

**CHAPTER 5
ANALYSIS OF THE DEVELOPMENT
OF NON-STATE PENSION FUNDS IN UKRAINE**

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**5.1 Analysis of the Legal and Regulatory Framework
for Private Pension Provision in Ukraine**

The operation of NPFs in Ukraine is regulated by special legislation and is subject to supervision by the relevant authorities. Analyzing the legal framework for the operation of NPFs, it is worth noting that Ukraine has laws that regulate the activities of pension funds and their relations with participants in the NPF system. There is the Law of Ukraine "On Non-State Pension Provision", which defines the legal, economic and organizational principles of NPF in Ukraine and regulates legal relations related to this type of activity [221]. In addition, the NPF legislation consists of "legislation on compulsory state pension insurance, the Laws of Ukraine "On Insurance", "On Banks and Banking", "On Collective Investment Institutions (Mutual and Corporate Investment Funds)", "On Securities and Stock Exchange", "On State Regulation of the Securities Market in Ukraine", "On Financial Services and State Regulation of Financial Services Markets" and other regulations adopted in accordance with this Law" [222].

The National Securities and Stock Market Commission (NSSMC) is responsible for the regulation and supervision of pension funds in Ukraine. The NSSMC ensures compliance with the rules and regulations in the field of non-state PP. The NSSMC is a state regulatory body that regulates the securities market and pension funds in Ukraine. The NSSMC is responsible for ensuring the stability, competitiveness and development of capital markets, as well as protecting investors' interests and preventing abuses and violations. The NSSMC also provides public access to information about the securities market and its participants, promotes public awareness and education about the securities market [223]. The main provisions of regulation and control of the NSSMC in Ukraine, which is responsible for the functioning of the NBFS, are shown in Figure 5.1.

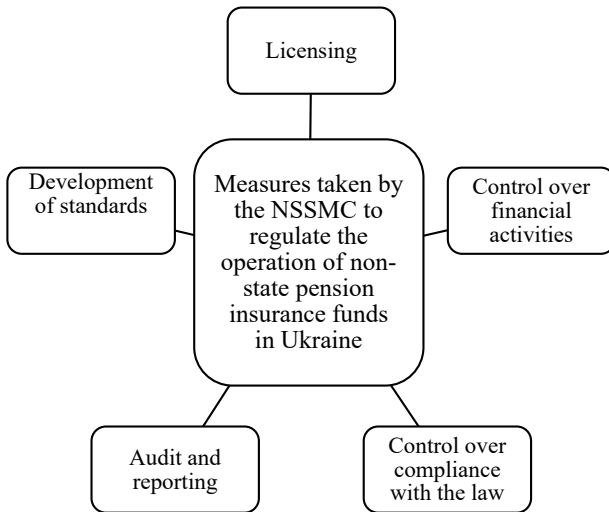


Figure 5.1 – Measures taken by the NSSMC to regulate the functioning of NPFs in Ukraine

Source: compiled by the author on the basis of generalization [224]

As shown in Figure 5.1. The NSSMC is responsible for granting licenses to NPFs, which allows funds to operate in the pension insurance industry. It sets standards and requirements for the financial activities of NPFs, which includes the obligation to maintain an appropriate level of capital, adequate risk management and other aspects of financial stability. The NSSMC ensures that the NPF complies with the pension insurance legislation, which provides for the fulfillment by the funds of the requirements regarding the rights and obligations of system participants as defined by the relevant laws and regulations. The Commission oversees the audit and reporting process of the NPF. Funds are required to submit regular reports on their financial activities and compliance with legal requirements. The NSSMC protects the rights and interests of participants in the pension insurance system and monitors the fulfillment of obligations to participants by the funds. It develops and establishes regulations that govern various aspects of NPFs, ensuring the stability and efficiency of their operations. These measures help to ensure the sustainability and reliability

of the NPFs in Ukraine and safeguard the rights and interests of pension system participants.

