THE BANK`S INCOME: ESSENCE, STRUCTURE AND PECULIARITIES OF FORMATION IN MODERN CONDITIONS

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Abstract. The nature of banking activity is to interact closely with the market structure through capital flows in the financial market. The bank's performance is reflected through specific financial indicators, among which the bank's income is essential, which is the basis for calculating the financial result. In the current conditions of banking and business in Ukraine, the role and importance of stable formation of the bank's income is growing to ensure reproducibility in its activities and obtaining the indicatively planned profit level. *The paper aims to* deepen the theoretical and methodological foundations and practical recommendations regarding forming banks' income in Ukraine. According to the purpose of the study, the following tasks were set: to summarise the theoretical, organisational and regulatory framework of the process of bank income generation; to analyse the current process of income generation in the banking system of Ukraine; on a micro level, to evaluate the financial of JSC Sense Bank as an example of a nationalised bank to outline the main areas of improvement for the formation of bank income in the context of force majeure circumstances. *Methodology* of the study is based on general research methods of generalisation, scientific abstraction, analysis, and synthesis; statistical and comparative analysis, grouping and systematisation; method of statistical comparisons; graphic and tabular methods - for visual display of financial and economic indicators of banks and display of the results of the conducted research. *Results* of the analytical review of the structure of the assets, liabilities and financial results of Ukraine`s banking system in 2020-2024 have shown that despite significant challenges, the Ukrainian banking system has proved to be one of the most resilient components of the national economy, demonstrating rapid adaptation to the crisis. However, it

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is worth emphasising the significant share of the public sector in the banking system, over 50%, and the predominance of transactions with government bonds in the total volume of bank transactions. This study has identified the advantages and disadvantages of the current situation in the Ukrainian banking market. The influence of external business conditions and force majeure circumstances on the bank`s ability to generate income is shown in the example of the real bank, which underwent a profound transformation during the analysed period. *Practical implications.* A comparative analysis of the sources of bank income under force majeure circumstances will help improve a flexible policy of adaptation to the changing conditions of the banking market. *Value/originality.* A generalised assessment of the advantages and disadvantages of shifting the emphasis towards government bond transactions in the total volume of banking operations could help to overcome the pressing issue of concentration and monopoly in the banking market and, hopefully, encourage banks to lend more to the real economy and develop relevant digital services, etc.

1. Introduction

A well-established and efficiently functioning banking system is the basis for the stability of the country's economy. The nature of banking activity is to interact closely with the market structure through capital flows in the financial market. Bank performance is reflected through specific financial indicators, among which the bank's income is essential, which is the basis for calculating the financial result. This creates the conditions for gaining competitive advantages in the banking services market by generating the appropriate income level, so studying the peculiarities of the income generation process of banking institutions, especially in today's challenging conditions, is a relevant issue. Revenue generation in the banking system is a key aspect of the state's financial stability, especially in the face of significant economic and security shocks. During 2020-2024, Ukraine faced unprecedented challenges that significantly affected the functioning of the banking sector. The COVID-19 pandemic and the quarantine restrictions caused by it reduced economic activity, which affected the solvency of businesses and households. At the same time, the full-scale military aggression of the Russian Federation against Ukraine, which began in 2022, exacerbated the crisis, causing large-scale destruction, the forced displacement of millions of citizens, and unprecedented pressure on the country's financial system.

Despite the challenging circumstances, Ukraine's banking sector has demonstrated high resilience, adapting its strategies to the new realities. The National Bank of Ukraine (NBU) implemented anti-crisis measures, including regulatory easing, liquidity support, and control over the foreign exchange market, which helped prevent destabilization of the banking system. However, the key challenges remained a decline in lending, rising levels of non-performing assets, risks of deposit outflows, and a significant decrease in profitability. Non-traditional sources of income, such as securities transactions, currency arbitrage, the expansion of digital financial services, and active cooperation with international financial institutions, became an essential component of the banking system's revenues during this period. At the same time, structural changes in the economy caused by the hostilities contributed to new trends in bank revenue generation, such as an increase in the share of cross-border payments and a shift in emphasis to financing the defence sector and infrastructure projects.

2. Essence and classification of bank`s income

The primary purpose of a bank's operation is to make a profit. According to international accounting and reporting standards, "the financial result of banking activities is the net profit, which is the income remaining after covering all general banking expenses, tax payments and contributions to funds" [15]. The importance of profit for a bank is undeniable, as it is a source for paying dividends, creating bank funds, etc. Earning sufficient profit helps banks attract new capital, increases the volume and quality of services provided to the bank's customers, and encourages the bank's management to improve and intensify operations, search for cost reduction reserves and develop banking technologies. The most important "factor influencing the amount of bank profit is the income received from banking activities" [25].

"Banking activity means attracting deposits from individuals and legal entities and placing these funds on its behalf, on its terms and at its own risk, opening and maintaining bank accounts of individuals and legal entities" [19]. Based on a banking licence issued by the regulator, in addition to financial services, a bank has the right to provide other services.

The provision of services by a bank generates income. The concept of bank profitability reflects the aggregate positive result of banking activities in all its areas of economic, financial and commercial activity. They cover all the bank's expenses and generate profit, which determines the amount of dividends, the growth of own funds and the development of passive and active operations. Modern approaches of scholars to the interpretation of the concept of 'bank income' are shown in Table 2.1

Table 2.1

Definition of the concept of 'bank income' by different authors

Author	Definition
Buliuk V. V.	"Bank income is formed by the total amount of funds received by the bank as a result of active operations and other banking services" [2]
Gerasymovych A. M.	"Bank income is the growth of economic benefits during the analysed period as a result of the implementation of a banking product and other activities of the bank in the form of an increase in assets or a decrease in liabilities" [5]
Kobylyanska G. Yu	"Banking income is a component of the overall economic result of banking activities, namely the increase in economic benefits" [6]
Kushnariova A. A., Burkovska A. V.	"Income of a banking institution is the total amount of funds received by a banking institution as a result of active operations and provision of other banking services" [10]
Makarenko Y. P., Morokhovets K. S.	"Bank income is the total amount of money received by the bank as a result of active operations and other banking services" [11]
Stelmakh V. S.	"Bank income is the total income from all active activities of a banking institution" [27]
Fatiukha N. G., Hryshunova T. A.	"Bank income is an increase in economic benefits during the reporting period in the form of receipts or improvement of assets or reduction of liabilities, resulting in an increase in equity" [4]

Source: compiled on the basis of [2, 4, 5, 6, 10, 11, and 27]

According to the Rules for Accounting of Income and Expenses of Banks of Ukraine, "income is an increase in economic benefits during the reporting period in the form of receipts or improvement of assets or reduction of liabilities, increasing equity, except for the increase associated with contributions from participants" [23].

Thus, based on the legislation and scholars' definitions in the table, it can be concluded that bank income is the aggregate result of banking activities and changes in the balance sheet of assets and liabilities. Thus, the essence of the bank's income should be considered from the economic and accounting point of view. From a financial point of view, income is the funds at the bank's disposal as a result of its activities. We have mentioned above how income is determined through an increase in assets or a decrease in liabilities following the 'Rules for Accounting for Income and Expenses of Banks of Ukraine'. We want to add that in international practice income is defined as "gross receipts of cash and other funds arising in the course of the company's ordinary business activities from the sale of products, provision of services and use of the company's resources by other companies (interest, dividends, etc.)" [16].

To summarise, bank income is the amount of cash and other funds the bank receives due to banking activities and other business entities' use of its resources. The bank's income is the basis for the development of its activities, which ensures the solution of specific tasks, such as: the bulk of the bank's income is used to cover the costs incurred in conducting banking operations and providing services, which ensures self-sufficiency; part of the income is a source of net profit, which is used to create funds and reserves for development and risk mitigation. By fulfilling these tasks, the bank develops in the long term and maintains self-financing of this development over a long period. A commercial bank's income must necessarily be higher than its expenses, thus creating conditions for the bank to obtain a positive financial result – profit. It should be noted that part of the bank's income is used to create and replenish reserves to cover the probable realisation of risks. To be effective, a bank's income should cover its expenses and risk provisions and ensure regularity of income. Sources of income of commercial banks are disclosed according to the types of banking operations and services and are grouped according to various classification criteria and characteristics (Table 2.2).

Accordingly, the bank's income is divided into interest and non-interest income, the latter including commission and other fees and charges. Interest income represents the payment by the borrower to the bank for the use of borrowed funds for the period they are used. The bank may issue a loan to a customer directly through a loan agreement or through "securitisation, i.e. through investments in securities of different issuers traded on the stock market” [1]. Non-interest income includes all other income of the bank, except interest income, such as commission income, dividends, income from transactions with foreign currency and other currency values, and other income from intermediary, consulting, trust and fiduciary operations. Income is grouped by place of origin by divisions, branches, financial responsibility centres, and customers to improve the quality of planning and control, as well as, for example, to calculate the financial result separately for a division or to study and analyse the efficiency of the bank's divisions. The classification of income by affiliation, particularly in terms of typical customer groups or certain types of banking operations, allows for individual identification of ways and methods to optimise them to help save the bank's resources on expenses during banking activities and spend them more efficiently.

Table 2.2

Classification of bank`s income

Criterion, classification feature	Types of income
1. By the form of receipt	Interest, non-interest (commission, other)
2. By the way income is reflected in the financial statements	Income from operating activities, financing activities, investing activities
3. By the place of income generation	By divisions, branches, financial responsibility centres, clients
4. By quality	Adequate, random, adventurous
5. By affiliation	By type of transactions, products, financial instruments, portfolios
6. By frequency of receipt	Standard, indefinite
7. By material form	Cash, accounts, securities, tangible objects
8. By source of receipt	Businesses, households, stock exchanges, government
9. By terms	Fixed, variable

Source: compiled on the basis of [7, 10, 22, and 24]

The quality of income is also used as a basis for their classification and divides income into:

– adequate, which are of the highest quality and come from core banking activities;

– incidental, which are of lower quality and include extraordinary (repayment of written-off debt), speculative (currency arbitrage), and income from other operations (accrued financial sanctions, sale of property, financial instruments, etc.);

– adventurous, low-quality or practically low-quality income received in case of breach of contractual obligations, insufficient payment of commission fees as a percentage of the payment amount.

In addition, banking income can be divided into fixed and variable based on the criterion of correlation of its dynamics with the dynamics of the volume of funds placed. For fixed income, this correlation is practically absent; such income includes: "income from cash and settlement services, income from trust departments, commissions, fines and penalties, other charges for services rendered, operating other income" [26]. As for fixed income, its total amount does not change due to changes in the amount of funds placed in assets, but the amount of fixed income per unit of funds placed in assets decreases when their amount increases and increases when the amount of funds placed in assets decreases. Variable income is income whose amount changes directly to the funds invested in assets. Such income includes: "interest and fees on loans granted by the bank, interest on deposits with other banks, interest on corporate bonds" [26].

