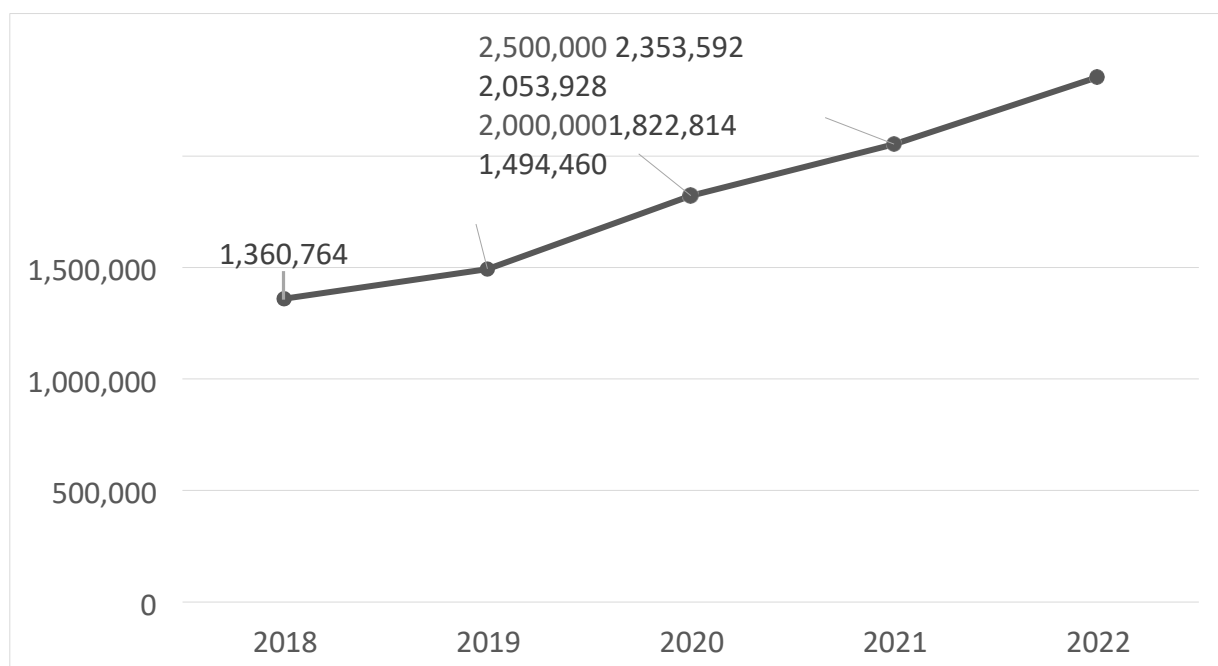


Fig. 2.2. Dynamics of bank assets in 2018-2022, mln. UAH [34]

As can be seen from Figure 2.2, there is a positive trend in the increase in the number of bank assets, during 2018-2022 they increased by 992,828 million. UAH and in 2022 amounted to 2,353,592 million. UAH

The structure of assets by individual items in 2020-2022 is presented in Table 2.1.

Table 2.1

The structure of bank assets in 2020-2022, mln. UAH

	2020	2021	2022	Deviation 2022-2020 year
Assets	1,822,814	2,053,928	2,353,592	530,778
Assets in foreign currency	585 349	583,717	731 394	146,045
Total assets (no adjusted for provisions)	2,209,287	2,358,982	2,716,883	507 596
Total assets (no adjusted) in foreign currency	745 788	679 420	819 336	73,548
cash	73,348	75,557	75,097	1 749
banking metals	572	384	156	-416
Funds in the NBU	2002	34,973	82,485	80,483
Correspondence accounts opened in other banks	176,041	172,868	315,085	139,044

Continuation of table 2.1

Term deposits in other banks and loans to others banks	2 037	60,096	51,010	48,973
Securities	791 345	829,887	1,021,5 20	230 175
Loans granted	963 664	1,065,3 47	1,036,1 29	72,465
Reserves for active operations of banks	375 459	278,774	368,091	-7 368

The total amount of the bank's assets during 2020-2022 increased by 530,778 million. hryvnias, which is a positive trend for Ukrainian banks in the conditions of war, economic crisis and decrease in customer profitability. During 2020-2022, the following also increased:

- assets in foreign currency amounting to 530,778 mln. UAH.;
- total assets (not adjusted for reserves) by 146,045 mln. UAH.;
- total assets (not adjusted) in foreign currency by 507,596 mln. UAH.;
- cash funds for 1,749 mln. UAH.;
- funds in the NBU for 80,483 mln. UAH.;
- accounts opened in other banks for 139,044 mln. UAH.;
- time deposits in other banks and loans for 48,973 mln. UAH.;
- securities for 230,175 mln. UAH.;
- granted loans for 72,465 mln. UAH

However, there were also decreases in the following balance sheet items: the volume of bank metals decreased by 416 million. hryvnias, reserves for active operations of banks decreased by UAH 7,368 million. UAH

As can be seen from Table 2.1, in the structure of active operations of banking institutions, one of the largest shares in 2020, 2021 and 2022 was occupied by loans granted to individuals and legal entities - clients of banks (Figure 2.3).

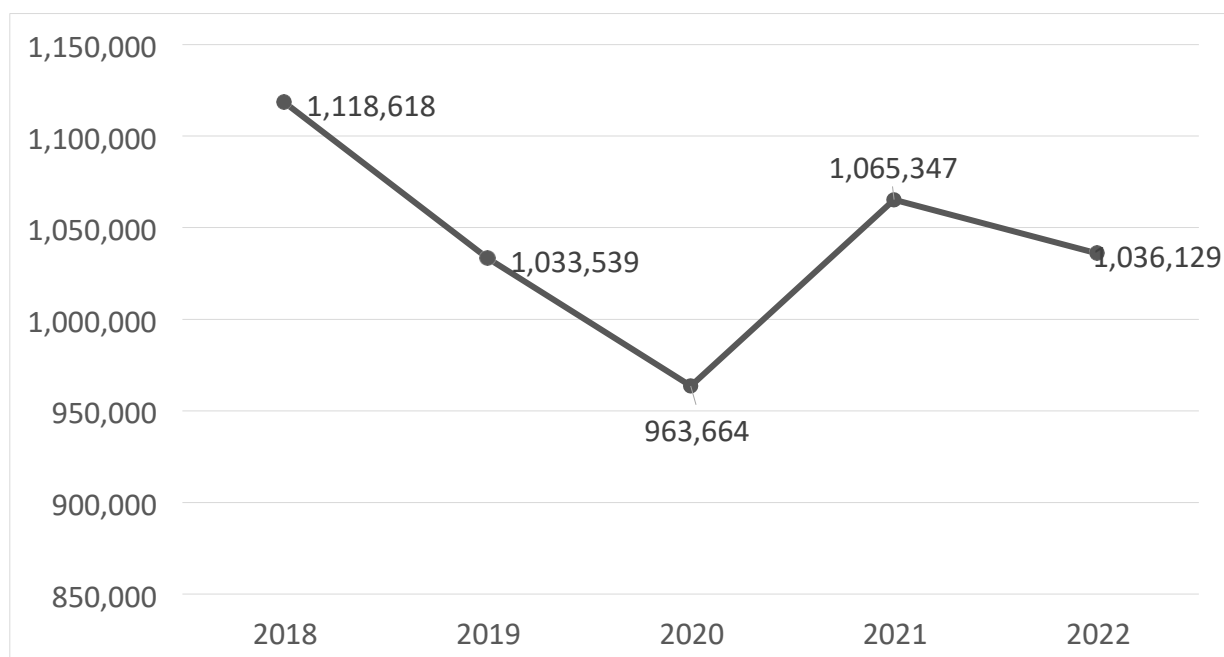


Fig. 2.3. Dynamics of loans granted to individuals and legal entities in 2018-2022, mln. UAH [33]

The volume of loans in 2022 decreased by 82,489million UAH in comparison with 2018 and by 29,128 mln. UAH compared to 2021. This situation is due to the low level of income of the subjects and the possibility of taking loans, the fear of customers not to return the amount in the conditions of war. The structure of bank loans during 2020-2022 is presented in Table 2.2.

Table 2.2

The structure of loans granted during 2020-2022, mln. UAH

	2020	2021	2022	Deviation 2022-2020
Loans granted	963 664	1,065,3 47	1,036,1 29	72,4 65
loans to state authorities	11,54 5	26,97 3	24,80 9	13,2 64
loans to business entities	752 503	795 513	801 327	48,8 24
loans to individuals	199,5 56	242,6 33	209,9 44	10,3 88
loans to non-bank financial institutions	60	228	48	-12

A significant part of the loans in the structure of the loan portfolio is given to business entities - enterprises, firms of different sizes (small, medium and large) and different forms of ownership. In 2022, the volume of loans granted to business entities increased from 752,503 mln. UAH in 2020 to 801,327 mln. UAH in 2022.

Loans granted by banks to individuals, mostly targeted consumer loans, also increased from 199,556 mln. UAH in 2020 to 209,944 mln. UAH in 2022. Loans to authorities increased from 11,545 mln. UAH in 2020 to 24,809 mln. UAH in 2022.

Average interest rates on loans granted to individuals and legal entities during 2018-2022 is presented in Figure 2.4.

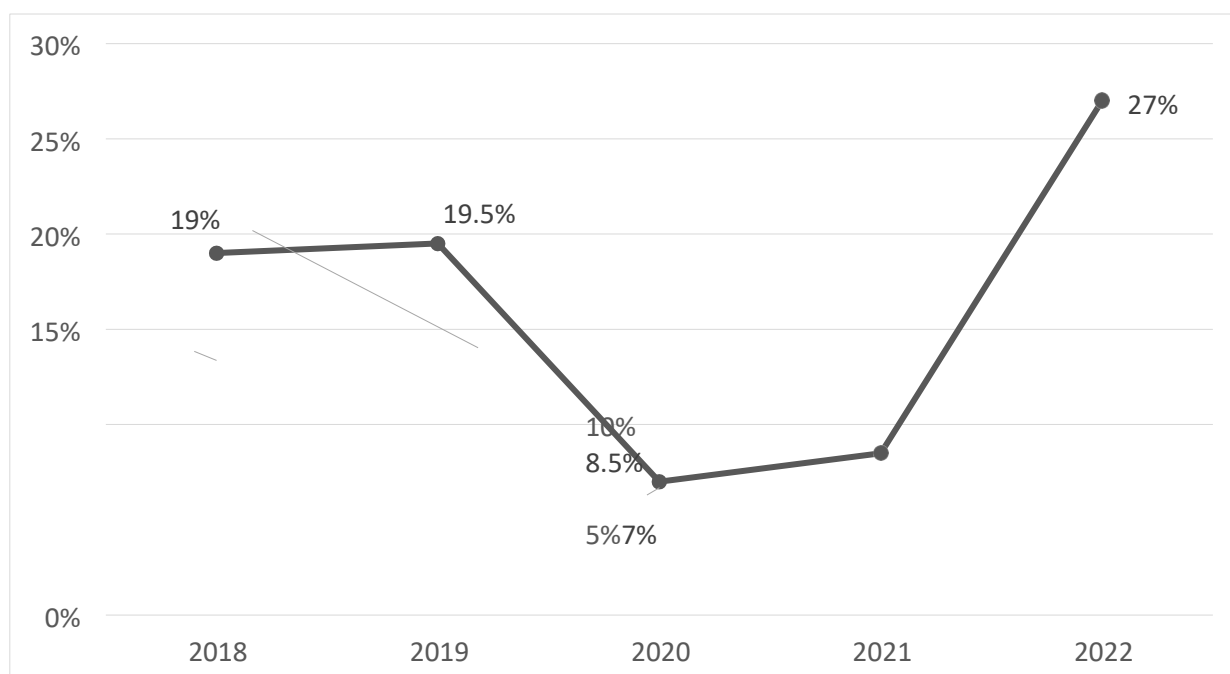


Fig. 2.4. Dynamics of interest rates on loans during 2018-2022, % [34]

Interest rates on bank loans granted to individuals and legal entities during 2018-2022 ranged from 7% to 27% and depended on the accounting policy of the National Bank of Ukraine, the economic and political situation in the country. As we can see from Figure 2.4, the most

high percentages were in 2022 - 27% per year in conditions of war, economic and political crisis.