Licensing. The activities of NPFs are subject to licensing. This means that funds must have the appropriate licenses to provide NPF services. Licensing of NPFs in Ukraine is the process of granting the right to conduct pension insurance activities. It is an important element of creating a stable and reliable NPF system that guarantees the rights and interests of participants in the pension system in Ukraine. In Ukraine, NPF licensing is carried out by the NSSMC. It is responsible for controlling and supervising the activities of NPFs to ensure their stability and compliance with the law. The licensing process involves the fulfillment of certain conditions and requirements set forth in the relevant laws and regulations. The main stages of the licensing process may include submission of an application, submission of required documents and information, as well as an assessment of financial and business activities or other aspects that may be specified by law. The NSSMC is also responsible for supervising the activities of licensed NPFs, monitoring their financial stability and compliance with established standards. It is important to note that the licensing procedures and requirements are subject to change in accordance with applicable law, so organizations intending to obtain a license to conduct pension activities should contact the National Commission directly for up-to-date information.

The licensing of NPFs in Ukraine is regulated by a set of regulations. *The Law of Ukraine "On Non-State Pension Provision"* defines the basic principles of NPFs, their rights and obligations, the procedure for obtaining and revoking licenses, etc., Article 27 of which sets out the rules for licensing NPF administration activities, and Article 39 – licensing asset management activities. In particular, "the issuance of a license to conduct asset management activities to a person who is entitled to obtain such a license in accordance with this Law is carried out in accordance with the procedure and on the terms and conditions established by the NSSMC, taking into account the requirements of this Law. The license for conducting asset management activities is issued to the relevant person provided that it had a paid-in cash authorized capital of at least UAH 7 million as of the date of submission of documents to the National Securities and Stock Market Commission for obtaining this license" [225]. The issue of licensing

NPFIs is also regulated by the Law of Ukraine "On Insurance", which establishes general provisions on insurance, defines the types of insurance and requirements for the activities of funds (in particular, Articles 11-15 of this Law regulate licensing activities) [226] and the Law of Ukraine "On Compulsory State Pension Insurance" [227]. In addition, the Law of Ukraine "On Licensing of Economic Activities" contains rules and conditions for licensing, requirements for documents to be submitted for obtaining a license, and other aspects of licensing [228]. These documents form the basis for regulating the activities of the NPF in Ukraine. They define the provisions of the non-state PP licensing process:

- Requirements for applicants: licensing provides for the establishment of criteria and requirements that funds must meet in order to obtain a license; it may include financial stability, management experience, qualified staff, and compliance with the law.

- Application procedure: applicants must submit a special license application to the relevant regulatory authority (e.g., the NSSMC).

- Internal control and compliance: the license may provide for the establishment of internal control and accounting systems in accordance with the established norms and standards.

- Duties and responsibilities of the licensee: having obtained a license, the licensee is obliged to comply with the established conditions and regulations. In case of violation of these conditions, the licensee may be subject to administrative or financial liability.

- Regular monitoring and evaluation of activities: the licensee should be subject to regular monitoring and evaluation of activities by the relevant regulator to verify compliance with all established requirements.

- License revocation: in case of violation of important conditions or failure to comply with requirements, the regulator has the right to revoke the license to conduct pension insurance activities.

Financial stability requirements: NPFs must comply with the established norms and requirements for financial stability, which includes requirements for the amount of equity capital, risk limitation, preservation of the rights of system participants and other indicators, etc. The financial stability requirements for NPFs in Ukraine are determined to ensure their efficient and uninterrupted operation. The main provisions of the financial stability requirements may include the following:

- Capital requirements: NPFs must have sufficient capital to cover pension payments and operations; the regulator may set minimum capital investments and requirements for their structure.

- Financial control system: NPFs should have effective financial control and accounting systems that ensure the accuracy and reliability of financial reporting.

- Liquidity: the fund's financial resources must be sufficiently liquid to ensure that pensions and other obligations are paid when due.