The general mechanism of bank income generation, studied in the work of H. Wagner, is that banks accumulate customer deposits and pay interest for using them [29]. Then, banks either invest these funds in securities or provide loans to borrowing clients. When interest earned on loans is higher than interest paid on deposits, the bank earns net interest income. The net interest spread is a key driver of a bank's profit. Banks also receive fee and commission income, which "they charge for their services, including asset management advice, current account fees, overdraft fees, ATM fees, interest and payment card fees, etc." [8]. Peculiarities of bank income formation can be considered from two perspectives: by type of activity (operating, investing, financing) and by nature (interest and non-interest). Let's consider the specifics of the formation of bank income according to these distribution criteria. Following the classification of activities in NR(S) AU 1 into operating, investment and financial, the bank recognises income and expenses for each type of activity [22]. When recognising income and expenses, the bank is guided by the accrual principle: "the reflection in the accounting and financial statements of income and expenses when they occur, regardless of the date of receipt or payment of funds" [23].

Figure 2.1 shows the types of income generated by operating activities.

A bank's operating activities include all its primary banking operations and services as a financial intermediary in the market, generating most of its income. Let's consider the specifics of generating income from operating activities by the types of transactions and asset groups that generate them. Interest income is generated by the assets of a bank, which are called earning assets, working assets, or interest-bearing assets. "Profitable assets are assets that generate interest income for a banking institution. They include the loan portfolio, funds placed with other commercial banks, funds invested in securities, and other income-generating assets" [12].

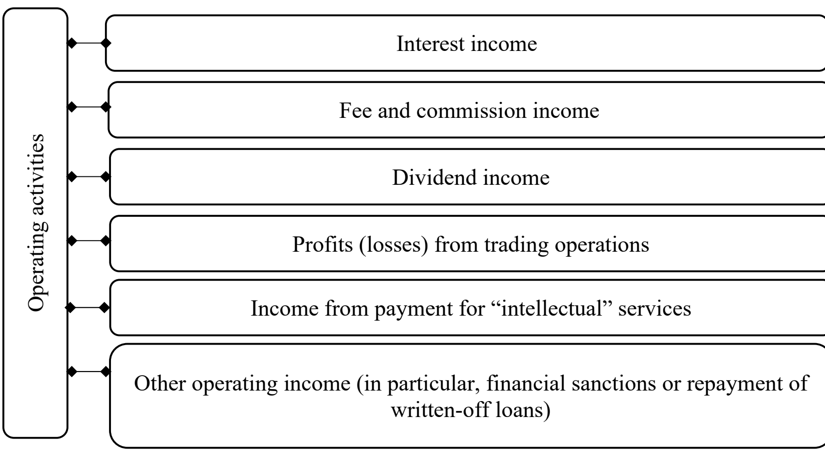

Figure 2.1. Types of income from operating activities of the bank

Source: based on [28]

Interest income, which can be grouped into income generated by hryvnia loans and income generated by foreign currency loans; income from interest on deposits with banks, leasing to customers, and debt securities portfolio, can be optimised within the framework of competitive, resource, social external constraints, as well as constraints on their quality. For example, to limit risk, the share of overdue loans should not exceed 2-5% of the bank's income. Fees and commissions are non-interest income, including fees for opening and maintaining all customer accounts, leasing, factoring, agency, trust, management services, etc. They are inherently reimbursable and should directly correspond to the costs incurred for their performance and indirectly to the quality of the transaction, but their excessive growth in the structure of the bank's income may mean a loss of the quality of bank management and the bank's image.

Dividend income is non-interest income from investing activities, namely dividends on equity securities and income from joint ventures, which in some cases may be significantly overstated, as their yield is only exceptionally the sole purpose of the investment. More often, another objective is assumed to be achieved, which results in lower returns compared to the costs of management, information, diversification, etc.

Trading income is non-interest income, which includes the purchase and sale of currencies, securities and other financial instruments, such as futures and options, as well as currency dealing and arbitrage. Trading results are speculative and arise from activities undertaken by the bank on its behalf rather than on behalf of its customers. As a rule, they are generated due to short-term fluctuations in financial asset prices and are formed due to non-traditional banking operations that are not very typical and somewhat risky for banks. Accordingly, the share of such income in the bank's income is limited due to their volatile nature, and therefore, it is impossible to expect to maximise them.

Fee and commission income are non-interest 'intellectual' services, such as intermediary services, consultations, guarantees, sureties, and income from rent of intangible assets: certain methodological developments, know-how, and software developed or acquired by the bank, which is especially relevant in the context of digitalisation of the banking sector. They are of the highest quality and characterise bank management as competent and highly professional. If such intellectual know-how and related investments are successfully implemented, with relatively low operating costs, such revenues can become stable and guaranteed. In some cases, the profitability of this group of operations involves maximising such revenues.

In contrast, other income, such as financial sanctions received by the bank (fines, penalties, etc., imposed on bad borrowers), is very unfavourable from the point of view of the bank's income generation and should be minimised.

They only worsen borrowers' already difficult financial situation on non-performing loans, making it more challenging to fulfil their obligations. They only partially cover losses and quite often, on the contrary, contribute to the growth of losses, thus reducing the bank's image as one that sues its customers, which disrupts partnerships. In contrast, income from the recovery of a written-off loan due to rehabilitating a troubled borrower and restoring its image may only partially compensate the bank for the losses incurred. Accordingly, such income should be minimised.

In the context of this classification, following NR(S)AU 1, the bank's investing activities are the acquisition and disposal of non-current assets and financial investments that are not part of cash equivalents. Figure 2.2 shows the income generated by investing activities.

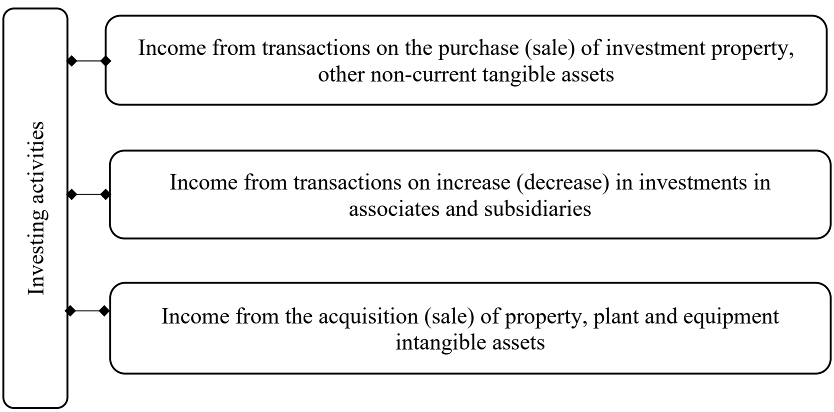

Figure 2.2. Types of income from the bank`s investing activities

Source: based on [28]

Banking institutions may participate in the investment process by servicing the movement of funds of client-investors intended for investment purposes, cooperating with clients in mobilizing savings and allocating them to investment purposes by working in the stock market, and investing their own and borrowed resources in the investment process. The bank`s investment property, which is land or a building or part of a building, or both, is held to earn rentals or for capital appreciation and is not held for use in production or sale in the ordinary course of business. These are the bank`s real investments, which require capital investment to generate from them. Regarding investments in associated and subsidiaries, Article 50 of the Law on Banks and Banking Activity sets out specific restrictions on bank investments in other legal entities' capital. In particular, "a bank`s direct or indirect participation in the authorized capital of any legal entity may not exceed 15 per cent of the bank's regulatory capital. The bank's total investment in the authorized capital of legal entities may not exceed 60 per cent of the bank's regulatory capital" [19].

The bank`s financing activities result in changes in the amount and composition of equity and debt. Income generated from operations related to financing activities is shown in Figure 2.3.

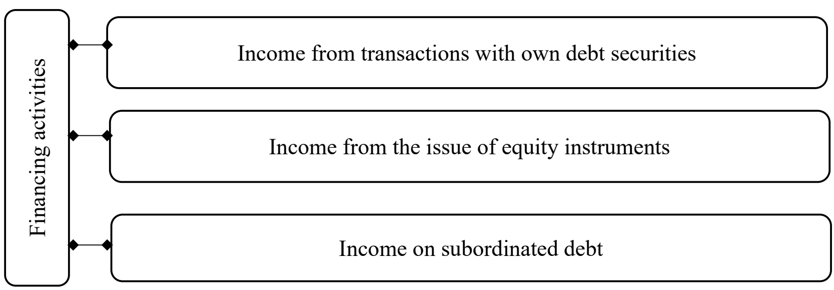

Figure 2.3 Types of income from financing activities of the bank

Source: based on [28]

To mobilise funds, a bank may carry out transactions with securities of its debt, offering banking products in the form of its own savings certificates, promissory notes, bonds and other securities of its debt to customers who will become its creditors. This securitisation allows the bank to raise additional resources, while the equity securities can be traded independently on the stock market and become tradable. A bank's issuance of equity instruments is intended to "protect debt investors from the first losses and any residual income from the investee" [21]. In addition to the peculiarities of bank income formation by type of activity discussed above, let us also consider the peculiarities of bank income formation depending on the nature of their formation: interest and non-interest. The practice of modern banking shows that interest income accounts for about 70% of a bank's income and consists of: "interest income from lending services; income from investments in securities; other interest income" [13, p. 13] (Figure 2.4).

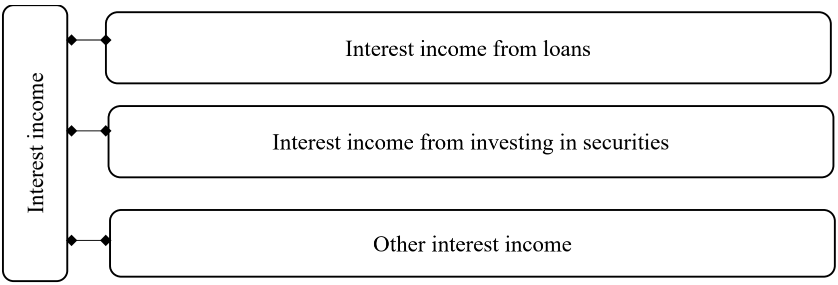

Figure 2.4. Interest income of the bank

Source: based on [28]

Customers and counterparties can break down the bank's interest income from lending: "interest income from loans to business entities and individuals; income from funds placed with other banks and the central bank; interest income from deposits with other banks and loans to other banking institutions" [13, p. 13].

Income from investments in securities is divided into investment and trading securities. Other interest income is generated through bank branches and off-balance sheet transactions. Accordingly, non-interest income includes all other income that is not interest in nature (Figure 2.5).