The next important operations in terms of volume and profitability in the structure of bank assets are investments in securities, which provide the possibility of obtaining additional income, the opportunity to increase the level of profitability of the bank in the financial year, increase the profits of customers (if investments are made on behalf of the bank's customers), and also ensure the development domestic stock market.

The dynamics of investment operations of banks during 2018-2022 is presented in Figure 2.5.

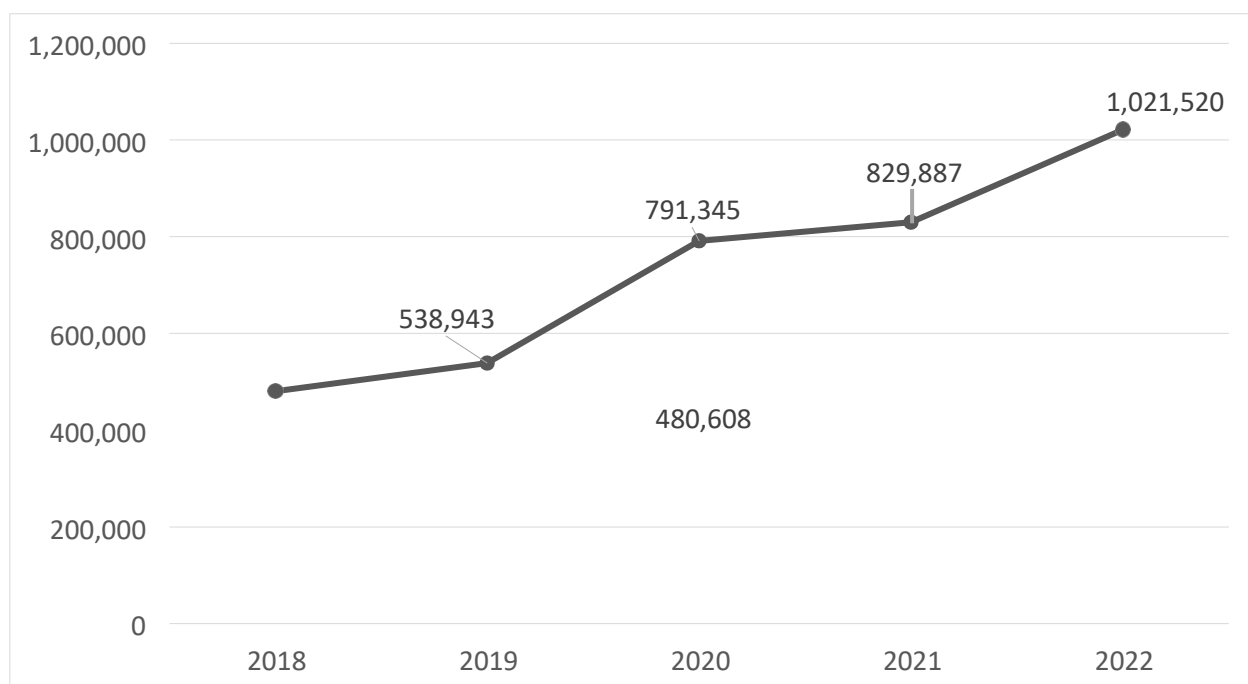


Fig. 2.5. Dynamics of investment operations in 2018-2022, mln. UAH

Investments in securities in the structure of bank assets during 2018-2022 increased by 540,912 million. hryvnias, which indicates the interest of clients and banking institutions in investments, in particular investing in bonds of the domestic loan, which are reliable and profitable even in wartime conditions.

2.2. Assessment of the structure of banks' liabilities

Crisis phenomena, which still have a negative impact on the country's economy, financial entities, financial agents of the market, and the banking system, reduce its ability to earn profits and provide quality services. According to the NBU, during 2022, the number of branches (subdivisions) of banking institutions decreased by 20% from 6,685 to 5,336. The main part falls on the southeastern regions where the occupation of territories, constant shelling and destruction of premises took place. Also, negative factors affected the structure of liabilities of Ukrainian banks during 2018-2022 (Figure 2.6).

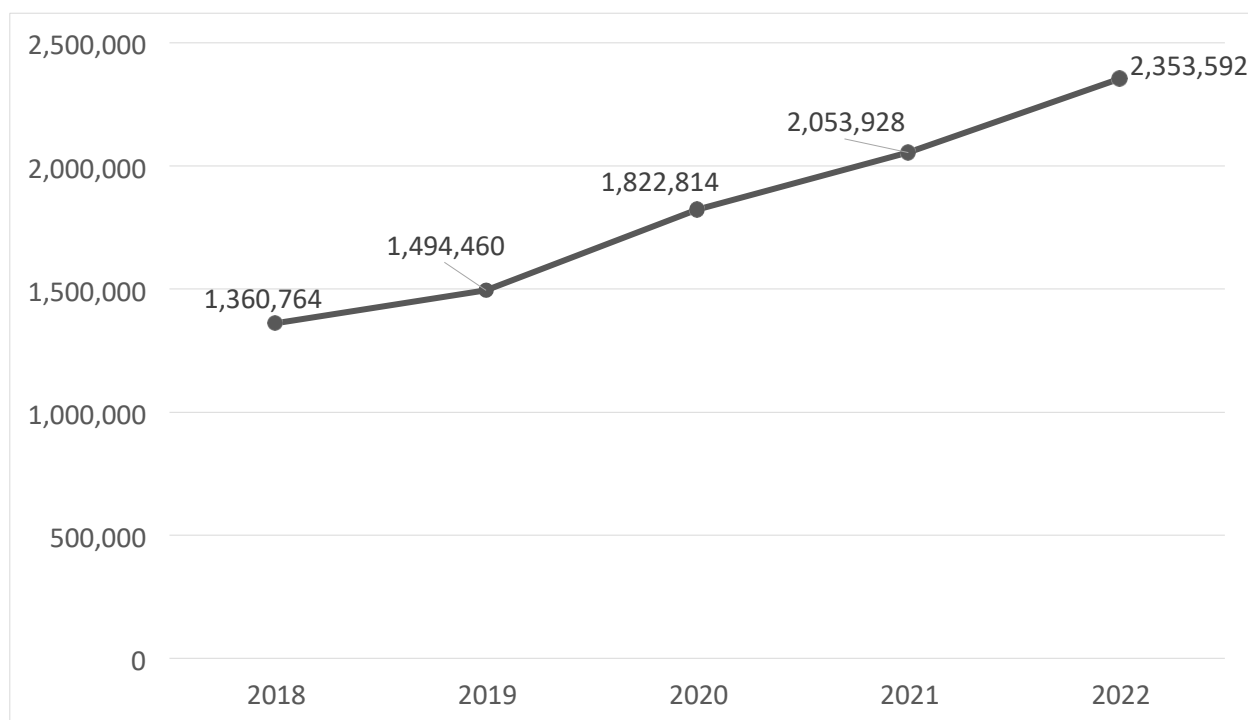


Fig. 2.6. Dynamics of bank liabilities in 2018-2022, mln. UAH [34]

As can be seen from Figure 2.6, the liabilities of banking institutions during 2018-2022, the liabilities of banks increased by 992,828 million. UAH Bank liabilities are the bank's own, borrowed and borrowed resources, which in financial statements are divided into:

- obligations of banks;
- banks' own capital.

In terms of the volume of formation of obligations, they make up a significant part, since they form a significant part of the funds attracted through deposits of individuals and legal entities, which are directed to the implementation of active operations, the provision of loans.

The dynamics of the bank's liabilities and equity is presented in Figure 2.7.

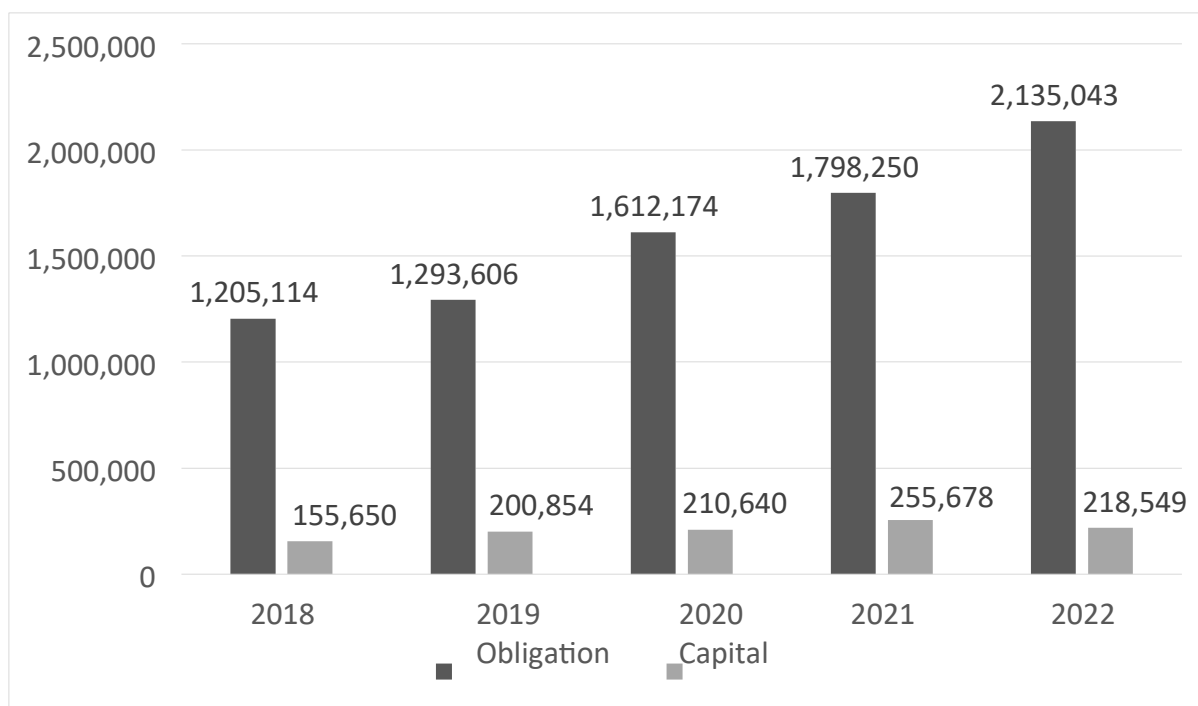


Fig. 2.7. Dynamics of liabilities and equity of banks during 2018-2022, mln. UAH

During 2018-2022, a significant increase in bank liabilities was observed, the increase in 2022 amounted to 929,929 million. UAH compared to 2018. The bank's capital has undergone a slight increase (by UAH 62,899 million), which is explained by the fact that during the five analyzed years, the number of banks that closed or went bankrupt is 10 institutions, which reduced the size of capital. A slight increase is due to an increase in reserves or profits during previous years.

The analysis of individual items of bank liabilities during 2020-2022 is presented in Table 2.3.