- Investment strategy: the funds should have an effective investment strategy that allows for a sustainable return at a reasonable level of risk.

- Profitability and profitability: ensuring that the fund makes adequate returns on the investments it makes to provide sufficient financial resources to pay pensions and manage its operations.

- Insurance reserves: requirements to maintain appropriate insurance reserves to cover potential risks and ensure financial stability.

- Financial reporting: regular and transparent financial statements provided to the regulator and third-party stakeholders.

These requirements help to ensure that NPFSPs have sufficient resources and effective governance mechanisms to fulfill their functions and obligations to pensioners and other system participants. In Ukraine, the NSSMC has approved amendments to the Regulation on Prudential Standards for Professional Activity in the Stock Market and Requirements for the Risk Management System [229]. Regarding NPF administrators, prudential indicators were not established by legal acts at all. Therefore, regular monthly calculation of the following prudential indicators was introduced for NPF administrators: own funds adequacy ratio, operational risk coverage ratio, and current liquidity ratio. In accordance with the above resolution:

- 1) To assess the risks associated with the administration of NPFs, two indicators have been established: the own funds adequacy ratio and the operational risk coverage ratio. However, these indicators do not apply to NPF administrators who have received a license for the first time during the first full financial year from the date of issuance of the license [230].

- 2) The own funds adequacy ratio is an indicator that shows whether the NPF administrator can cover its fixed costs for three months, even if there

is no income. The ratio is calculated as the ratio of the administrator's own funds to 25% of its fixed overhead costs for the previous financial year. The standard value is not less than 1 [231].

3) The operational risk coverage ratio shows whether the NPF administrator can cover its operational risks with its own funds at the level of 15% of the average annual positive net income for the three previous financial years. The standard value is not less than 1 [232].

Information support: Funds should provide the necessary information on their activities, financial position and results of pension assets management. Information support for NPFs in Ukraine includes various aspects aimed at ensuring efficient processing, storage and exchange of information for the performance of their activities. The main provisions of information support may include:

- Automation of accounting: the use of modern digital technologies to automate the accounting of internal fund processes, such as registration of contributions, investment accounting, pension calculation, etc.

- Electronic reporting: transition to electronic reporting to regulatory and supervisory authorities, which facilitates information exchange and compliance with standards.

- Information security: application of modern technologies to protect confidential information about depositors, investments and financial transactions.

- Electronic architecture: the development of efficient information systems and architecture that allows for easy integration with other financial and regulatory systems.

- IT risk management tools: the use of information technology to analyze and manage risks in investment operations and financial activities of funds.

- Electronic communication with participants: ensuring the possibility of electronic communication and exchange of information with system participants, including pensioners and depositors.

- Ensuring access: creating an effective system of access to information for authorized persons and supervisory authorities.

- Standardization of information: adherence to standards and the establishment of common formats for exchanging information with other financial institutions and regulators.

Information support plays a key role in ensuring the efficiency and transparency of non-state pension funds, contributing to their successful operation and compliance with regulatory requirements.

State supervision: The activities of the NPF are subject to state supervision to ensure compliance with the law and protect the interests of system participants. State supervision of the NBFs in Ukraine is typically carried out through the relevant regulatory authorities. In many countries, including Ukraine, these bodies are the National Securities and Stock Market Commission (NSSMC) and the Pension Fund. The main provisions of state supervision include:

- NPFs must obtain a license from the relevant regulators to operate; they must also be registered with the designated authorities;
- State authorities supervise the financial activities of the funds, including auditing and reviewing their financial statements; this includes control over the correct distribution and investment of funds;
- the state sets rules and standards to protect the rights of depositors and pensioners; this may include limiting risky investments and setting mandatory liquidity standards;
- foundations must regularly submit reports on their activities, financial position, and other important aspects to government agencies. Compliance with reporting and declaration standards is an important part of government oversight;
- the state sets restrictions and requirements for the investment portfolio of funds aimed at ensuring adequacy and security;
- the state controls the process of pension payments and makes sure that they are made on time and in full;
- establishing norms and standards that funds must comply with to ensure the stability and reliability of the pension fund.