Fee and commission income arises from the provision of specific services, and the amount of income is calculated in proportion to the amount of the asset or liability or is fixed. Dividend income arises from the Bank's holding of non-fixed income securities. Gains from trading operations result from the purchase and sale of financial instruments. Other operating income is unrelated to investment and economic activities and includes income from operating leasing, fines and penalties received from banking operations [13].

Since the most recent practice of modern banking shows the growing role of fee and commission income in the activities of banks, we will provide a breakdown of this income in Figure 2.6.

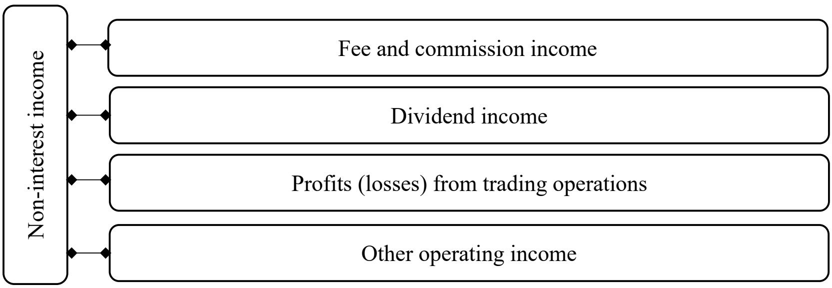

Figure 2.5. Types of non-interest income

Source: based on [28]

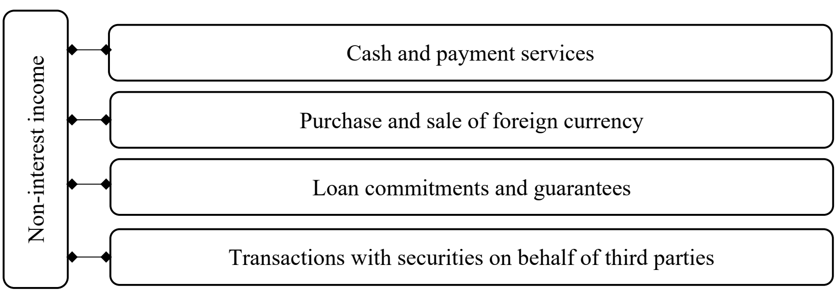

Figure 2.6. Types of fee and commission income

Source: based on [28]

Settlement and cash services to clients, lending, trust services, foreign exchange and securities market transactions related to the purchase and sale of assets on behalf of clients generate commission income, which is calculated in proportion to the amount of the service object. The bank's services generate fee and commission income. The peculiarities of generating such a modern type of income as digital banking income are worth mentioning separately. Given the pandemic-accelerated digitalisation of the domestic economy, and especially its banking sector, we can distinguish the following groups of income: traditional banking income received through online channels, income resulting from cooperation with innovative service providers (banking social platforms, etc.), income from digital services (receiving, processing, and using information flows, protecting and storing information), etc. Thus, banks aim to increase revenues while reducing transaction costs. The current state of the domestic banking system is characterised by a decline in lending, which is the primary generator of interest income, and active cleaning of banks' loan portfolios from non-performing loans. In light of this, the issue of increasing the turnover of commission and other intermediary transactions is becoming increasingly important, as it will allow the bank to generate the necessary income without the need to use its own and borrowed resources and with a minimum level of risk. Generating as much income as possible may increase the bank's risk level. Interest income accounts for the largest share and is generated by interest-bearing assets, which are loans to different groups of borrowers, investments in securities and investments in associates and subsidiaries. All these assets are risky, and the greater the risk, the greater the income. Accordingly, to increase income, banks may enter high-risk assets and accumulate the probability of negative realisation, i.e. losses. State regulation of banking activities is based on protective and preventive measures.

The essence of preventive measures is to limit access to banking activities through licensing and restrictions on the scope of activities, to prevent possible negative consequences, to set limits on certain types of banking operations to limit unreasonable risks, to set requirements for the amount and structure of the bank's equity capital, liquidity and diversification of bank assets to avoid risks. The essence of the protection measures is that they are implemented in the event of a threatening situation for the bank that may lead to bankruptcy. State-level protection measures include the functioning of the Deposit Guarantee Fund, the requirement for banks to form reserves to compensate for possible losses on active operations, and the refinancing of commercial banks by the National Bank of Ukraine.

Supervision by the NBU plays an essential role in the system of state regulation of banking activities. The NBU's vertically coordinated banking supervision system operates as a single mechanism and provides for the registration of banks, licensing of their activities, analysis and control of compliance with the NBU's economic standards, financial monitoring and application of sanctions in case of violation of the rules, as well as reorganisation of banks for their recovery. These measures help improve banks' security and financial stability and reduce risk and bankruptcies. The key aspect here is the focus of supervision on the real risks of banking activities following the guidelines "Risk Assessment System" for inspecting banks [14].

Risk-based supervision combines the following supervisory components into a system: reporting analysis, early warning system, classification system by the degree of financial stability, and assessment of the banking sector's systemic stability. The purpose of such supervision is to identify high-risk areas and actual and potential problems in the activities of banks. This supervision makes it possible to predict the future state of the bank and take adequate measures.

Thus, the entirety of the bank's income is generated to generate a positive financial result and is subject to risk-based supervision by the NBU to prevent uncontrolled growth of risks in the banks' efforts to increase their income.

3. Income dynamics of the banking system of Ukraine

Today, the banking system of Ukraine is, without exaggeration, one of the most developed elements of the country's economic mechanism, as its reforms started earlier than other sectors and are ongoing. This happened in the context of defining the key role of banks in the transition to a market economy, and today, they remain a kind of innovation leader and growth driver. Since 2020, Ukraine's banking sector has been significantly affected by force majeure factors and is constantly "stands its ground". The system has not suffered an economic collapse, even under the threat of physical destruction in the context of active hostilities in our country. The pandemic has significantly impeded the rapid introduction of digital innovations and remote customer service and communication systems. The resilience and innovation of the banking system are the keys to a thriving economy.

The dynamics of the number of banks in Ukraine since 2020 show a gradual decrease in their number (Figure 3.1).

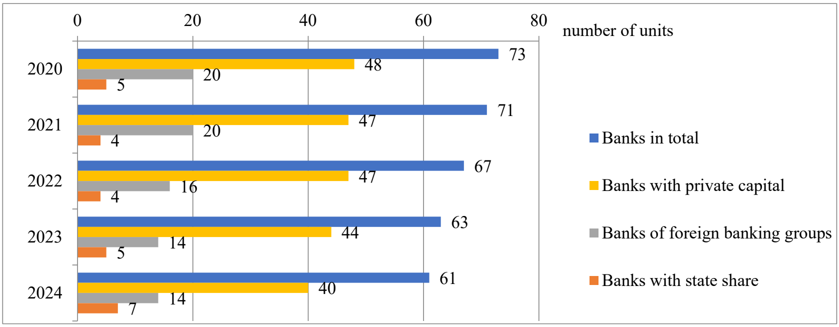

Figure 3.1. Dynamics of the number of banks in Ukraine in 2020-2024

Source: based on [17]

The strongest ones remain in the market, able to withstand competition, challenges, and threats from the external environment. In turn, this means providing better and more innovative services for customers. Table 3.1 shows the leading quantitative and qualitative indicators that characterise the performance of the Ukrainian banking system in 2020-2024.

The leading quantitative indicators of the system's performance – assets and liabilities – have been growing over the 5 years under review, while equity capital has also been growing overall, with a 14.5% decline in the crisis year of 2022. Against the backdrop of unclear dynamics in lending, there has been an active increase in investment in securities, particularly domestic government bonds. The volume of customer accounts has been growing steadily throughout the period.

Figure 3.2 shows a steady positive trend in the growth of banks' net assets and liabilities, while equity capital in the system as a whole is fluctuating. A 14.5% drop was observed in the crisis year 2022, but in 2023, the banking system's equity capital grew by 35.8%, surpassing even the level of 2020. The banking system's loan and securities portfolios, the two primary sources of interest income, have generally shown growth over the period. However, the securities portfolio of banks is growing much faster than the loan portfolio. It is worth noting that in 2022, the loan portfolio decreased by 10.3%, and in 2023, the growth was only 0.04%, but in 2024, the loan portfolio grew by 19.6%. At the same time, investments in securities grew by 5.6% in 2021, 22.6% in 2022, 42.1% in 2023, and 15.0%

Table 3.1

Performance indicators of the Ukrainian banking system in 2020-2024

Indicators	Years					Increase, %			
	2020	2021	2022	2023	2024	2021/2020	2022/2021	2023/2022	2024/2023
Total assets, UAH million	2 205 915	2 358 982	2 716 883	3 308 621	3 774 921	+6.9	+15.2	+21.8	+14.1
Reserves, UAH million	383 074	305 054	363 291	365 816	352 321	-20.4	+19.1	+0.7	-3.7
Net assets, UAH million	1 822 841	2 053 928	2 353 592	2 942 806	3 422 600	+12.7	+14.6	+25.0	+16.3
equity, UAH million	209 460	255 678	218 549	296 797	381 642	+22.1	-14.5	+35.8	+28.6
Liabilities, UAH million	1 613 381	1 798 250	2 135 043	2 646 009	3 040 958	+11.5	+18.7	+23.9	+14.9
Loans and advances to customers, UAH million	595 881	766 876	688 072	688 376	823 534	+28.7	-10.3	+0.04	+19.6
Investments in securities, million UAH	785 788	829 823	1 017 117	1 445 127	1 661 507	+5.6	+22.6	+42.1	+15.0
Amounts due to customers, million UAH	1 377 386	1 539 720	1 931 571	2 435 960	2 821 856	+11.8	+25.4	+26.1	+15.8
Income tax, million UAH	3 811	6 375	7 335	73 452	83 718	+67.3	+15.1	+901.4	+14.0
Net profit, million UAH	39 727	77 530	24 716	86 545	103 703	+95.2	-68.1	+250.2	+19.8
ROE, %	18,97	30,32	11,31	29,16	27,17	-46.7	+11.9	+157.8	-6.8
ROA, %	2,18	3,77	1,05	2,94	3,03	+73.2	-72.2	+180.1	+3.0
Equity multiplier	8,70	2,68	10,77	9,92	8,97	-69.2	+302.1	-7.9	-9.6
Net interest spread,%	5,16	6,28	7,30	7,92	7,87	+21.7	+16.2	+8.5	-0.6

Source: based on [17]

in 2024. As of 01 January 2025, the banking system's securities portfolio was twice as extensive as its loan portfolio. It is worth noting that there is a steady upward trend in customer accounts attracted by the banking system. Their growth was as follows: 11.8% in 2021, 25.4% in 2022, 26.1% in 2023, and 15.8% in 2024. The dynamics of net profit as the main result of the Ukrainian banking system's activities in 2020-2024 are shown in Figure 3.3.