Table 2.3

The structure of bank liabilities during 2020-2022, mln. UAH

	2020	2021	2022	Deviation 2020-2022
Liabilities (total)	1,822,814	2,053,928	2,353,592	530,778
Capital	210,640	255,678	218,549	7,909
authorized capital	479,932	481 535	407 021	- 72,911
Obligations of banks	1,612,174	1,798,250	2,135,043	522,869
Obligations of banks in foreign currency	647 002	613,893	798 701	151,699
funds of business entities	646 491	758 434	889,526	243,035
including time funds of economic entities	147,871	137 417	139 196	-8,675
funds of individuals	682,029	727,022	933 553	251,524
including time funds of individuals	344 353	314,026	326,655	- 17,698
funds of non-bank financial institutions	34,704	41 410	53 188	18,484
including time funds of non-bank financial institutions	17,573	17,926	22,205	4,632

The overall dynamics of bank liabilities during the analyzed periods is constantly growing and shows positive dynamics, in the structure of liabilities there are more than 65

% belongs to liabilities that are formed due to attracting deposits of individuals and legal entities in national and foreign currency.

During 2018-2022 (Figure 2.8), the volume of time deposits of legal entities increased by 30,982 million. hryvnias, demand deposits increased by UAH

593,813 million. UAH and in 2022 amounted to 889,526 million. hryvnias, which allows banks to carry out effective operations, ensure the development of active operations, and provide loans in sufficient volume.

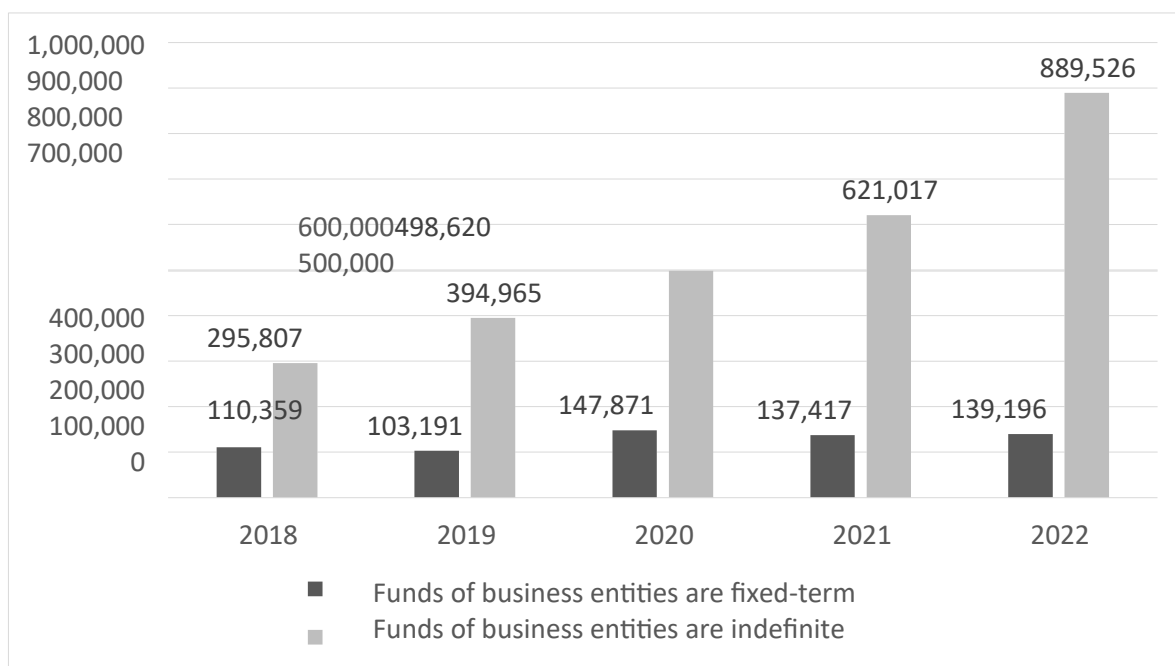


Fig. 2.8. Dynamics of time and open deposits of business entities in 2018-2022, mln. UAH

Term deposits (Figure 2.9) of individuals during 2018-2022 decreased by 960 million. hryvnias, while open-ended deposits of individuals increased by UAH 425,624 million. hryvnias, which made it possible to more safely insure one's funds against losses in war conditions.

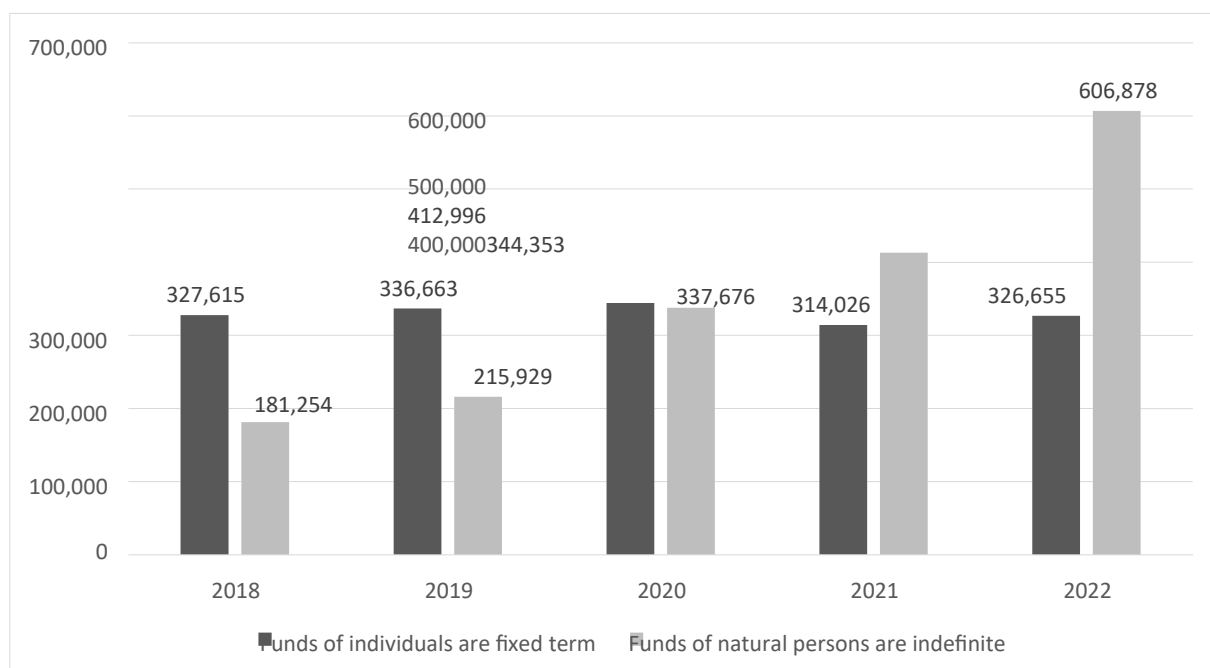


Fig. 2.9. Dynamics of time and open deposits of individuals in 2018-2022, mln. UAH

During 2022, a significant number of individuals opened accounts with an open-ended settlement in order to preserve their own funds, the ability to operate funds abroad, insurance against loss during shelling.

A significant part of the deposit funds are in current accounts (more than 31%) which include payments to military personnel, assistance to temporarily displaced persons, assistance to persons from the war (various state and international payments), which have not yet been used or withdrawn from the account.

The increase in foreign currency deposits was due to the National Bank of Ukraine's three-month offer of "conversion deposits", which were used to buy foreign currency for the account at a "preferential rate", which was 3-6 hryvnias less than the current exchange rates.

Interest rates on deposits of individuals and legal entities during 2018-2022 (Figure 2.10) were not high, which significantly reduced the attractiveness of investing funds in bank deposit accounts.

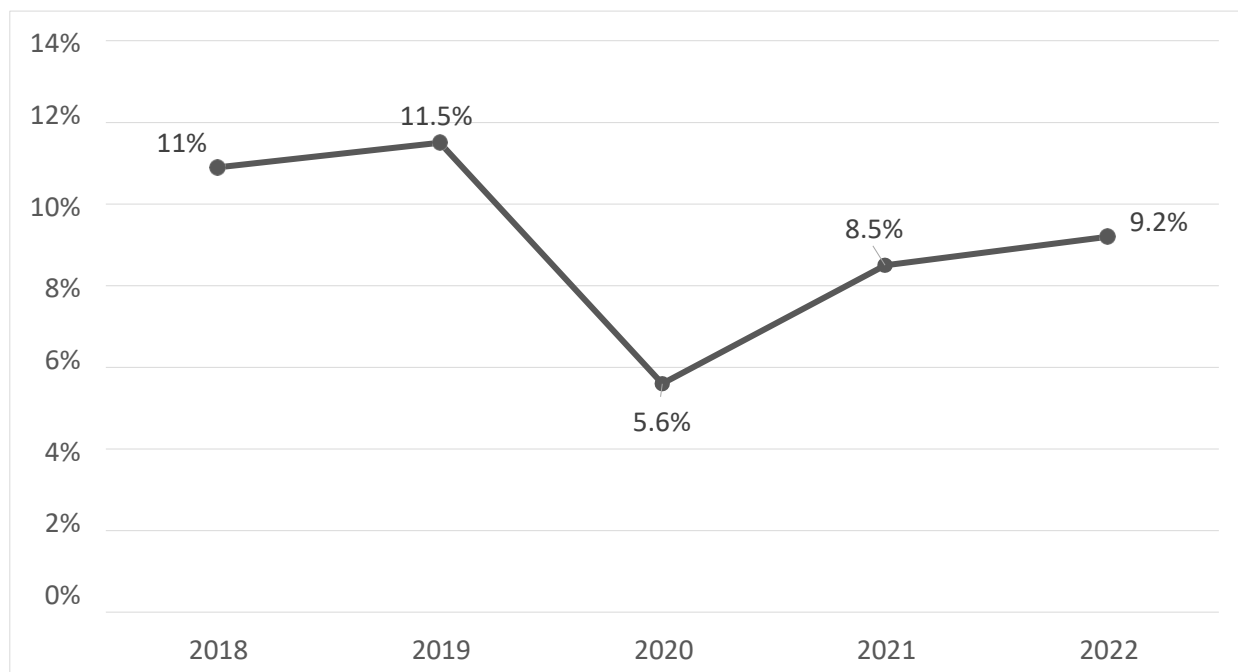


Fig. 2.10. Dynamics of interest rates on deposits during
2018-2022, %

The second component of banks' liabilities is banks' own capital, which forms the part of financial resources that belongs to shareholders, owners of banks. Thus, during 2018-2022, there was a reduction in the amount of authorized capital of banks (Figure 2.11).