State supervision is an important element to ensure the stability and credibility of the non-state pension system, as well as to protect the interests of depositors and pensioners. These regulatory mechanisms are aimed at ensuring the stability and reliability of the non-state PP system in Ukraine.

Thus, the operation of NPFs in Ukraine is regulated by special legislation, in particular the Law of Ukraine "On Non-State Pension Provision". The main regulatory authority for NPFs in Ukraine is the National Securities and Stock Market Commission (NSSMC), which is responsible for issuing

licenses, controlling financial activities, protecting the rights of depositors, etc. NPFs are subject to licensing. Licenses are issued by the NSSMC. The license contains requirements for financial stability and reporting of funds. Funds must comply with financial regulations, which include requirements for capital, liquidity, investment strategy, etc. to ensure reliability. NPFs are required to report on their activities on a regular basis. Their activities are also subject to audit and state supervision. Prudential standards have been introduced for NPF administrators, including the equity capital adequacy ratio and the operational risk coverage ratio. These regulatory mechanisms are aimed at ensuring stability and protecting the interests of participants in the private pension system.

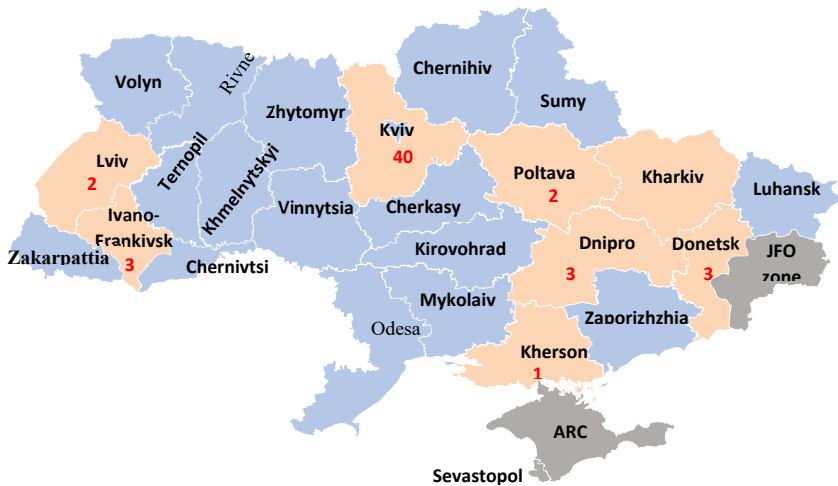
Indirectly, it is worth focusing on some potential problems and shortcomings of the existing NPF regulation system, namely: imperfection of certain regulations governing NPFs, as the text refers to the need to amend the Regulation on Prudential Standards; insufficient regulation of certain aspects, for example, until recently, prudential indicators for NPF administrators were not defined; complexity and confusion of legislation in this area, as regulation is scattered among different regulations; issues of practical application and control over compliance with the established norms are not covered, which may indicate potential problems in this area.

5.2 Assessment of Trends in the Development and Operation of Non-State Pension Funds in Ukraine

The NPP system is the third pillar of the Ukrainian pension system. It consists of NPFs that invest pension assets of NPP participants. The purpose of the investment is to provide NPF participants with additional pension benefits, ensure the return on pension assets above the inflation rate, and attract long-term investment resources for economic modernization. The analysis of the functioning of Ukraine's NPP should begin with a study of the dynamics of changes in the total value of NPF assets compared to pension contributions, the amount of investment income, the profit from investing NPF assets, and the amount of expenses reimbursed by pension assets.