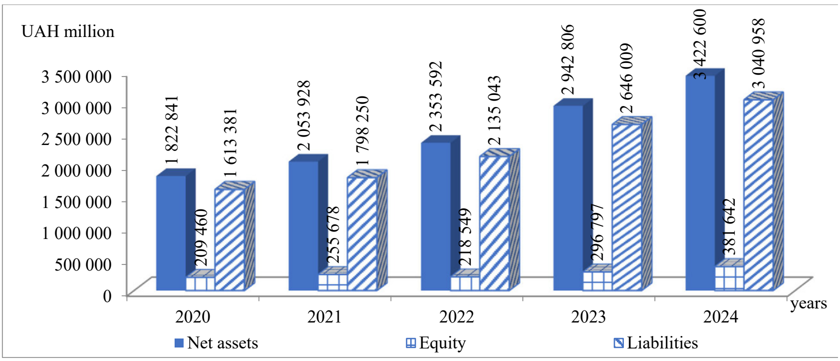

Figure 3.2. Dynamics of net assets, equity and liabilities of the banking system of Ukraine in 2020-2024

Source: based on [17]

As shown, net profit moved in a sinusoidal pattern in 2020-2023. The profit of 2023 surpassed even 2021, which was previously considered a record year. Thanks to changes in the legislation on the taxation of bank profits, it is also worth noting the record amount of income tax paid by banks in 2023, as it is 10 times higher than in previous years. However, in 2024, the banking system's net profit increased again, crossing the UAH 100 billion mark. Qualitative profitability indicators, such as ROE and ROA, follow the dynamics of net profit fluctuations, which is the basis for their calculation. The growth of the net spread is positive, which indicates the effectiveness of the interest rate policy of the banking system as a whole. Let's look at the banking system's income, which is the basis for a positive financial result. Table 3.2 shows the composition of the banking system's income in Ukraine in 2020-2024.

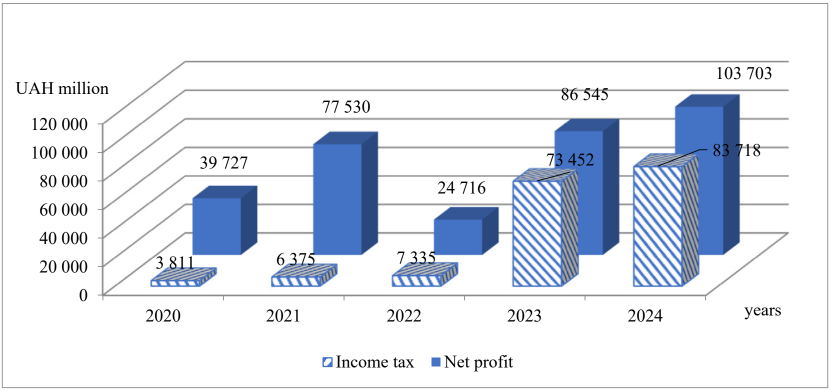

Figure 3.3. Dynamics of net profit of the banking system of Ukraine in 2020-2024

Source: based on [17]

The analysis shows a steady growth in income amid fluctuations in expenses, with a 13.3% decrease in 2021 and a 39.3% decrease in 2023. However, in 2024, expenditures increased by 9.2%, and net profit showed less rapid growth, although, in absolute terms, the profit was more than UAH 100 billion.

Figure 3.4 shows the dynamics of the composition of the banking system's income.

Net interest income accounted for the largest share of the banking system's income, rising to 70% at the end of the period from 52%. However, net fee and commission income decreased from 29% to 17%. It should be noted that in 2021, the banking system's trading result was negative and amounted to UAH 83.4 million. This was due to a significant negative result from operations with financial assets and liabilities, which amounted to UAH 14,044 million and could not be covered by other positive components that form the trading result. However, this episode did not become a trend, and already, in 2022, the trading result for the system as a whole was 17%, and in 2023-2024, it was 10% annually. Thus, we can positively describe the aggregate performance of the banking system in 2020-2024, as the leading performance indicators show positive dynamics.

Table 3.2

Dynamics of the banking system's income in Ukraine in 2020-2024

Indicators	Years					Increase, %			
	2020	2021	2022	2023	2024	2021/ 2020	2022/ 2021	2023/ 2022	2024/ 2023
Interest income	147 743	168 749	216 992	304 502	351 588	+14.2	+28.6	+40.3	+15.5
- income from operations with legal entities	53 142	54 898	72 847	91 490	100 588	+3.3	+32.7	+25.6	+9.9
- income from operations with individuals	50 025	57 230	55 436	51 355	67 056	+14.4	-3.1	-7.4	+30.6
- income from operations with securities	44 576	56 622	88 709	161 657	183 944	+27.0	+56.7	+82.2	+13.8
Net interest income/(Net interest expense)	84 848	117 646	151 632	201 453	234 323	+38.7	+28.9	+32.9	+16.3
Fee and commission income	70 640	93 206	85 568	97 088	110 710	+31.9	-8.2	+13.5	+14.0
Net fee and commission income / (Net fee and commission expense)	46 508	58 050	50 147	50 142	56 908	+24.8	-13.6	0	+13.5
Trading result	21 507	(83)	43 525	30 263	34 403	-100.4	+52301.8	-30.5	+13.7
- result from revaluation	-11 634	3 231	-8 105	-2 812	-5 628	-127.8	-350.9	-65.3	+100.1
- result from purchase and sale transactions	6 878	10 730	34 810	28 568	21 112	+56.0	+224.4	-17.9	-26.1
- result from operations with financial assets and liabilities	26 262	(14 044)	16 820	4 507	18 919	-153.5	+219.8	-73.2	+319.7
Other operating income	6 813	7 434	8 097	9 900	6 541	+9.1	+8.9	+22.3	-33.9
Other income	3 468	4 537	3 206	4 501	4 059	+30.8	-29.3	+40.4	-9.8
Total income	163 145	187 583	256 607	296 259	336 234	+15.0	+36.8	+15.5	+13.5
Total expenses	119 607	103 679	224 556	136 262	148 814	-13.3	+116.6	-39.3	+9.2
Profit before taxation	43 537	83 904	32 050	159 997	187 420	+92.7	-61.8	+399.2	+17.1
Income tax	3 811	6 375	7 335	73 452	83 718	+67.3	+15.1	+901.4	+14.0
Net profit	39 727	77 530	24 716	86 545	103 703	+95.2	-68.1	+250.2	+19.8

Source: based on [17]

According to the NBU's data on the structure of the banking system's interest income, the state provides about 50% of all interest income in the banking system.

Figure 3.4. Dynamics of the composition of the banking system's income in Ukraine in 2020-2024

Source: based on [17]

In particular, "in the structure of interest income, the largest share is made up of income from lending to businesses and households – about 40%, another 20% is income from investments in domestic government bonds and about 30% from investments in certificates of deposit" [3]. It should be noted that the income from domestic government bonds in the banking system's portfolio is paid by the Ministry of Finance of Ukraine, and the National Bank of Ukraine pays the income from deposit certificates. A significant share of bank lending is carried out under the state programme "Affordable Loans 5-7-9%", which provides for reimbursement of interest payments from the state budget. This is why the state provides about half of banks' interest income. In 2022, banks' income from NBU certificates of deposit amounted to UAH 40.3 billion, and in 2023 it was already UAH 48.6 billion. The NBU overnight certificate rate in 2022 was 20% per annum, and the 3-month certificate rate was 25%, and in 2023 it decreased to 18% and 22%, respectively [3]. In 2024, the NBU's deposit certificate market decreased by 17%. The NBU uses the instrument of certificates of deposit to absorb the excess money supply that has been withdrawn from circulation and does not create additional depreciation pressure in the FX market. However, comparing the dynamics of lending to business entities (+10%) with banks' investments in domestic government bonds (+16%), it can be concluded that banks prefer to deal with the state rather than the real sector.

4. The impact of force majeure on JSC Sense Bank's financial status

Joint Stock Company "Sense Bank" is one of the largest Ukrainian banks. The bank was founded in 1992 and has a long history of participating in mergers and acquisitions (M&A) of banking institutions in the domestic market with the participation of foreign investors. Since 2001, the bank has operated under the name Alfa-Bank JSC and, since 2004, has been part of ABH Holdings S.A. (Luxembourg). In March 2021, the NBU included the bank in the list of systemically important banks, as it was among the top 10 largest financial institutions in Ukraine in terms of assets. On 11.07.2022, a name change was announced, and from 01.12.2022, Alfa-Bank Ukraine changed its name to Sense Bank, and a new brand, "Sense Bank", was created. On 03.05.2023, ABH Holdings announced its withdrawal from Russian assets. On 20.07.2023, the NBU withdrew Sense Bank from the market and proposed its nationalisation. On 22.07.2023, The Ministry of Finance of Ukraine and the Deposit Guarantee Fund concluded a purchase and sale agreement for the bank's shares in full for UAH 1, and thus Sense Bank became state-owned and the fifth state-owned bank in the domestic banking system at that time, and the third one of the nationalised banks. This happened because JSC Sense Bank holds a leading position in the banking market, is one of the most stable and reliable banks, is included in the list of 15 systemically important banks in Ukraine, and is one of the seven specialised savings banks, so there was no reason to go through bankruptcy proceedings and would have required considerable payments to depositors whose deposits are insured by the DGF.

In the years before the full-scale invasion, the bank received several awards [18]: 2021 – the best bank according to Global Finance; 2021 – No. 3 among the "50 Leading Banks of Ukraine" according to the Financial Club, "The Best Consumer Digital Bank in Ukraine" according to Global Finance; 2022 – "The Best SME Bank in Ukraine" according to SME Bank Awards. The current ratings of JSC Sense Bank are shown in Table 4.1.

Table 4.1

Current ratings of JSC Sense Bank in 2024

Agency	Type of rating	Level
Fitch Ratings	In foreign currency	
	Long-term issuer default rating	CCC
	short-term issuer default rating	C
	viability	ccc
	support rating	ns
	In local currency	
	Long-term Issuer Default Rating	CCC+
	National scale rating	
	long-term rating	AA(ukr)
	outlook	Stable
Expert Rating	National scale rating	
	long-term rating	uaAAA
	outlook	Stable

Source: based on [18]

Table 4.2 shows the key performance indicators of the bank for 2020-2024.