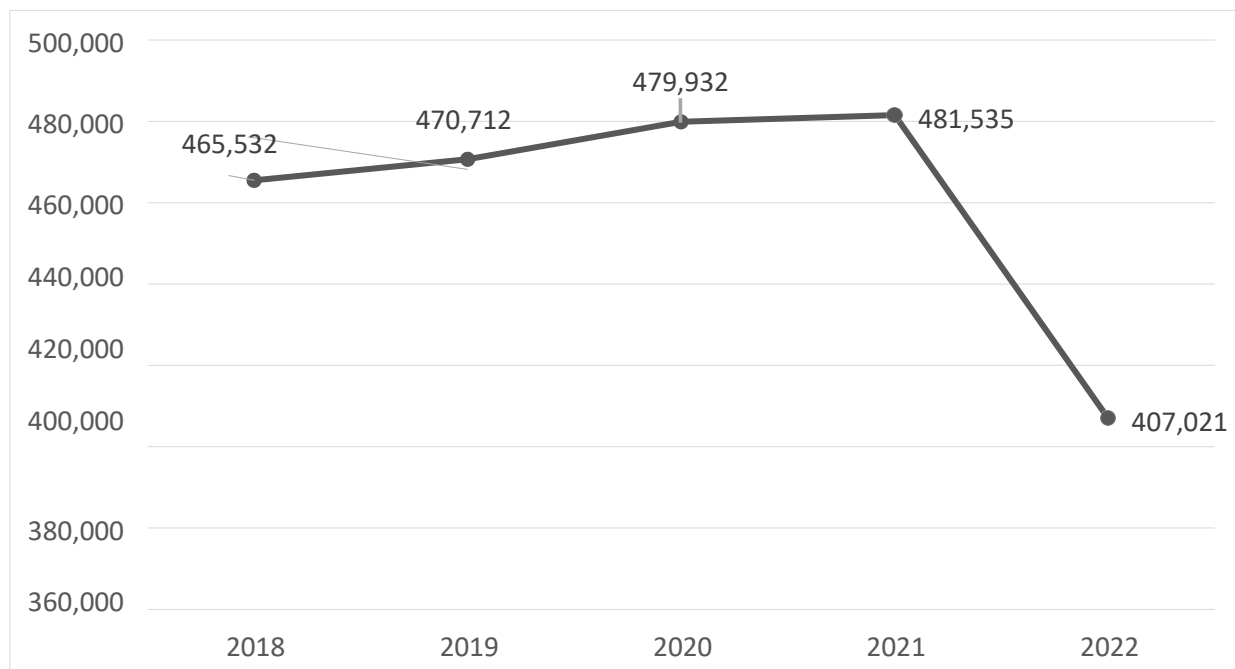


Fig. 2.11. Dynamics of authorized capital of banks
in 2018-2022, mln. UAH

The authorized capital of banks in 2022 decreased by 74,514 million. UAH compared to 2021 and by 58,511 mln. UAH compared to 2018, which is a consequence of the termination of the activities of 10 banks during the analyzed period and the absence of additional volumes of share issues by banks.

According to the amount of income received, the banks that replenished their equity capital in 2022 were: JSC Privatbank, JSC Raiffeisen Bank, JSC PUMB, JSC Ukrsibbank, and closing the top five leaders is JSC OTP Bank.

According to the forecasts of experts, the management of the liabilities of domestic banks should be based on the challenges of modern negative phenomena, the need of clients to keep their funds in accounts, diversification of currency and national savings of individuals.

2.3. Evaluation of the effectiveness of the mechanism of management of assets and liabilities of banks

Over the past year and a half, the National Bank of Ukraine has been trying to maintain the profitability of Ukrainian banks at a more or less stable level, despite the crisis phenomena and factors affecting the banks' activities.

Total return on capital of banks (ROE) in 2022 at the level of 10.9 % (Figure 2.12) indicates positive trends regarding the condition of banks and the banking system in general, but the source of income was the interest income of the largest large state banks of Ukraine, which made investments in intrastate loan bonds and certificates of deposit of the National Bank of Ukraine, which made it possible to obtain significant income for interest on securities.

However, if the banks increase the deductions to reserve funds in accordance with wartime, the return on capital will decrease significantly.

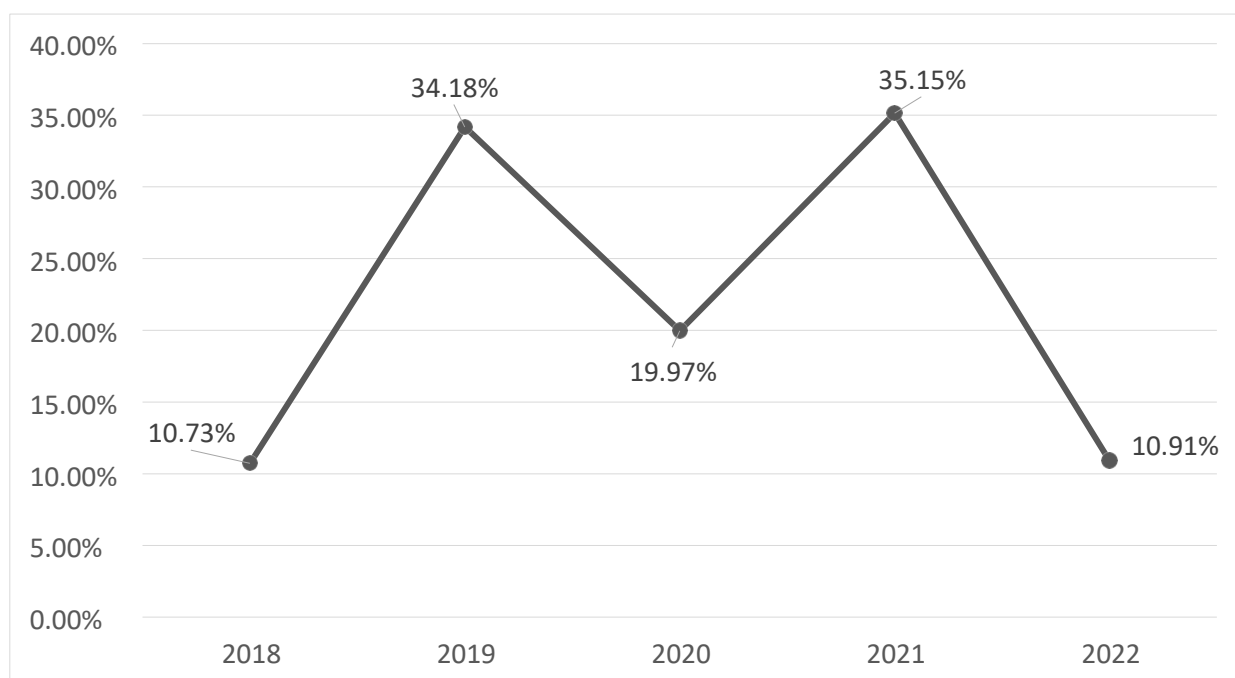


Fig. 2.12. Dynamics of profitability of banks' capital during 2018-2022, % [34]

In 2022, the return on capital of banks decreased by 24.24% compared to 2021, which is an indicator of the low level of profitability in the post-war period.

It is worth noting that it was the credit operations of banks and the significant growth of banks' investments in domestic loan bonds and deposit certificates of the National Bank of Ukraine that made it possible to increase both their own level of profitability and that of the banks' customers, and increase the profitability of assets.

Profitability of bank assets during 2018-2022 years is presented in Figure 2.13.

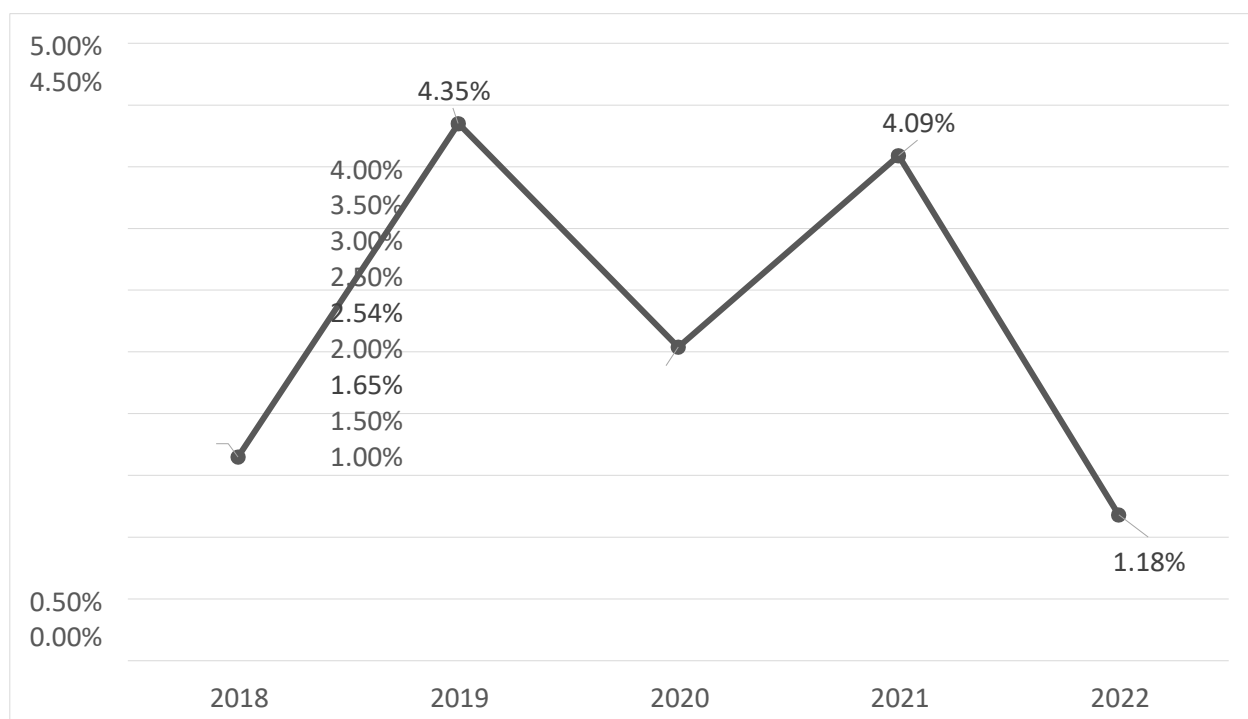


Fig. 2.13. Dynamics of profitability of bank assets during 2018-2022, %

Return on assets in 2022 was 1.18%, which is 2.91% less than 2021, 1.36% less than 2020 and 3.17% less than 2019.

For potential and existing clients of banking institutions, the National Bank of Ukraine advises to pay attention to profitability indicators

of modern banks, which are officially posted on the official page, the amount of deductions to reserve funds.

The dynamics of banks' reserves for active operations during 2018-2022 is presented in Figure 2.14.

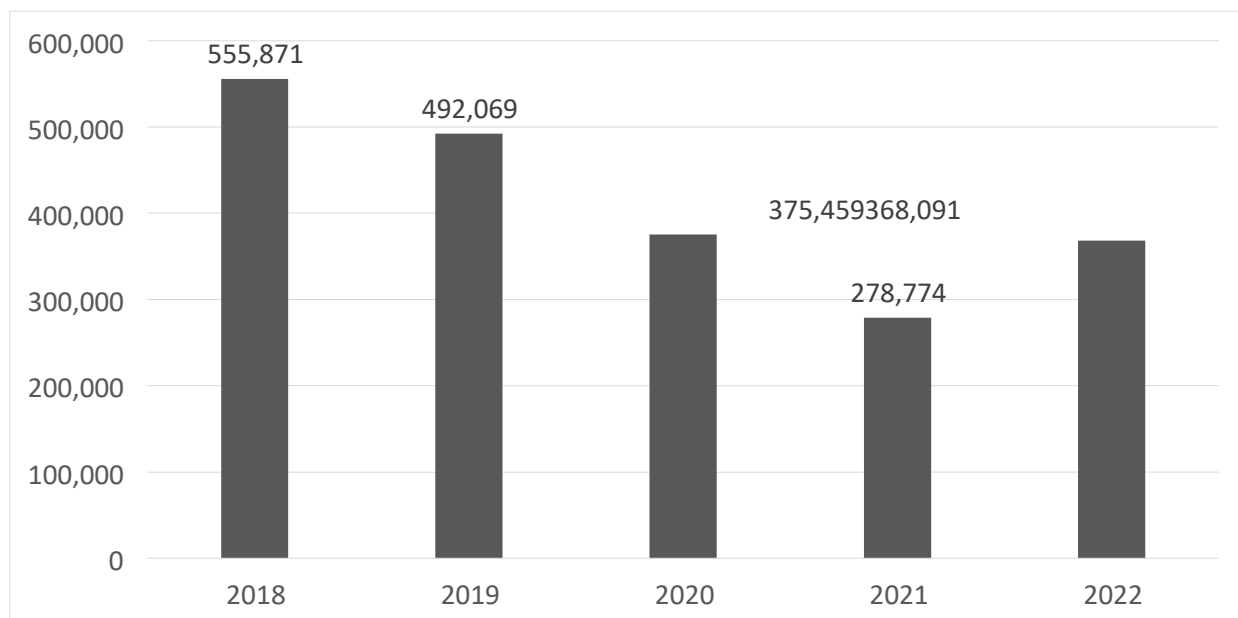


Fig. 2.14. Dynamics of banks' reserves for active operations during 2018-2022, mln. UAH

As can be seen from Figure 2.13, the amount of reserves formed by banks to cover possible losses from active operations in 2022 increased by 89,317 million. UAH compared to 2021, but decreased by 7,368 million. UAH compared to 2020, by 123,978 million hryvnias, and by 187,780 mln. UAH

According to the recommendations of the National Bank of Ukraine, banks are obliged to increase their own reserves in the period of martial law, taking into account:

- inflation rate in the country;
- the level of the NBU discount rate and the level of bank support;
- directions of financing and supporting the economy of Ukraine;
- the level of financial prosperity and capacity of citizens.