Analysis of the development of the NPP system in Ukraine. As of September 30, 2024, according to the Register of Non-State Pension Funds,

there were 60 NPFs and 18 NPF administrators in Ukraine [233]. At the end of 2023, there were 63 NPFs. However, there are only 56 active NPFs. They are registered in 8 regions of Ukraine. The largest number of them is concentrated in Kyiv – 40, or 71.4% of the total number of operating NPFs. There are three each in Ivano-Frankivsk, Dnipro, and Donetsk, two each in Lviv, Kharkiv, and Poltava, and one in Kherson (Figure 5.2).



**Figure 5.2 – Regional distribution of NPFs in Ukraine
as of 31.12.2022, units**

Source: based on [233]

As of December 31, 2023, administrators of non-state pension funds concluded 96.9 thousand pension contracts, which is 0.8% (0.8 thousand) more than in the same period of 2022. In recent years, the total number of NPF participants has tended to decrease (Figure 5.3) and amounted to 886.3 thousand people at the end of 2023. At the same time, the number of participants who received/receive pension payments increased from 90 thousand to 93.8 thousand.

Until 2020, another trend was observed: the number of NPF participants increased annually (Table 5.1).

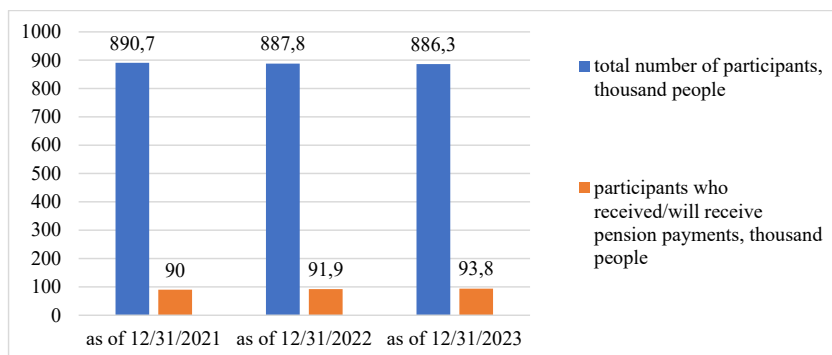


Figure 5.3 – Dynamics of NPF participants and those who received/receive pension payments

Source: compiled by the author on the basis on [234]

Table 5.1 – Dynamics of the number of NPF participants in 2015-2020

Indicator	As of the end of the year						Average annual growth rate, %
	2015	2016	2017	2018	2019	2020	
Total number of participants, thousand people	836,7	834,0	840,8	855,3	874,6	883,0	5,3
Participants receiving pension payments, thousand people	82,2	81,3	78,8	81,3	83,9	87,0	5,8
The ratio of the number of participants to recipients of pension payments	10,18	10,26	10,67	10,52	10,42	10,42	-

Source: compiled by the author on the basis on [234]

Thus, between 2015 and 2020, the number of NPF participants increased by 5.3%, reaching 883.0 thousand people at the end of 2020; the number of participants receiving pension payments also increased by 5.8% over this period, amounting to 87.0 thousand people in 2020; the ratio of the number of participants to recipients of pension payments remains stable – 10 people per recipient of pension payments.

Thus, by 2021, non-state pension funds in Ukraine were attracting more and more participants, which public confidence in such funds and their popularity as a tool for providing retirement security. However, there is a problem. In 2019, contributions from 874.6 thousand people amounted to UAH 2.16 billion, and payments from 83.9 thousand people amounted to UAH 0.95 billion. Thus, contributions to the NPF, given the increase in the number of participants who will need pension payments, are insufficient to cover the payments. This trend continued in 2021-2023, which indicates an increased likelihood of risks in the private pension sector, namely, the failure to fully fulfill its obligations to depositors.

As of the end of 2023, there were 96.9 thousand pension contracts concluded by administrators of non-state pension funds in Ukraine. This is 0.8% more than at the end of 2022. Of these, 87.5 thousand contracts were concluded with individuals, 0.1 thousand contracts with individual entrepreneurs, and 2 thousand contracts with legal entities (Table 5.2).