Table 4.2

Dynamics of performance indicators of JSC Sense Bank for 2020-2024

Indicators	Years					Increase, %			
	2020	2021	2022	2023	2024	2021/ 2020	2022/ 2021	2023/ 2022	2024/ 2023
Net assets, UAH million	97 593	115 722	75 165	108 860	124 161	+18.6	-35.0	+44.8	+14.1
Loans, UAH million	47 837	60 334	42 663	33 856	42 574	+26.1	-29.3	-20.6	+25.8
Customer accounts, UAH million	74 122	89 497	61 168	95 144	107 963	+20.7	-31.7	+55.5	+13.5
equity, UAH million	9 623	12 933	6 117	11 445	13 017	+34.4	-52.7	+87.1	+13.7
Liabilities, million UAH	87 970	102 789	69 048	97 415	111 143	+16.8	-32.8	+41.1	+14.1
Net profit (loss), million UAH	1 155	3 346	-7 110	5 039	3 812	+189.8	-312.5	+170.9	-24.4
ROE, %	12,00	25,87	-116,24	44,03	29,28	+115.6	-549.3	-137.9	-33.5
ROA, %	1,18	2,89	-9,46	4,63	3,07	+144.4	-427.1	-148.9	-33.7
Equity multiplier	10,14	8,95	12,29	9,51	9,54	-11.8	+37.3	-22.6	+0.3
Net interest spread, %	6,24	6,23	11,24	5,93	6,81	-0.2	+80.4	-47.3	+14.9

Source: based on [17]

The analysed period of the bank's activity was almost entirely under martial law, and before that, it was under quarantine restrictions due to the pandemic, so the very fact of the bank's survival in such difficult conditions is already positive. As noted above, the bank held a leading position in the market before nationalisation due to the sanctioned ultimate beneficiaries, and therefore, the number one task for JSC Sense Bank in the current environment, as a state-owned bank, was to maintain its niche. As seen from the indicators in Table 4.2, the worst year for the bank was the crisis year of 2022, which is unsurprising. Net assets, loans and customer accounts decreased significantly, while equity increased, but the year's financial result – a net loss – was 2 times higher than the net profit in the previous year, 2021. However, based on the results of its operations in 2023-2024, the bank is back in the profitable zone, with net profit in 2023 amounting to 2/3 of the previous year's loss and in 2024, although it decreased by 24.4%, it still amounted to a significant amount. The bank's qualitative performance indicators, such as the capital multiplier and net interest spread, are also positive.

For a thorough analysis of the activities of JSC Sense Bank over the past three years, we will build tables based on the annual financial statements [17] to analyse the dynamics and structure of assets, equity and liabilities (Tables 4.3 – 4.7).

According to Table 4.3, the bank's assets increased by UAH 26,567 million or 27% over the period under review, with a significant decrease of 35% in 2022, but growth resumed in 2023-2024. The dynamics of the bank's assets are shown in Figure 4.1.

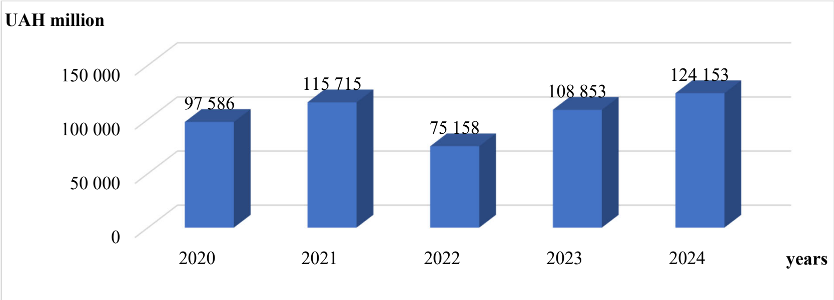

Figure 4.1. Dynamics of assets of JSC Sense Bank in 2020-2024

Source: based on [17]

According to the primary trend in 2022, almost all components of Sense Bank's assets decreased, with only UAH 30 603 thousand or a 6% increase in the value of investment property. However, in 2023-2024, approximately half of the asset groups showed positive dynamics. In 2023, only the value of loans to both legal entities and individuals, deferred tax assets and other assets decreased, and in 2024, the amount of funds due from different banks and the value of securities carried at amortised cost decreased. In the structure of assets of JSC Sense Bank (Table 4.4), the largest share during

Table 4.3

Dynamics of assets of JSC Sense Bank for 2020-2024

Assets	Years, UAH million					Increase, %			
	2020	2021	2022	2023	2024	2021/2020	2022/2021	2023/2022	2024/2023
Cash and cash equivalents	7 229	7 973	5 094	8 830	9 945	+10.3	-36.1	+73.3	+12.6
Financial assets at fair value through profit or loss	329	839	20	693	981	+154.8	-97.6	+3305.9	+41.6
including those refinanced by the NBU	0	0	0	693	979	0	0	+100	+41.3
Due from other banks	13 717	16 106	9 269	13 495	13 193	+17.4	-42.5	+45.6	-2.2
Loans and advances to customers	47 837	60 334	42 663	33 856	42 574	+26.1	-29.3	-20.6	+25.8
Loans and advances to legal entities	29 698	36 005	29 463	24 912	32 874	+21.2	-18.2	-15.4	+32.0
Loans and advances to individuals	18 140	24 329	13 200	8 944	9 700	+34.1	-45.7	-32.2	+8.5
Securities at fair value through profit or loss	12 287	9 828	3 677	17 857	29 550	-20.0	-62.6	+385.6	+65.5
including those refinanced by the NBU	11 572	9 796	3 647	17 824	29 517	-15.3	-62.8	+388.7	+65.6
Securities carried at amortised cost	8 703	13 717	8 520	28 427	21 796	+57.6	-37.9	+233.6	-23.3
including those refinanced by the NBU	8 703	12 910	8 010	28 243	21 708	+48.4	-38.0	+252.6	-23.1
Investment property	900	477	543	545	1 189	-47.0	+13.9	+0.4	+118.1
Receivables for current income tax	2	2	2	2	573	0	-0.9	+2.8	+28288.5
Deferred tax asset	852	852	583	583	66	0	-31.6	0	-88.6
Property, plant and equipment and intangible assets	4 220	4 123	3 927	3 698	3 461	-2.3	-4.7	-5.9	-6.4
Other financial assets	274	409	406	456	351	+49.1	-0.7	+12.4	-23.0
Other assets	1 236	1 056	453	412	474	-14.5	-57.1	-9.1	+15.1
Net assets	97 586	115 715	75 158	108 853	124 153	+18.6	-35.0	+44.8	+14.1

Source: based on [17]

the period under review was occupied by loans and advances to customers, but in line with the decrease in their volume over the period, the share of loans in the bank's assets also decreased: from 49.0% in 2020 to 34.30% in 2023.

Table 4.4

Dynamics of the asset structure of JSC Sense Bank in 2020-2024

Assets	Share in assets, %					Change in structure, %			
	2020	2021	2022	2023	2024	2021/ 2020	2022/ 2021	2023/ 2022	2024/ 2023
Cash and cash equivalents	7.4	6.9	6.8	8.1	8.0	-0.5	-0.1	+1.3	-0.1
Financial assets at fair value through profit or loss	0.3	0.7	0	0.6	0.8	+0.4	-0.7	+0.6	+0.2
including those refinanced by the NBU	0	0	0	0.6	0.8	0	0	0.6	+0.2
Due from other banks	14.1	13.9	12.3	12.4	10.6	-0.1	-1.6	+0.1	-1.8
Loans and advances to customers	49.0	52.1	56.8	31.1	34.3	+3.1	+4.6	-25.7	+3.2
Loans and advances to legal entities	30.4	31.1	39.2	22.9	26.5	+0.7	+8.1	-16.3	+3.6
Loans and advances to individuals	18.6	21.0	17.6	8.2	7.8	+2.4	-3.5	-9.3	-0.4
Securities at fair value through profit or loss	12.6	8.5	4.9	16.4	23.8	-4.1	-3.6	+11.5	+7.4
including those refinanced by the NBU	11.9	8.5	4.9	16.4	23.8	-3.4	-3.6	+11.5	+7.4
Securities carried at amortised cost	8.9	11.9	11.3	26.1	17.6	+2.9	-0.5	+14.8	-8.6
including those refinanced by the NBU	8.9	11.2	10.7	25.9	17.5	+2.2	-0.5	+15.3	-8.5
Investment property	0.9	0.4	0.7	0.5	1.0	-0.5	+0.3	-0.2	+0.5
Receivables for current income tax	0	0	0	0	0.5	0	0	0	+0.5
Deferred tax asset	0.9	0.7	0.8	0.5	0.1	-0.2	+0.1	-0.3	-0.4
Property, plant and equipment and intangible assets	4.3	3.6	5.2	3.4	2.8	-0.8	+1.7	-1.8	-0.6
Other financial assets	0.3	0.4	0.5	0.4	0.3	+0.1	+0.2	-0.1	-0.1
Other assets	1.3	0.9	0.6	0.4	0.4	-0.4	-0.3	-0.2	0
Net assets	100	100	100	100	100	0	0	0	0

Source: based on [17]

By the end of the period under review, loans were catching up with investments in securities in terms of their share in assets. Securities accounted for through other comprehensive income increased from 12.6% in 2020 to 23.8% in 2024, and securities at amortised cost increased from 8.9% in 2020 to 17.6% in 2024. The next largest share is from other banks, which decreased from 14.1% in 2020 to 10.6% in 2024. The share of cash and cash equivalents increased from 7.4% in 2020 to 8.0% in 2024, with the cash component decreasing and the NBU increasing. The share of other components of the bank's assets is insignificant. Next, let us analyse the dynamics of liabilities and equity of JSC Sense Bank, which are the sources of formation of the bank's resources for its active operations (Table 4.5).

Table 4.5 shows the same trend as for assets: liabilities increased by UAH 23 173 million or +26% over the period, but in 2022, they dropped sharply by 32.8%, but in 2023-2024, growth resumed. The dynamics of liabilities are shown in Figure 4.2.

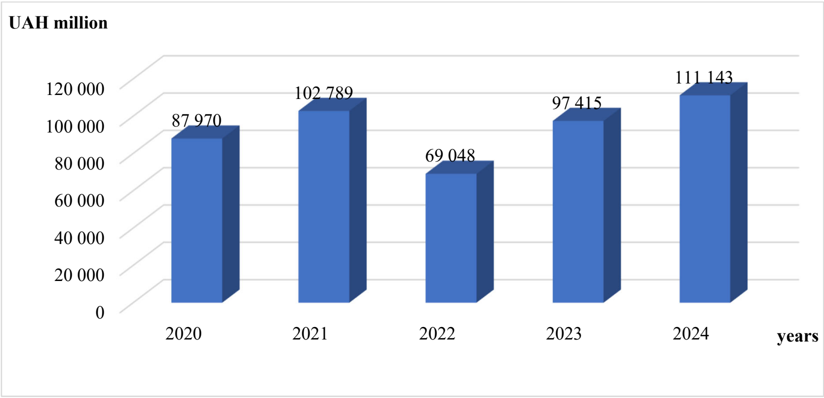

Figure 4.2. Dynamics of liabilities of JSC Sense Bank in 2020-2024

Source: based on [17]

In general, the bank's liabilities account for 88-92% of total liabilities (Table 4.6).