Also, an important aspect of determining the effectiveness of asset and liability management is the level of interest and commission income of banks (Figure 2.15).

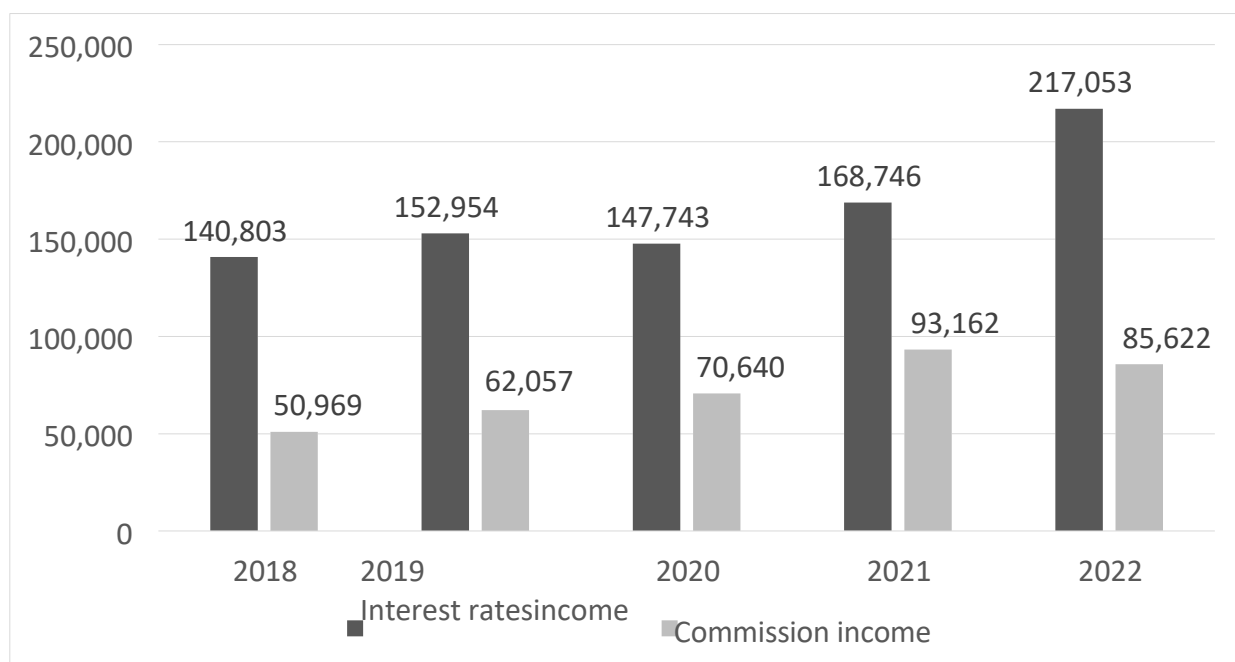


Fig. 2.15. Dynamics of interest and commission income of banks during 2018-2022, mln. UAH

Interest income in 2022 increased by 76,250 million. UAH compared to 2018, commission income in 2022 increased by 34,653 million. UAH compared to 2018, which indicates a positive trend and profitability. Bank expenses during 2018-2022 are presented in Figure 2.16.

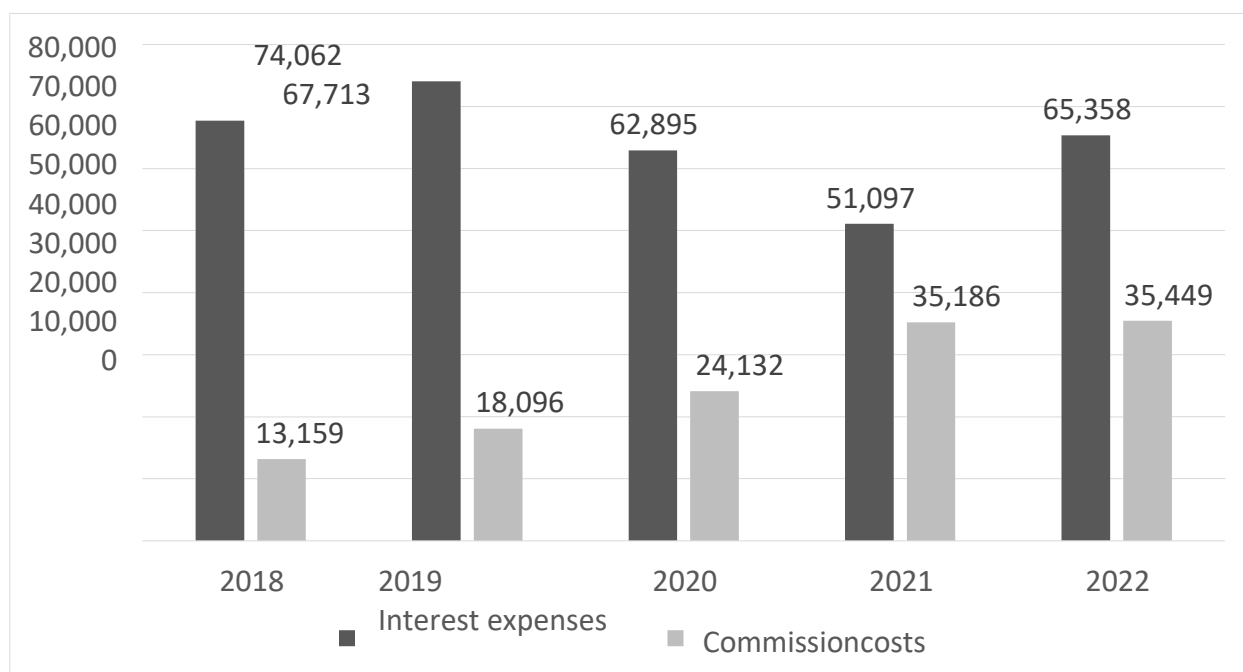


Fig. 2.16. Dynamics of interest and commission expenses of banks during 2018-2022, mln. UAH

Interest expenses in 2022 amounted to UAH 65,358 million, which is UAH 2,355 million. less than in 2018, and commission expenses increased by UAH 22,290 million. compared to 2018.

The amount of net profit of banks in 2018-2022 is presented in Figure 2.17.

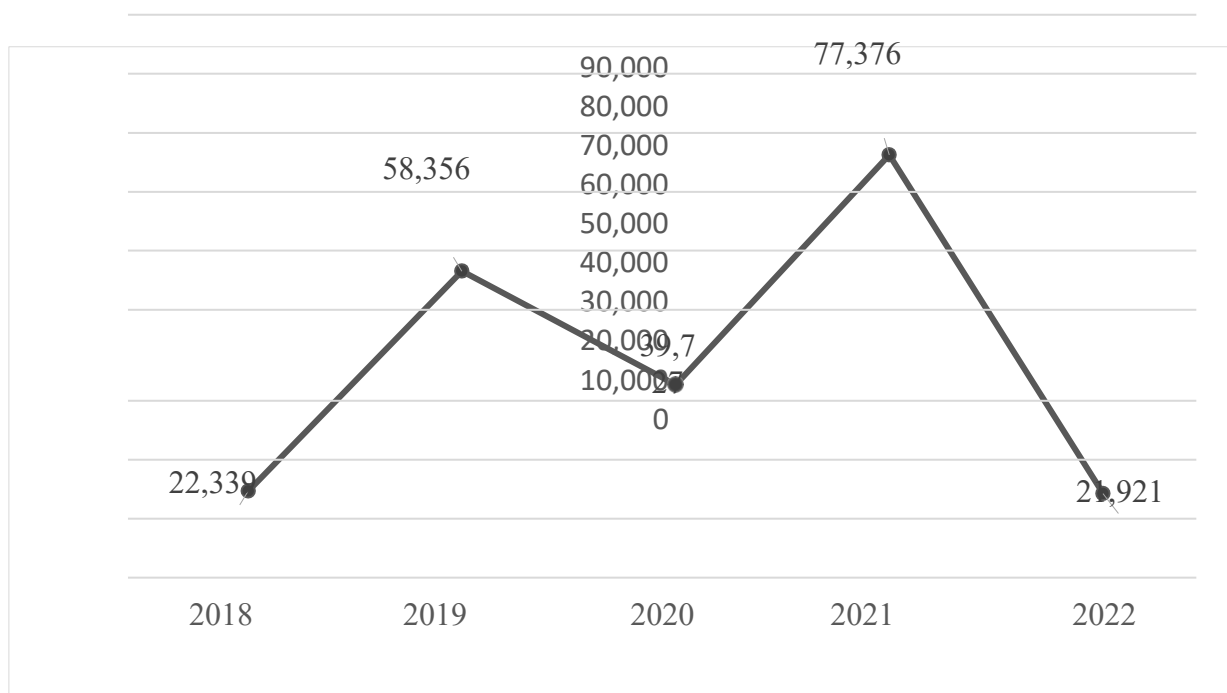


Fig. 2.16. Dynamics of banks' net profit during 2018-2022, mln. UAH

Decrease in the level of profitability of banks in 2022 by 55,455 mln. UAH., indicates negative trends, a decrease in the efficiency of both asset and liability management.

So, during 2018-2022, the number of banks decreased by 10 and in 2022 there will be 67 institutions. During the analyzed years 2018-2022, bank assets increased from 1,360,764 mln. UAH to 2,353,592 million hryvnias, that is, the increase in assets amounted to UAH 992,828 million. UAH The structure of assets increased the most during

three years: checking accounts opened in other banks for 139,044 mln. hryvnias, investments of banks in securities for 230,175 mln. UAH and granted loans to individuals and legal entities for 72,465 million. UAH

Loans to individuals and legal entities, which decreased during the analyzed period for 82,489 mln. UAH. Instead, investments in securities during 2018-2022 increased by 540,912 million. hryvnias, which indicates investment interest and the intention to obtain the maximum level of profit.

The liabilities of banks during 2018-2022 increased by 992,828 million. hryvnias, in terms of the structure of liabilities, the increase in liabilities in 2022 amounted to UAH 929,929 million. UAH compared to 2018, the capital of banks increased by only 62,899 million. UAH. The authorized capital of banks in 2022 decreased by 74,514 million. UAH compared to 2021 and by 58,511 mln. UAH compared to 2018, which is a consequence of the closure of 10 banks.