Table 4.5

Dynamics of liabilities of JSC Sense Bank in 2020-2024

Liabilities	Years, UAH million					Increase, %			
	2020	2021	2022	2023	2024	2021/ 2020	2022/ 2021	2023/ 2022	2024/ 2023
Funds received from the NBU	9 915	8 617	3 279	0	0	-13.1	-61.9	-100	0
Due to banks	130	83	32	25	36	-36.1	-61.1	-24.1	+44.5
Amounts due to customers	74 122	89 497	61 168	95 144	107 963	+20.7	-31.7	+55.5	+13.5
incl. due to legal entities	30 445	40 582	18 180	47 343	60 682	+33.3	-55.2	+160.4	+28.2
incl. demand deposits	26 466	34 129	17 083	39 225	53 390	+29.0	-49.9	+129.6	+36.1
incl. due to individuals	43 641	48 911	42 982	47 798	47 277	+12.1	-12.1	+11.2	-1.1
incl. funds on demand	19 280	25 782	16 430	14 437	18 091	+33.7	-36.3	-12.1	+25.3
Financial liabilities	125	53	834	0,3	1	-57.7	+1470.1	-100	+264.1
Debt securities issued by the Bank	8	5	2	0	0	-44.7	-61.3	-100	0
Other borrowed funds	0	0	0	7	663	0	0	+100	+9688.6
Liabilities for current income tax	0	0	0,11	0,14	0,24	0	+100	+21.6	+77.2
Provisions for liabilities	145	322	199	324	480	+121.2	-38.2	+63.0	+47.9
Other financial liabilities	692	1 250	741	937	689	+80.6	-40.7	+26.6	-26.5
Other liabilities	1 418	1 598	832	978	1 313	+12.7	-47.9	+17.5	+34.3
Subordinated debt	1 414	1 364	1 961	0	0	-3.5	+43.8	-100	0
Total liabilities	87 970	102 789	69 048	97 415	111 143	+16.8	-32.8	+41.1	+14.1

Source: based on [17]

Table 4.6

Dynamics of the structure of liabilities of JSC Sense Bank in 2020-2024

Liabilities	Share in total liabilities, %					Change in structure, %			
	2020	**2021**	**2022**	**2023**	**2024**	**2021/ 2020**	**2022/ 2021**	**2023/ 2022**	**2024/ 2023**
Funds received from the NBU	10.2	7.4	4.4	0	0	-2.7	-3.1	-4.4	0
Due to banks	0.13	0.07	0.04	0.02	0.03	-0.06	-0.03	-0.02	0.01
Amounts due to customers	76.0	77.3	81.4	87.4	87.0	+1.4	+4.0	6.0	-0.4
incl. due to legal entities	31.2	35.1	24.2	43.5	48.9	+3.9	-10.9	19.3	5.4
incl. demand deposits	27.1	29.5	22.7	36.0	43.0	+2.4	-6.8	13.3	7.0
incl. due to individuals	44.7	42.3	57.2	43.9	38.1	-2.5	+14.9	-13.3	-5.8
incl. funds on demand	19,8	22,3	21,9	13,3	14,6	+2,5	-0,4	-8,6	1,3
Financial liabilities	0.0459	1.1093	0.0002	0.0006	-0.0827	1.0634	-1.1091	0.0004	0.0459
Debt securities issued by the Bank	0.009	0.004	0.002	0	0	-0.005	-0.002	-0.002	0
Other borrowed funds	0	0	0	0.006	0.534	0	0	0.006	0.528
Liabilities for current income tax	0	0	0.0001	0.0001	0.0002	0	+0.0001	0	+0.0001
Provisions for liabilities	0.1	0.3	0.3	0.3	0.4	+0.2	0	0	0.1
Other financial liabilities	0.7	1.1	1.0	0.9	0.6	+0.4	-0.1	-0.1	-0.3
Other liabilities	1.5	1.4	1.1	0.9	1.1	-0.1	-0.3	-0.2	0.2
Subordinated debt	1.4	1.2	2.6	0	0	-0.3	1.4	-2.6	0
Liabilities	90.1	88.8	91.9	89.5	89.5	-1.3	3.0	-2.4	0
Total liabilities (plus equity)	100	100	100	100	100	0	0	0	0

Source: based on [17]

In the structure of liabilities of JSC Sense Bank (Figure 4.3), the largest share is occupied by customer accounts, which in 2020-2024 were dominated by retail accounts, but in 2023-2024, the number of legal entities' accounts increased significantly and first equalled and then exceeded the number of retail accounts. The share of customers' funds increased from 76.0% in 2020 to 77.3% in 2021, to 81.4% in 2022, and to 87.4% in 2023-2024, which confirms in practice that the NBU classifies JSC Sense Bank as a specialised savings bank. As mentioned above, the deposits of individuals prevail over the deposits of legal entities in hryvnia terms, and their share decreased from 44.7% in 2020 to 42.27% in 2021 and then increased to 52.3% in 2022, again reducing to 43.9% in 2023 and 38.1% in 2024. Although the share of legal entities decreased significantly in 2022 to 22.1%, it increased to 43.5% in 2023 and 48.9% in 2024. During 2020-2022, funds received from the NBU accounted for 10.2% to 4.4%, but from the end of 2023 to the present, this type of liability has not been observed on the bank's balance sheet. Funds from banks account for less than 1% of Sense Bank's liabilities, meaning that the bank practically does not attract resources on the interbank market.

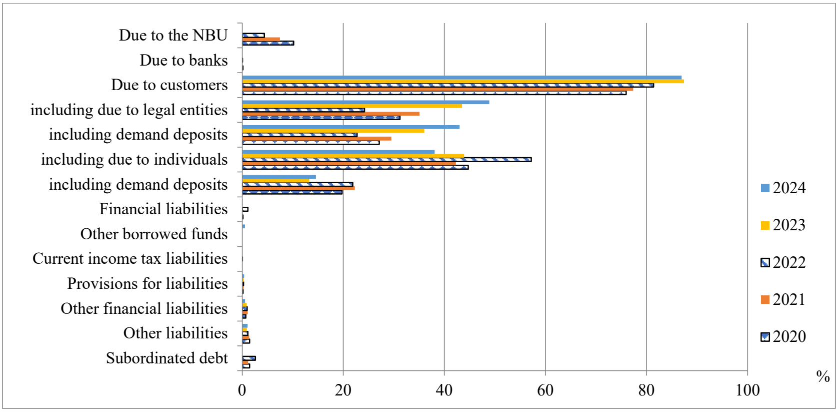

Figure 4.3. Dynamics of the share of liabilities of JSC Sense Bank in 2020-2024

Source: based on [17]

Subordinated debt fluctuated from 1-2% during 2021-2022, and since 2023, it has not been observed on the bank's balance sheet. Other groups of liabilities account for less than 1% of liabilities. Next, let's consider the composition and structure of the equity capital of JSC Sense Bank (Table 4.7 and Figure 4.4).

Table 4.7

Dynamics of JSC Sense Bank's equity in 2020-2024

Equity	Years, UAH million					Increase, %			
	2020	2021	2022	2023	2024	2021/ 2020	2022/ 2021	2023/ 2022	2024/ 2023
Share capital	28 726	28 726	28 726	28 726	28 726	0	0	0	0
Issue differences	2 368	2 368	2 368	2 368	2 368	0	0	0	0
Reserve and other funds of the bank	1 421	1 536	1 868	1 868	1 868	+8.1	+21.6	0	0
Revaluation reserves	65	26	348	637	731	-59.6	+1218.8	+83.2	+14.8
Retained earnings (Uncovered loss)	-22 957	-19 724	-27 193	-22 153	-20 676	-14.1	+37.9	-18.5	-6.7
Total equity	9 623	12 933	6 117	11 445	13 017	+34.4	-52.7	+87.1	+13.7

Source: based on [17]

Table 4.7 shows that the bank's equity increased by UAH 3 395 million or 35% over the period under review, but it should be noted that in 2021, it increased by 34.4%, and in 2022, it significantly decreased by 52.7%, but in 2023-2024 it resumed growth by 87.1% and 13.7%, respectively. A negative phenomenon is the presence of an uncovered loss in equity, which significantly reduces the total capitalisation of JSC Sense Bank (Figure 4.4).

As shown in Figure 2.7, the uncovered loss is up to half of the authorised capital, thus giving grounds for a negative conclusion about the bank's capitalisation. Following its charter, JSC Sense Bank's primary goal is to make a profit, so we will analyse the dynamics of its financial results over the past five years (Figure 4.5).

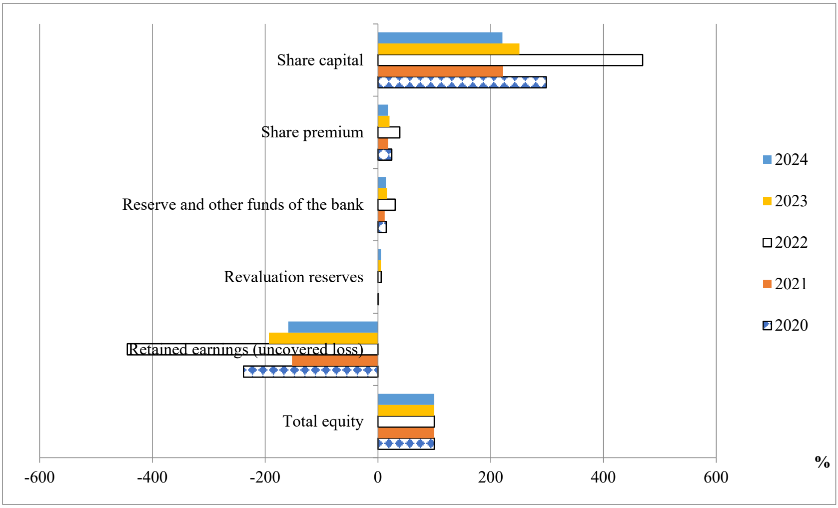

Figure 4.4. Dynamics of the equity structure of JSC Sense Bank for 2020-2024

Source: based on [17]

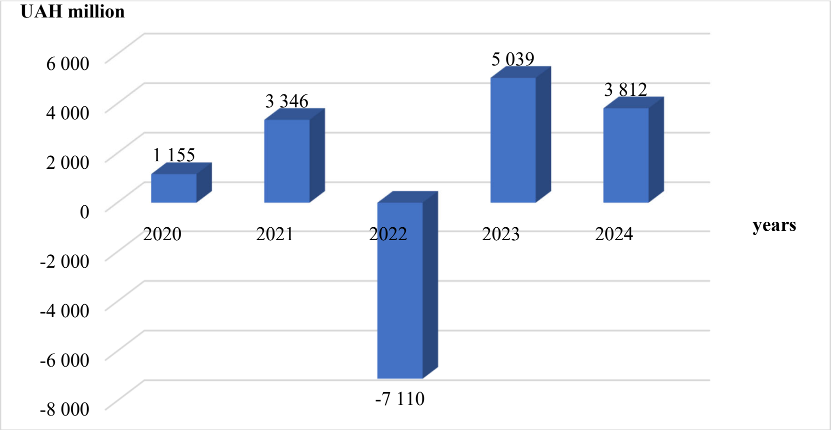

Figure 4.5. Dynamics of profit (loss) of JSC Sense Bank for 2020-2024

Source: based on [17]

In the crisis year 2022, along with a reduction in assets and borrowed funds, the bank suffered losses of just over UAH 7 billion. As we can see, JSC Sense Bank was profitable in four out of five years under review and was unprofitable only in 2022, when the whole country faced challenges and threats. However, in 2023, the bank managed to organise its operations so that it made a profit of about 73% of the previous year's loss. Although in 2024, net profit declined, it still amounted to a significant amount. Thus, the situation with the profitability of this nationalised bank requires special attention to avoid falling into the loss zone again.

Table 4.8 shows the indicators of the bank's compliance with the NBU's economic ratios.

Table 4.8

Compliance of JSC Sense Bank with the NBU prudential ratios in 2020-2024

Prudential ratio	**Standard**	**Years**					**Deviations**			
		2020	**2021**	**2022**	**2023**	**2024**	**2021/ 2020**	**2022/ 2021**	**2023/ 2022**	**2024/ 2023**
Capital ratios:										
R1	200 UAH million	8 774.8	11434.0	7180.0	9097.4	9408.7	2659.2	-4254.0	1917.4	311.3
R2	>	13.95	12.12	11.72	15.44	13.30	-1.83	-0.41	3.73	-2.14
R3	>	11.83	8.93	9.29	15.40	13.30	-2.90	0.37	6.11	-2.10
Liquidity ratios:										
NSFR	100%	76.82	121.90	109.29	180.34	143.75	45.08	-12.61	71.05	-36.59
LCR_{BB}	>	264.95	193.77	311.28	432.14	376.32	-71.18	117.51	120.86	-55.82
LCR_{IB}		623.46	444.17	471.67	635.46	347.28	-179.29	27.50	163.79	-288.18
Credit risk ratios:										
R7	<	18.32	14.72	24.42	17.45	17.24	-3.60	9.70	-6.97	-0.21
R 8	<	112.66	96.28	252.17	136.72	155.31	-16.38	155.89	-115.45	18.59
R 9	<	12.97	12.20	11.25	0.01	0.06	-0.77	-0.95	-11.24	0.05
Investment ratios:										
R 11	<	0.02	0.067	0.005	0.004	0.01	0.047	-0.062	-0.001	0.006
R 12	<	0.03	0.436	0.005	0.004	0.03	0.406	-0.431	-0.001	0.026
Foreign exchange positions:										
R 13-1	<	3.11	8.83	3.68	1.17	2.55	5.72	-5.15	-2.51	1.38
R 13-2	<	1.28	0.64	2.45	2.03	1.82	-0.64	1.81	-0.42	-0.21

Source: based on [17]

As seen from Table 4.8, JSC Sense Bank mostly complies with the prudential standards set by the NBU. In 2021-2022, the NBU exceeded the permissible risk limit of R9 (the maximum amount of loans, guarantees and sureties granted to one insider). After the nationalisation procedure, this problem disappeared. It is worth noting that the NBU decided not to apply penalties for non-compliance with economic standards if such violations occurred after 24.02.2022 [20].

5. Directions for improving the formation of banks' income

The formation of a banking institution's financial result depends directly on the comparison of all income and all expenses. The number one task for a bank is to increase its revenue while minimising its costs, which will lead to profit formation as the main result. Table 5.1 shows the dynamics of income, expenses and financial results of JSC Sense Bank for 2021-2023.

Table 5.1

Dynamics of income, expenses and financial results of JSC Sense Bank for 2020-2024

Indicators	Years, UAH million					Increase, %			
	2020	2021	2022	2023	2024	2021/2020	2022/2021	2023/2022	2024/2023
Net interest income	5 058	6 333	7 053	5 540	7 321	25.2	11.4	-21.5	32.2
Net fee and commission income	3 360	3 859	2 842	2 352	2 166	14.9	-26.3	-17.2	-7.9
Trading result	1 105	1 066	2 563	1 483	914	-3.5	140.4	-42.2	-38.4
Other operating income	935	829	1 248	3 337	475	-11.3	50.6	167.3	-85.8
Other income	435	609	206	210	189	40.1	-66.1	1.5	-10.1
Total income	10 893	12 696	13 913	12 921	11 063	16.6	9.6	-7.1	-14.4
Charges to provisions	3 413	2 163	12 678	1 323	11	-36.6	486.2	-89.6	-99.2
Administrative and other expenses	6 303	7 185	8 143	6 834	7 206	14.0	13.3	-16.1	5.4
Total expenses	9 716	9 348	20 822	8 157	7 217	-3.8	122.7	-60.8	-11.5
Profit/(loss) before taxation	1 177	3 348	-6 909	4 764	3 846	184.5	-306.4	-169.0	-19.3
Income tax	22	2	202	-276	34	-91.4	10635.8	-236.7	-112.4
Net profit/ (loss)	1 155	3 346	-7 110	5 039	3 812	189.8	-312.5	-170.9	-24.4

Source: based on [17]

The bank's net interest income increased by 25.2% in 2021 and by 10.1% in 2022, but already in 2023, it decreased by 21.5%, and in 2024, it increased again by 32.2%, for a total increase of UAH 2262.5 million or 44.7% over the period. Net fee and commission income, except for 2021, when it grew by 14.9%, showed a clear downward trend over the period: by -26.3% in 2022 and -17.2% in 2023, by -7.9 in 2024, and total, it decreased by UAH -1 193.8 million or -35.5%. Instead, the bank's trading result was upbeat throughout the period but grew only in 2022 by +140.4% and declined in all other years: by -3.5% in 2021, by -42.2% in 23, by -38.4 in 2024; in total, it decreased by UAH 191.8 million or -17.4% over the period. Other operating income decreased by -11.3% in 2021, then showed a clear upward trend: by +50.6% in 2022 and +167.3% in 2023, and in 2024 it decreased again by -85.8%; in total, the decrease was UAH 460.2 million or -49.2%. The total income of JSC Sense Bank increased by 16.6% in 2021 and by +9.6% in 2022, but already in 2023, it decreased by -7.1% and in 2024 by -14.4%; however, in general, the bank's income increased by UAH 170.3 million or 1.6% over the period.

Against this backdrop, the dynamics of the bank's total expenses were the opposite: in 2021, a decrease of -3.8%; in 2022, an increase of +122.7%; in 2023, a decrease of -60.8%; and in 2024, another decrease of -11.5% (Figure 5.1).

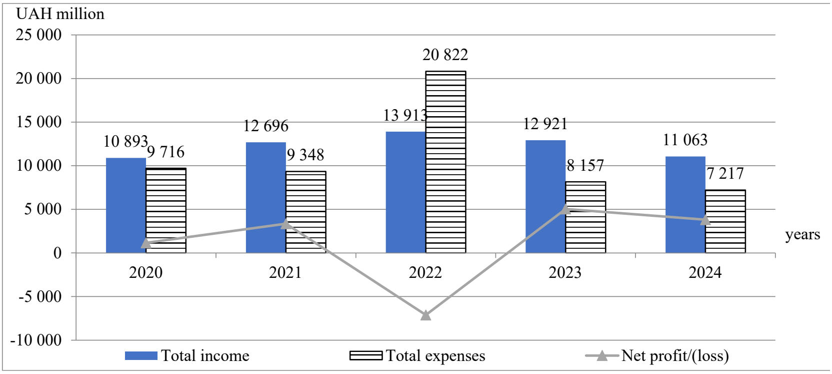

Figure 5.1. Dynamics of income, expenses and profit (loss) of JSC Sense Bank in 2020-2024

Source: based on [17]

The rapid growth of expenses in 2022 resulted in losses for JSC Sense Bank this year, which was almost 2 times higher than the profit of the previous 2021. Among the components of expenses, the largest share was occupied by provisioning in 2022, which increased by +485.4% and accounted for 61.2% of the bank's total costs. Of these, 93.7% were due to a net increase in provisions for loans to customers, which reflected the crisis with non-performing loans. Next, let us detail the composition and structure of income of JSC Sense Bank for 2020-2024 (Table 5.2).

The largest share in the revenue structure of JSC Sense Bank is net interest income: 46% in 2020, 50% in 2021, 51% in 2022, 43% in 2023, and 66% in 2024, which is quite logical, since loans account for more than half of the assets, although in 2023 there was a shift in focus to securities, but they are also interest-bearing assets. The share of net fee and commission income, which is the second largest source of the bank's income, is gradually decreasing: from 31% in 2020 to 30% in 2021, to 20% in 2022, to 18% in 2023, and only in 2024 did it slightly increase to 20%. We should also note the increase in the share of the trading result and the fact that the trading result was upbeat throughout the entire period. Its share decreased from 10% in 2020 to 8% in 2021, increased to 18% in 2022, and then decreased again to 11% in 2023 and 8% in 2024.

Since interest income accounts for the largest share, let us consider it in more detail. Table 5.3 shows the analysis of interest income of JSC Sense Bank in 2020-2024.