In 2022, the profitability of banks' capital decreased by 24.24% compared to 2021. Return on assets in 2022 was 1.18%, which is 2.91% less than in 2021. Interest income in 2022 increased by 76,250 million. UAH compared to 2018, and commission income by 34,653 mln. UAH. The net profit of banks in 2022 decreased by 55,455 million. UAH.

CHAPTER 3. DIRECTIONS OF IMPROVING THE CONTROL MECHANISMS ASSETS AND LIABILITIES OF DOMESTIC BANKS

3.1. Methods of improving bank asset management

In the course of their banking activities, domestic banking institutions today face a large number of negative factors, threats, external influences that reduce the profitability and efficiency of managing the bank's resources and assets.

In order to implement an effective asset management system, banks need to determine the key areas of work, the key goals of which must be achieved using certain methods:

- provision of high-quality, transparent, understandable and reliable banking services and operations;
- software the highest equal profit from implementation
active services;
- increasing the profitability of the bank's assets;
- reduction of the level of risky operations (this especially applies to loans granted to individuals and legal entities);
- increase in the size of investment portfolios of banks;
- informing existing and potential clients about possible new transactions, bank services;
- increasing confidence in banking institutions;
- improving the protection of bank clients;

Defining clear goals allows for the formation of the most effective directions and methods of managing the bank's assets. At the same time, in modern conditions, management must take into account the war in the country, the economic crisis, the impact of inflation on the position of the hryvnia, the level of financial support for the economy, and the standard of living of the population.

In our opinion, the following should be important methods of improving bank asset management (Figure 3.1).

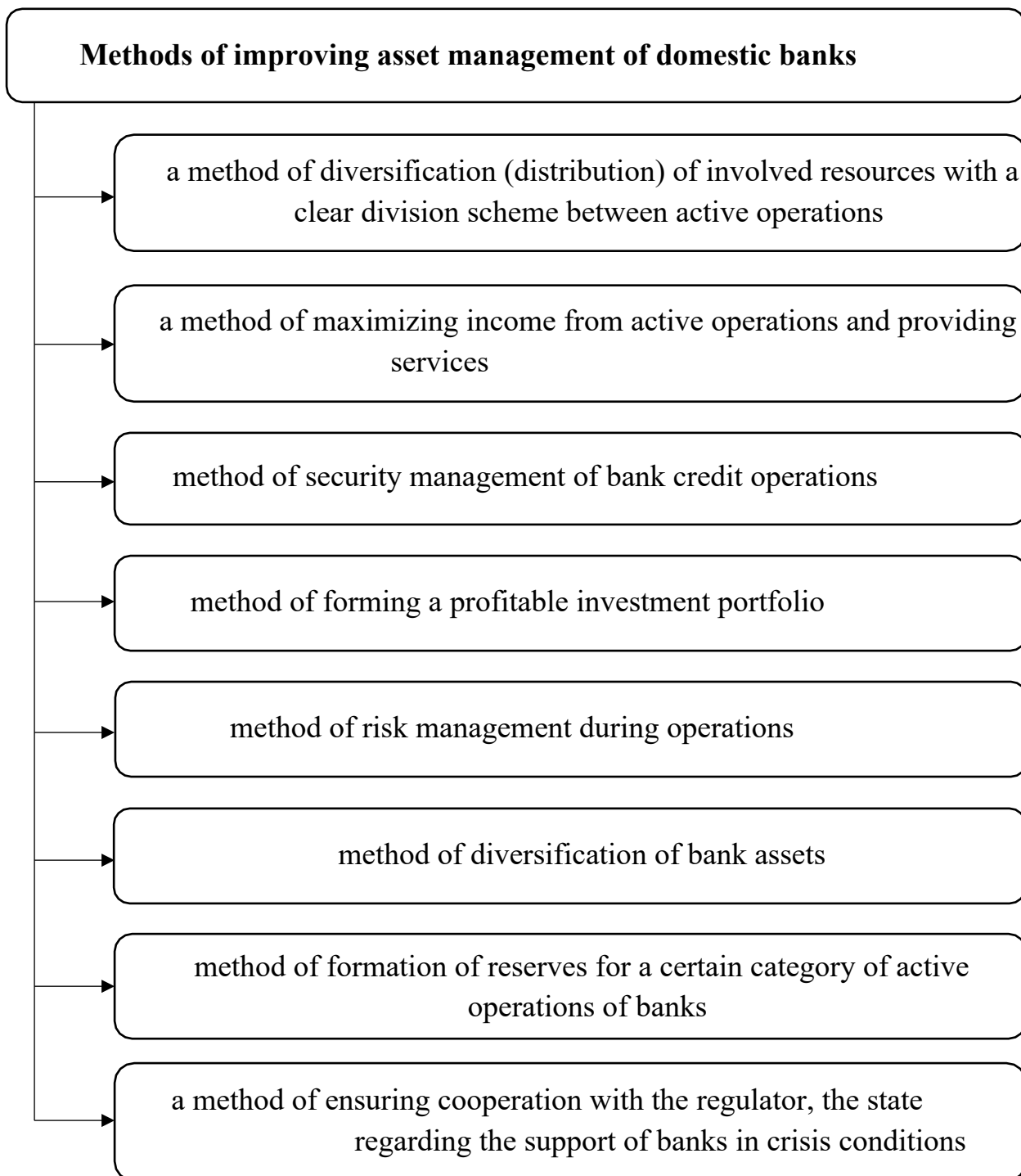


Fig. 3.1. List of methods of bank asset management (formed by the author on the basis of 13, 29, 40)

In the process of attracting resources, banks need clearly define directions of use, placing for software maximum effective using. For this bank, the distribution of funds is used for active operations, the profitability of which will bring the

banking institution the highest level of profitability.

That is why the bank must use the method of maximizing income from active operations. Its task is to distribute the resources of banking institutions involved in those assets that bring the highest level of profits during the financial period. According to the data provided in the second section, the most profitable assets include: cash and currency transactions, loans, investments.

The distribution of funds for loans is carried out depending on the needs of clients, who are both individuals, legal entities (enterprises, firms, companies, etc.), financial and state institutions, as well as depending on the terms of lending and the currency in which loans are granted.

Allocation to credit operations enables banks to form an effective credit portfolio, reduce the level of risk, ensure the maximum level of profit, and choose clients who will ensure full repayment of loan funds. Also, banks independently determine the types of loans that clients can choose from a banking institution.

Allocation to investments ensures formation of the bank's investment portfolio mostly in the long term. The bank's profit is formed at the expense of received discount interest, payments or dividends. Formation of investments is carried out on behalf of oneself or on behalf of clients and is invested in the most profitable and reliable securities.

Distribution of money provides for the possibility of providing cash or currency transactions to bank customers, to fill in the gaps of various types of settlement operations or current calculations, cash replenishment.

The following is a method of security management of the bank's credit operations, which involve constant analysis, evaluation of loans, formation of the least risky credit portfolio. Quality management of the credit portfolio will involve constant analysis and control of the following components:

- conclusion of a contract between the client and the bank, which includes all stipulated points, unforeseen circumstances, possible options for solving misunderstandings;
- loan amount, loan interest;
- terms and methods of repaying the received loan;

- check the creditworthiness of the client or his credit history;
- in special circumstances, the presence of a guarantor or collateral for the amount of the received loan [37].

An important aspect for modern banks in wartime is to ensure a more individual approach to loans, especially if the loan amount is granted in large volumes or for a long period. The current state of the war showed that banks need to approach the loan portfolio formation system with particular care, take into account all possible negative factors of the flow.

Another important method is the formation of a bank's profitable investment portfolio. Before the war, Ukrainian banks made investments in various securities - equity, debt and derivatives. After the Russian attack, companies limited the issue of shares, the stock market closed operations on the purchase and sale of securities, the regulator (the National Commission for Securities and the Stock Market) introduced restrictions on operations on stock exchanges.

From the middle of 2022, Ukrainian banks will concentrate their investment in government debt securities, namely bonds of the domestic loan, which have a number of important characteristics:

- is a reliable financial instrument, especially in the conditions of war, since the guarantor of bond payments and discount is the state and state bodies;
- provide stable interest income from funds invested in them;
- have an affordable nominal value (not only legal entities, but also individuals can invest in them);
- different investment terms (the longer the term, the higher the discount rate the investor will receive);
- support of the national economy;
- support of the army and military needs;
- ensure the development of intermediary services and financial agents of the stock market.

According to the data of the research carried out in the second section, the total amount of investments in securities - in bonds of the domestic loan in 2022 amounted to - 1,021,520 million. hryvnias, interest rates range from 9% to 30%

% depending on the maturity of the OVDP. Let's calculate the possible amounts of income at constant investment amount (based on 2022), but at different interest rates – 10%, 15%, 20%, 25% and 30% (Figure 3.3).

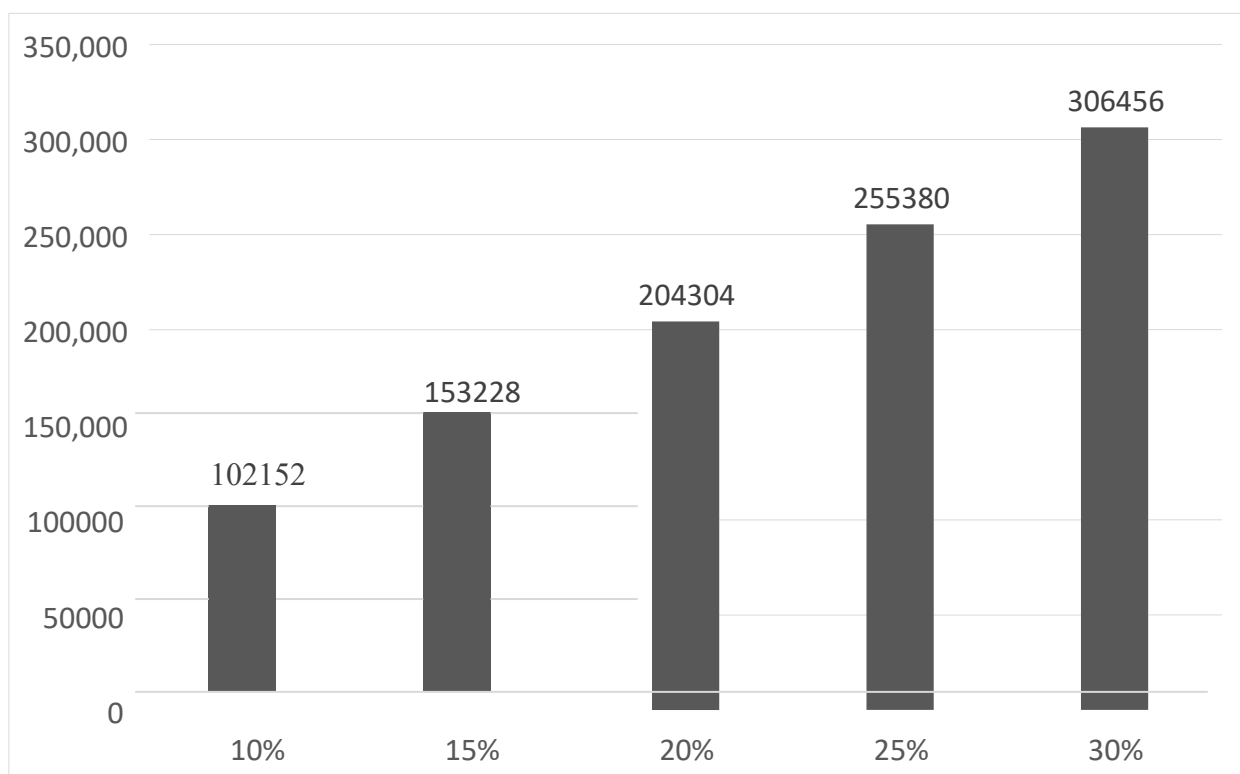


Fig. 3.3. Calculation of the forecast of possible profit from investment operations in OVDP, mln. UAH

The potential calculation showed that when:

- 10% - the income will be 102,152 mln. UAH.;
- 15% - the income will be 153,228 mln. UAH.;
- 20% - the income will be 204,304 mln. UAH.;
- 25% - the income will be 255,380 mln. UAH.;
- 30% - the income will be 306,456 mln. UAH

As can be seen from the research, investing in domestic loan bonds will provide banks with a reliable level of profits in times of crisis and war, an opportunity to increase profitability, liquidity, and ensure profitability for bank clients. Also, the received investment profit ensures the payment of taxes, thereby replenishing the state budget.

Banking institutions, through the implementation of investment operations, ensure the development of financial intermediation through the development of the stock market, underwriting and investment consulting services, and the formation of individual portfolios of securities.

Also, it is important for the bank to use the method of diversifying the bank's assets, which is based on the fact that to ensure effective, reliable, profitable and liquid asset management, attention should be paid to each active operation separately. Active operations have different functions in terms of purpose of ensuring the provision or organization of financial assistance, services, and operations to clients.

Therefore, the approach to the distribution of the involved resources should be based on the expediency, importance and efficiency of the distribution on this or that item of the balance sheet. That is why the main part is directed to credit and investment operations, which bring the highest level of bank income.

The method of formation of reserves for a certain category of active operations of banks is primarily based on the evaluation of unreliable or risky assets in order to protect against possible financial losses in the future. According to banking institutions, the main group of reserve funds (in national and foreign currencies) includes:

- reserves for possible losses from credit operations;
- reserves for the depreciation of securities in the bank's portfolio;
- reserves for risky debts of bank clients.

Banks form: special reserves formed by banks to compensate potential (possible) losses from credit operations, receivables, other assets; general reserves, which are formed in order to compensate for possible unforeseen risks. From the analytical data of the National Bank of Ukraine, it can be seen that in the conditions of the crisis, banks should increase the amount of reserves, since there is a significant percentage of the probability of losing part of the income from active operations.

In the current conditions, the most risky are those operations related to loans, currency, securities and receivables.

In this connection, the need for banks to use the method of risk management, which is currently the most relevant topic, arises. Risk management should involve the development of a strategy to reduce the impact of risky situations, operations or factors on the bank's active operations or profitability in general.

It is important for banks to create a department or department that will deal with:

- analysis of financial status, analysis of assets, liabilities, investments and loans during the reporting period;
- control over compliance with regulatory indicators established by the National Bank of Ukraine regarding liquidity, capital adequacy, etc.;
- assessment of the impact of possible risks on the activity and liquidity, profitability of banks;
- management of the following types of risk: credit, operational, market, interest, liquidity, portfolio (credit, deposit, investment);
- implementation of stress testing and identification of risks in activities;
- development of an early warning system and identification of risks, problem customers, etc.;
- development of a system for reducing the impact of risks on individual indicators of activity and the general financial condition of the bank.

Also, and in our opinion, the following are the important directions for effective management of active operations of banks in modern conditions:

- constant supervision and development of risk minimization strategy;
- monitoring and evaluation of the credit portfolio (composition, structure, profitability, efficiency, diversification, etc.);

- ensuring a sufficient level of liquidity;
- managing investments in securities, determining the level of profitability for different periods and for different financial instruments;
- planning financial budget the bank with purpose software financial stability;
- diversification of the distribution of the funds involved;
- strategic asset management in the long term;
- cost optimization;
- management of innovative technologies, etc.

3.2. Optimizing the structure of the bank's liabilities in modern conditions of the development of the banking services market

The current state of crisis has had a negative impact on the formation and management of bank liabilities, the amount of equity capital, the amount of retained earnings, and the decrease in citizens' income have reduced the amount of free financial resources that can be placed on deposit accounts. It still forces banking institutions to develop effective directions, methods and strategies for managing bank liabilities.

The strategy of managing the liabilities of banks is aimed at optimizing its structure in such a way as to ensure the solution of liquidity problems and the formation of an appropriate portfolio of resources by attracting additional funds on the financial market. The main emphasis is on sources of attraction of such resources:

1. involved bank resources;
2. the bank's own resources.

As you know, the raised capital (raised resources) of banks is the funds (monetary resources) that the bank attracts to deposit accounts. Formation

of the involved resources constitutes an important economic basis of the bank, which is related to the organization of the bank's activities, the formation of the process of providing active operations, commercial and intermediary services. The development of deposit operations largely depends on the state of the economy in the country, the incomes of the population, and the financial awareness of subjects in the field of banking services.

The formation of a complex management system for the funds of individuals and legal entities is an important direction of optimization of the invested capital (Figure 3.4).

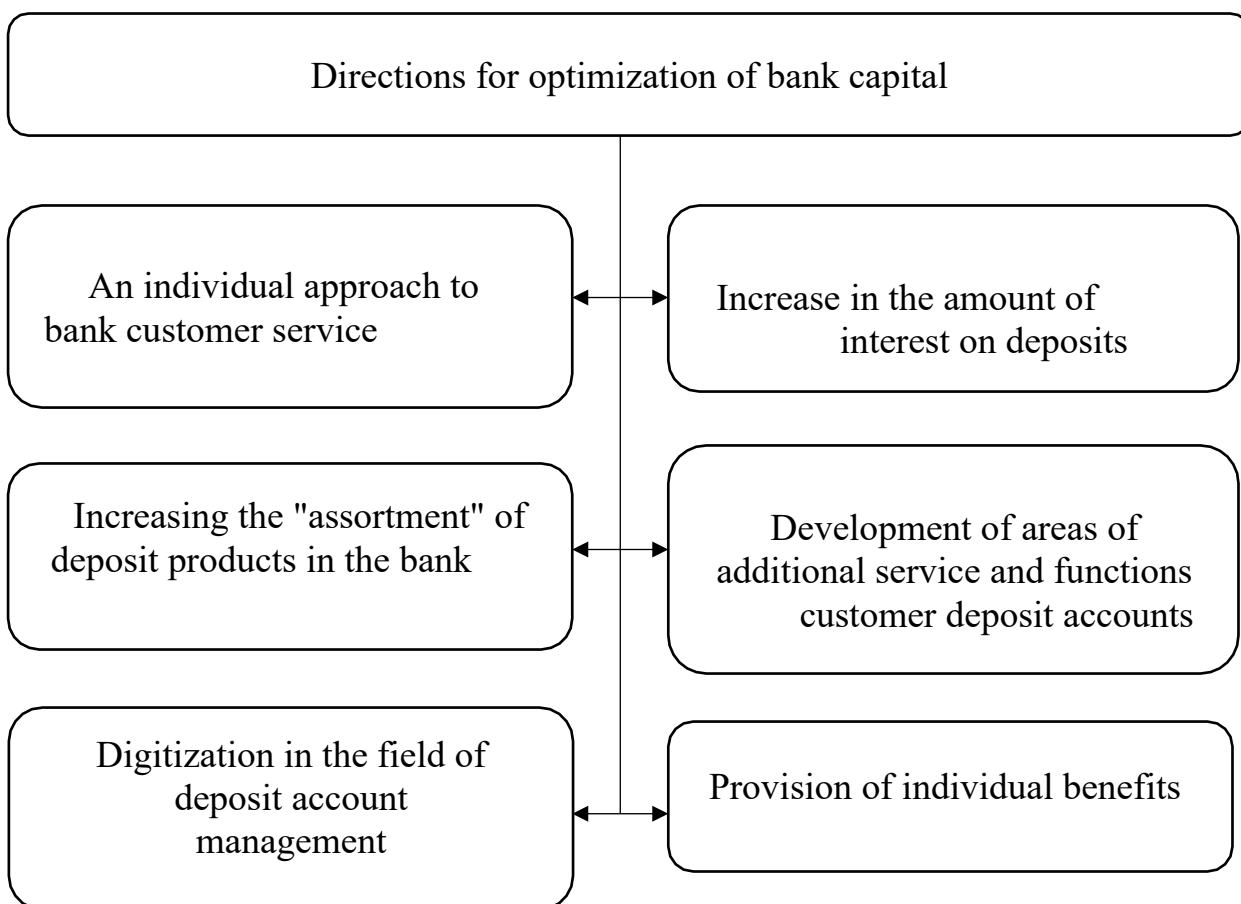


Fig. 3.4. Directions for optimizing bank deposits (raised capital) of banks
(author's own development)

An individual approach to customer service provides the opportunity for bank customers (individuals and legal entities) to contact the bank with personal questions related to: volumes of withdrawal and replenishment of funds, changes in interest rates (for example, if the amount is large, or the term

the attachment is very long), the possibility of changing the currency of the account, changing the conditions of storage or transfer to another account.

This issue is especially relevant for legal entities that open current accounts for carrying out financial activities, but have a significant number of different financial calculations, storage or conversion directions that require an individual approach.

The increase in interest rates, in our opinion, should be applied to a separate group of customers who provide special conditions. Especially in times of crisis, constant control over accounts and profitability will ensure a high level of trust on the part of the population. These include the following accounts:

- deposit accounts for children before they reach the age of majority (18 years or 21 years) in the future, this will give an opportunity to accumulate significant sums of funds;
- long-term accounts of pensioners in the national currency (which mostly serve as a means of accumulating one's own financial resources "for a rainy day");
- accounts that have a long-term period (the client replenishes the account for more than five years) and are linked to a current account.

Increasing the "assortment" of deposit products in the bank involves providing a larger number of deposit products depending on:

- deposit placement period;
- interest on deposit deposits;
- currency of the deposit;
- replenishment methods (number of times or unlimited, through a terminal or card, with the same or different amounts);
- with capitalization of interest or the possibility of withdrawal (at the end of the term or monthly to the client's card).

Digitalization in the field of deposit management of individuals and legal entities involves the development of computer support, new applications for mobile phones to improve work, replenishment, withdrawal or management of funds. At the same time, digitization will ensure effective management in three main directions: first, it is the development of effective and efficient protection for the client base, personal information, passwords, amounts of deposits, transfers, etc. Effective protection development will ensure a high level of trust in the bank on the part of customers, reduce the level of threats regarding the loss of customer data and funds, and reduce the possibility of cyber threats.

The second direction involves the development of computer support at the bank level (programs, website), which should ensure effective management of deposit resources of bank clients (individuals and legal entities) face-to-face (in a bank branch or branch) and remotely with the ability to manage or assist in management.

And the third direction, the development and implementation of new programs, applications for a computer, tablet or phone, with the ability to quickly and safely: open and close deposit accounts, top up accounts, transfer funds between different types of accounts, convert into different currencies, receive information regarding the expiration of the term of the deposit agreement or accrued interest, etc.

The development of areas of additional service and functions of customer deposit accounts involves a more "creative" approach to customer service, which will ensure an increase in the number of customers and, accordingly, the resources involved. Such directions include: development of individual card design, both plastic and in applications, use of additional stickers or emojis, avatars or pictures for transactions, the possibility of receiving additional bonuses for accumulation, etc.

The provision of individual benefits, in our opinion, should be applied to the following population group: pensioners, military personnel, people with disabilities. Under

benefits mean an increase in the amount of interest on deposit accounts or the removal of commissions for operations related to their accounts.

In the bank's relations with different groups of clients, deposit accounts with various modes of operation can be used. It is about studying the possibilities of applying in domestic conditions the experience of commercial banks of developed countries regarding the opening of various types of MA-, ATS-, NOW-accounts and some other types of deposits. On the one hand, the funds stored in such accounts can be used to make current payments, and on the other hand, they are a kind of financial investment that bring certain income to their owners, and therefore allow to eliminate one of the main disadvantages of ordinary deposits on demand - low profitability (or its complete absence), while maintaining an appropriate level of liquidity.