Analysing the calculations, it can be concluded that the factors behind the bank's interest income growth are an increase in balances on interest-bearing assets and an increase in the average interest rate on interest-bearing assets. For example, in 2021, the amount of interest-bearing assets increased by 22%, but the average interest rate decreased by -1% in absolute terms or -5% in relative terms, and accordingly, the amount of interest income increased by only 16%; and in 2022, the amount of interest-bearing assets, on the contrary, decreased by -36%, but the average interest rate increased by 10% in absolute terms or 83% in relative terms. Accordingly, the amount of interest income increased again by +16%. In other words, the decline in the volume of 'working' assets was covered by an increase in their 'price' and vice versa. Instead, in 2023, the average interest rate fell by -6% in absolute terms or by -35% in relative terms, and only the growth of interest-

Table 5.2

Dynamics of income components of JSC Sense Bank for 2020-2024

Indicators	2020		2021		2022		2023		2024	
	UAH million	%	UAH million	%	UAH million	%	UAH million	%	UAH million	%
Interest income	8 732	80	10 093	79	11 740	84	11 183	87	14 665	133
- income from operations with legal entities	2 509	23	3 062	24	3 518	25	3 230	25	4 175	38
- income from operations with individuals	5 272	48	5 501	43	6 765	49	3 866	30	3 360	30
- income from operations with securities	950	9	1 530	12	1 457	10	4 087	32	7 130	64
Net interest income	5 058	46	6 333	50	7 053	51	5 540	43	7 321	66
Fee and commission income	4 549	42	5 641	44	4 319	31	4 700	36	4 525	41
Net fee and commission income	3 360	31	3 859	30	2 842	20	2 352	18	2 166	20
Trading result	1 105	10	1 066	8	2 563	18	1 483	11	914	8
- result from revaluation	307	3	-65	-1	1 729	12	849	7	31	0,1
- result from purchase and sale transactions	757	7	1 108	9	810	6	531	4	516	5
- result from operations with financial assets and liabilities	42	0,1	23	0,1	25	0,1	103	1	367	3
Other operating income	935	9	829	7	1 248	9	3 337	26	475	4
Other income	435	4	609	5	206	1	210	2	189	2
Total income	10 893	100	12 696	100	13 913	100	12 921	100	11 063	100

Source: based on [17]

bearing assets by +47% prevented a proportional decline in interest income by the same -35%, but only by -5%. In 2024, however, interest-bearing assets and the average interest rate grew by 15%, by 2% in absolute terms or by 14% in relative terms, and the cumulative effect resulted in a 31% increase in interest income.

Table 5.3

Analysis of interest income of JSC Sense Bank for 2020-2024

Indicators	Years					Increase, %			
	2020	2021	2022	2023	2024	2021/ 2020	2022/ 2021	2023/ 2022	2024/ 2023
Interest-bearing assets, UAH million	82 873	100 823	64 150	94 327	108 093	22	-36	47	15
Interest income, UAH million	8 732	10 093	11 740	11 183	14 665	16	16	-5	31
Interest income on loans, UAH million	7 782	8 563	10 283	7 096	7 534	10	20	-31	6
Share of interest income on loans, %	89	85	88	63	51	-5	3	-28	-19
Interest income on securities, million UAH	950	1 530	1 457	4 087	7 130	61	-5	181	74
Share of interest income from securities, %	11	15	12	37	49	39	-18	195	33
Average interest rate on interest-bearing assets, %	11	10	18	12	14	-5	83	-35	14

Source: based on [17]

Figure 5.2 shows the shift in 2023-2024 to interest income from securities in the structure of interest income of JSC Sense Bank for 2020-2024.

Our analysis of the dynamics of the composition and structure of Sense Bank's income and the factors influencing their volumes allows us to make the following generalisations:

– after a "failed" year in terms of profitability in 2022, the bank was able to get out of the loss zone in the following year, 2023, and receive a net profit even higher than in 2021; in 2024, although the net profit decreased, it remained significant;

– a significant loss in 2022 was caused by an increase in provisioning expenses, in particular for customer loans, and therefore, it is necessary to work very carefully with borrowers on non-performing loans to resume debt repayments and improve the quality of this part of the assets;

– although interest income accounts for the majority of the bank's income, and interest income on loans prevails in the composition of this income, the share of interest income from securities increased significantly in 2023-2024, which indicates that the bank is looking for new sources of income to cover expenses and generate net profit;

– the share of fee and commission income in the bank's total income is significant, although it decreased in the period under review, but this also indicates that the bank is looking for new sources of income to cover expenses and generate net profit.

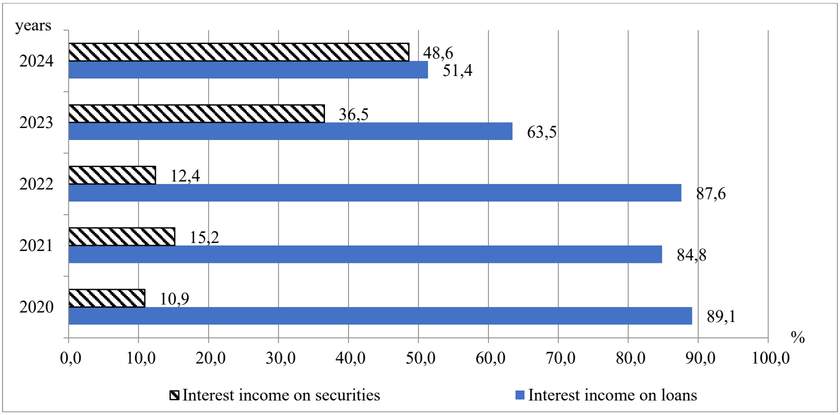

Figure 5.2. Dynamics of the structure of interest income of JSC Sense Bank in 2020-2024

Source: based on [17]

Today's banking market in Ukraine is characterised by a decline in traditional lending operations, an increasing role for investments in government securities, and the development of non-traditional fee and commission operations. The reasons for this are increased competition between banks and non-banking institutions, the need to optimise customer service by improving the quality of services, the need to reduce the riskiness of banking activities, the need to attract more and more new customers, and the specific needs of premium customers and provide them with comprehensive services.

Banking operations with significant potential for development in Ukraine include those shown in Figure 5.3.

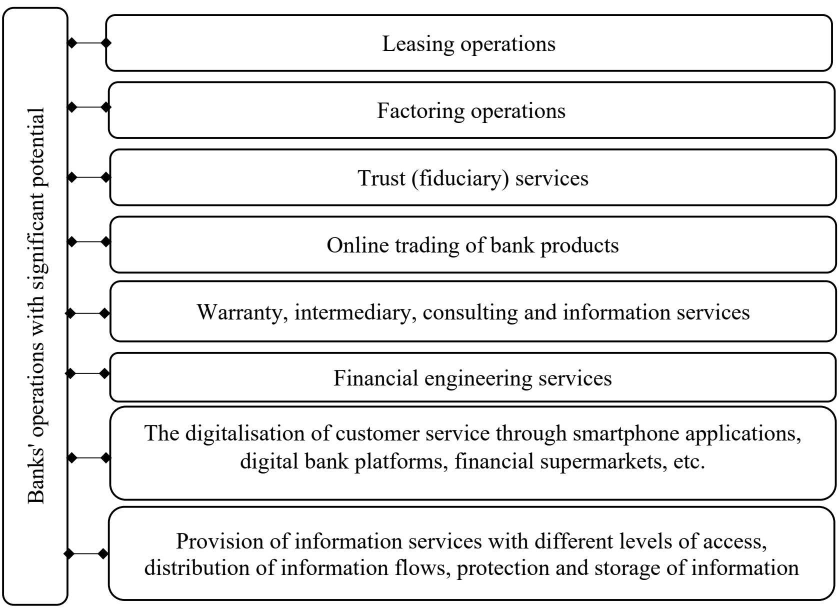

Figure 5.3. Types of banking operations that have significant potential for development in Ukraine

Source: proposed by the author

The non-traditional nature of most of these services is unrelated to novelty, as most of them have been performed for a long time in banking. However, in the domestic banking sector, these operations have not yet fully unlocked their potential for generating income; therefore, they are a reserve for development. Their development depends on the overall digitalisation of the economy and the banking sector, as increased digitalisation of Ukraine's economy will positively impact the growth of banking revenues.

Using modern security tools and the banking network, banks can provide information services with different levels of access: obtaining information, using information, distributing information flows, and protecting and storing data. Thus, the increase in banking income is currently limited by the ceiling on fees for servicing customer accounts and foreign exchange transactions, and there is a list of non-traditional operations for domestic banks, the development of which will contribute to an increase in the share of fee and commission income in the total income of the bank and the banking system as a whole.

6. Conclusions

Following the paper's purpose, the study substantiates the theoretical, organisational and regulatory framework for forming bank income and develops directions for its improvement. The author analyses the views of scholars on the essence of the concept of "bank income", and based on the definitions from legislation and definitions of scholars, it is concluded that bank income is considered the aggregate result of banking activities and changes in the balance sheet of assets and liabilities. Thus, the essence of bank income should be regarded from economic and accounting perspectives. It is also determined that commercial banks' income sources are disclosed following the types of banking operations and services and are grouped according to various classification criteria and characteristics. Accordingly, the bank's income is divided into interest and non-interest, the latter including commissions and others. Also, the bank's income generation peculiarities are disclosed by type of activity according to NR(S)AU 1: operating, investment and financial. The general mechanism of generating bank income is that banks accumulate customer deposits and pay interest on them, then either invest these funds in securities or provide loans to borrowing customers. The net interest spread is a determinant of a bank's profit. The analysis of the legislative regulation of banking activities has shown that state regulation is based on protection and preventive measures. The desire to generate as much revenue as possible may increase the bank's risk level. Supervision by the NBU plays an essential role in the state regulation of banking activities. The key here is focusing supervision on the real risks of banking activities following the guidelines for inspecting banks, which is called the Risk Assessment System.

During 2020-2024, the banking system of Ukraine faced unprecedented crisis challenges caused by the COVID-19 pandemic, quarantine restrictions, Russia's full-scale military aggression, and the economic downturn. At the same time, this period has demonstrated the banking sector's high adaptability and ability to transform and find new sources of profitability. The main trends in the banking market in 2020-2024 are the growth of the banking system's loan and securities portfolios as the two primary sources of interest income, although the latter is growing much faster. The profit of 2024 surpassed even 2021, which was previously considered a record year. The record amount of income tax paid by banks in 2024 is also worth noting, as it is 10 times higher than in previous years. Qualitative profitability indicators – ROE and ROA – repeat the dynamics of fluctuations in net profit, as it is the basis for their calculation. The growth of the net spread is positive, which indicates the effectiveness of the interest rate policy of the banking system as a whole. JSC Sense Bank is a nationalised state-owned bank classified as systemically important, ensuring the stability of Ukraine's entire banking system. A strong influence of external circumstances characterised the analysed period of the bank's activity – a pandemic and war, respectively; the very fact of the bank's survival in such difficult conditions is already positive. The worst year for the bank was the crisis year 2022, which is unsurprising. Net assets, loans and customer accounts decreased significantly, and although equity increased, the year's financial result – a net loss – was 2 times higher than the net profit in the previous 2021. However, based on the results of its operations in 2023-2024, the bank was back in the profitable zone, with a net profit of 2/3 of the previous year's loss. The bank's qualitative performance indicators, such as the capital multiplier and net interest spread, are also positive. In light of the above problems, the bank should intensify its work on non-traditional fees and digitalised banking services to increase revenues and stay in the profitable zone. Based on the results of the research conducted in this paper, the author proposes priority areas for improving the process of income generation of banks in general and JSC Sense Bank in particular.

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