Management of banks' own resources and their optimization are based on two main approaches: increasing the amount of authorized (share) capital or increasing the amount of net profit. An increase in the size of the authorized capital provides two important goals: the first is an increase in the size of the authorized and, accordingly, equity capital of the bank, and the second increases the investment attractiveness of the bank on the stock market.

Banks can increase their authorized capital with the help of:

1. additional issue of shares and their placement among already existing shareholders or on the domestic stock market with the possibility of buying shares by new investors. Placing shares on the stock market will ensure the development of the stock market, attract investors, and ensure the movement of investment capital. This is an opportunity for banks "strengthen positions" regarding investment attractiveness among potential investors in the future;
2. reinvestment of the bank's profit as one of the effective ways of increasing the authorized capital of the bank. This will allow you to direct

part of the net profit for the development of the bank as a joint-stock company, to increase the nominal value of the shares of the participants (already existing shareholders of the bank), while the percentage value remains preliminary. In addition, shareholders do not need to make additional sums of money during reinvestment;

3. additional contributions of all participants (owners of the bank), the conditions of which are clearly prescribed in the bank's charter;
4. increasing the bank's reserve funds. This issue is especially relevant for modern banks in the conditions of war, crisis phenomena, devaluation of the national currency, and high inflation. It is advisable to form or increase reserve funds from part of the bank's net profit.

It is important that the process of increasing the bank's own capital leads to the strengthening of financial stability of banks, increasing the level of reliable positioning in the market of banking services, and also increases the general level of investment attractiveness as a joint-stock company.

Also, important areas of optimization of passive operations should include:

- implementation of a system of increasing interest rates depending on the terms of depositing funds or prolongation of deposit contracts with preservation of the deposit amount;
- formation of the deposit insurance fund of individuals and legal entities, in particular, it is necessary to increase the amount of deposit insurance in the Deposit Guarantee Fund of individuals, taking into account inflation and the constant increase in the volume of deposits;
- conducting additional issues of shares and placement on the stock market, not only among shareholders;
- to pay attention to the management of the bank's liabilities in the general strategy of the bank's management, i.e. to manage and optimize assets and liabilities in parallel;

- develop a bank capitalization management system;
- analyze and evaluate the ratio of assets and liabilities, liquidity;
- development of the management system of internal conflicts related to share capital, issue and dividend policy;
- carry out a constant risk assessment of the bank's external environment, develop a risk management program taking into account modern realities and the state of the economy, war and external threats to the bank.

Therefore, the management of assets and liabilities of modern banking institutions is an important direction for implementation not only by banking institutions, but also by the National Bank of Ukraine and state institutions. Determining the direction of asset management presupposes, firstly, the formation of management goals, and secondly, the definition of clear directions and methods of management. The main methods of bank asset management, in our opinion, should include: the method of diversification (distribution) of involved resources with a clear division scheme between active operations, the method of maximizing income from active operations and the provision of services, the method of security management of bank credit operations, the method of forming profitable investment portfolio, a method of risk management during operations, a method of diversifying bank assets, a method of forming reserves for a certain category of active bank operations, a method of ensuring cooperation with the regulator, by the state regarding the support of banks in crisis conditions.

Liability management involves the management of two separate components: own capital and borrowed capital. Optimization of own capital involves the implementation of the following important tasks: increase the size of the authorized capital, an increase in reserves due to deductions from net profit, an increase in the amount of net profit.

The directions for optimizing the bank's invested capital include: an individual approach to servicing bank clients, an increase "assortment" of deposit products in the bank, digitalization in the field of deposit account management, increase in the amount of interest on deposits, development of areas of additional service and functions of customer deposit accounts, provision of benefits.

CONCLUSIONS

Based on the research conducted in the qualification work, the following conclusions can be drawn:

1. Assets are important economic resources of the bank, which are at the disposal of the bank and ensure the provision of active operations with the aim of obtaining profit during the reporting period. As an economic category, assets perform the following functions: satisfaction of customer needs by providing necessary banking services and operations; expansion of the scope of financial services in the market of banking services; ensuring the profitability of domestic banks through the receipt of interest and commission income; ensuring a high and constant level of profit; provision of quality services depending on the needs of the market, customers and innovative development of the banking services market; to introduce new methods of attracting funds from individuals and legal entities for the purpose of obtaining income.
2. The bank's liabilities represent a set of own, borrowed and borrowed funds necessary for the bank to ensure reliability, liquidity, and ensure a sufficient level of active operations. The structure of the bank's equity capital includes: authorized capital (share capital); emission differences; other additional capital; reserves and other funds of the bank; retained earnings or uncovered loss; other equity capital of the bank. The bank's liabilities are presented mainly in the form of deposits - borrowed funds of individuals and legal entities.
3. The management of the bank's assets and liabilities involves the formation of their structure and ratio, which will ensure the highest level of profitability, financial stability, stability and efficiency of using own, borrowed and borrowed resources.

4. During the analyzed years 2018-2022, bank assets increased from 1,360,764 mln. UAH to 2,353,592 million hryvnias, that is, the increase in assets amounted to UAH 992,828 million. UAH In the structure of assets, the largest increase over the past three years was: checking accounts opened in other banks by 139,044 million. hryvnias, investments of banks in securities for 230,175 mln. UAH and granted loans to individuals and legal entities for 72,465 million. UAH
5. The liabilities of banks during 2018-2022 increased by 992,828 million. hryvnias, in terms of the structure of liabilities, the increase in liabilities in 2022 amounted to UAH 929,929 million. UAH compared to 2018, the capital of banks increased by only 62,899 million. UAH The authorized capital of banks in 2022 decreased by 74,514 million. UAH compared to 2021 and by 58,511 mln. UAH compared to 2018, which is a consequence of the closure of 10 banks.
6. In 2022, the profitability of banks' capital decreased by 24.24% compared to 2021. Return on assets in 2022 was 1.18%, which is 2.91% less than in 2021. Interest income in 2022 increased by 76,250 million. UAH compared to 2018, and commission income by 34,653 mln. UAH The net profit of banks in 2022 decreased by 55,455 million. UAH
7. In our opinion, the methods of asset management of banks should include: the method of diversification (distribution) of involved resources with a clear division scheme between active operations, the method of maximizing income from active operations and the provision of services, the method of security management of bank credit operations, the method of forming profitable investment portfolio, a method of risk management during operations, a method of diversifying bank assets, a method of forming reserves for a certain category of active bank operations, a method of ensuring cooperation with the regulator, by the state regarding the support of banks in crisis conditions.

8. Liability management involves the management of two separate components: own capital and borrowed capital. Optimizing own capital involves the implementation of the following important tasks: increasing the amount of authorized capital, increasing reserves due to deductions from net profit, increasing the amount of net profit. The directions for optimizing the bank's invested capital include: an individual approach to servicing bank clients, an increase

"assortment" of deposit products in the bank, digitalization in the field of deposit account management, increase in the amount of interest on deposits, development of areas of additional service and functions of customer deposit accounts, provision of individual benefits.

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APPENDICES

Appendix A

Classification of bank loans [14]

Classification sign	List of species
1. By methods of provision	– on a one-time basis; – according to the open credit line; guaranteed loans.
2. By repayment methods	– loans that are repaid in a single payment on a specific date, which is specified in the loan agreement as the loan repayment term; – loans that are repaid in installments.
3. By the number of creditors	– loans granted by one bank; – syndicated loans; – parallel loans.
4. By object of lending	– in current activity; – in investment activity.
5. By provision	– secured by collateral (property, property rights, securities); – guaranteed (by banks, finance or property of a third party); – with other security (guarantee, certificate of insurance organization); – unsecured (form).
6. For economic subjects-borrowers	– loans to state administration bodies; – loans to business entities; – loans to individuals.
7. By the currency of the loan	– loans in national currency; – loans in foreign currency; – multi-currency loans.
8. By terms (terms) of use	– short-term - up to 1 year; – onkolny — loans, the repayment of which does not take place in a clearly specified period, but at the request of the bank; – medium-term - up to 3 years; – long-term — more than 3 years.
9. By the nature of the interest rate	– loans with a fixed credit rate; – loans with a floating credit rate.

ПРОТОКОЛ
створення та перевірки кваліфікованого та удосконаленого електронного підпису

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Розмір файлу з підписом: 408.1 КБ

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Розмір файлу без підпису: 390.9 КБ

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Підписувач: УТЕНКОВА КАРІНА ОЛЕКСАНДРІВНА
П.І.Б.: УТЕНКОВА КАРІНА ОЛЕКСАНДРІВНА
Країна: Україна
РНОКПП: 2939018503
Організація (установа): ФІЗИЧНА ОСОБА
Час підпису (підтверджено кваліфікованою позначкою часу для підпису від Надавача): 18:40:40 04.12.2024
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Алгоритм підпису: ДСТУ 4145
Тип підпису: Удосконалений
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Сертифікат: Кваліфікований

Версія від: 2024.10.24 15:00

Онлайн сервіс створення та перевірки кваліфікованого та удосконаленого електронного підпису

ПРОТОКОЛ
створення та перевірки кваліфікованого та удосконаленого електронного підпису

Дата та час: 09:21:06 15.05.2025

Назва файлу з підписом: 04_диплом_Sun_Yan.pdf.p7s.zip[1].p7s[1].p7s
Розмір файлу з підписом: 773.1 КБ

Назва файлу без підпису: 04_диплом_Sun_Yan.pdf.p7s.zip[1].p7s[1]
Розмір файлу без підпису: 737.7 КБ

Результат перевірки підпису: Підпис створено та перевірено успішно. Цілісність даних підтверджено

Підписувач - 1: АЗАРЕНКОВА ГАЛИНА МИХАЙЛІВНА

П.І.Б.: АЗАРЕНКОВА ГАЛИНА МИХАЙЛІВНА

Країна: Україна

РНОКПП: 2571514226

Організація (установа): ФІЗИЧНА ОСОБА

Час підпису (підтверджено кваліфікованою позначкою часу для підпису від Надавача): 20:28:20 05.12.2024

Сертифікат виданий: КНЕДП АЦСК АТ КБ "ПРИВАТБАНК"

Серійний номер: 5E984D526F82F38F04000000E4DA710112DF3D05

Тип носія особистого ключа: Незахищений

Алгоритм підпису: ДСТУ 4145

Тип підпису: Удосконалений

Тип контейнера: Підпис та дані в одному файлі (CAdES enveloped)

Формат підпису: З повними даними ЦСК для перевірки (CAdES-X Long)

Сертифікат: Кваліфікований

Підписувач - 2: Омеляненко Денис Олегович

П.І.Б.: Омеляненко Денис Олегович

Країна: Україна

РНОКПП: 3634714115

Час підпису (підтверджено кваліфікованою позначкою часу для підпису від Надавача): 17:18:33 19.12.2024

Сертифікат виданий: "Дія". Кваліфікований надавач електронних довірчих послуг

Серійний номер: 382367105294AF9704000000EF5A070009B10B03

Тип носія особистого ключа: ЗНКИ криптомодуль ІІТ Гряда-301

Серійний номер носія особистого ключа: Не визначено

Алгоритм підпису: ДСТУ 4145

Тип підпису: Кваліфікований

Тип контейнера: Підпис та дані в одному файлі (CAdES enveloped)

Формат підпису: З повними даними ЦСК для перевірки (CAdES-X Long)

Сертифікат: Кваліфікований

Версія від: 2025.01.15 13:00