The analysis of Table 5.2 shows that the number of depositors as of 31.12.2023 increased compared to the end of 2022; compared to the end of 2020, the number of depositors increased by 9.28%. The increase in the number of pension contracts as of 31.12.2023 is due to an increase in pension contracts with individuals (by 11.36%). At the same time, the number of pension contracts with legal entities decreased in the same period. Thus, the total number of depositors and concluded pension contracts shows a stable and positive trend. The increase in the number of contracts and depositors, including individuals, indicates a certain growth in the popularity of NPFs among the population. These data point to the positive development of NPFs in Ukraine and confirm the growing interest of citizens in investing in pension programs.

As of December 31, 2022, as well as December 31, 2023, the vast majority of NPF participants were aged 25 to 50, but in 2023 their share decreased by 0.8% in favor of persons over 60. The share of NPF participants in the age group over 60 was 24.5% at the end of 2023, which is 1% more than the previous year. The smallest share is made up of participants under the age of 25 – 0.5% (Figure 5.4).

The analysis by gender showed that both in general and in the context of individual age groups, men predominate among NPF participants. Moreover, in the age group over 60, their number exceeds the number of women by 1.6 times (Table 5.3).

Table 5.2 – Dynamics of the number of concluded pension contracts and the number of contributors to non-state pension funds in Ukraine in 2020-2023

Indicators	Unit of measurement	As of:				Growth rate, % 2023/2020
		31.12. 2020	31.12. 2021	31.12. 2022	31.12. 2023	
Number of legal entity depositors	thousand people	2,1	2,0	2,0	2,0	- 4,76
Number of depositors, private persons	thousand people	79,8	86,3	86,7	87,5	9,65
Total number of depositors	thousand people	81,9	88,3	88,7	89,5	9,28
Number of pension contracts concluded with legal entities	thousand units	6,7	6,7	6,7	6,6	-1,49
Number of pension contracts concluded with individual entrepreneurs	thousand units	0,1	0,1	0,1	0,1	0,0
Number of pension contracts concluded with private persons	thousand units	81,0	88,7	89,3	90,2	11,36
Total number of pension contracts concluded	thousand units	87,8	95,5	96,1	96,9	10,36

Source: compiled by the author on the basis on [235]

One of the main qualitative indicators characterizing the NPF system is the pension contributions paid, which amounted to UAH 3,043.2 million as of 31.12.2023, an increase of 8.0% (UAH 224.2 million) compared to the same period in 2022. Compared to 31.12.2021, the amount of pension contributions as of 31.12.2022 increased by 7.7% (UAH 200.7 million). Compared to 2020, the amount of contributions increased by 10.1%. Of the total amount of contributions, 81.6% are contributions from legal entities, which amount to UAH 2.3 billion.

Data on pension contributions and other key performance indicators of Ukrainian NPP are presented in Table 5.4.

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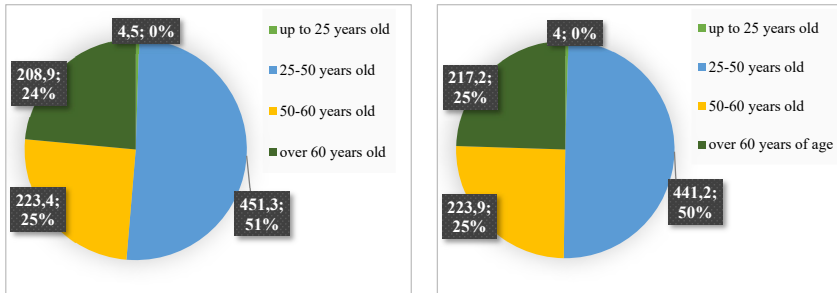


Figure 5.4 – Distribution of participants in private pension funds by age groups as of December 31, 2022 and December 31, 2023

Source: compiled by the author on the basis of generalization of [236]

Table 5.3 – Number of participants in the NPF of Ukraine by gender broken down by age group as of December 31, 2022 and December 31, 2023

Age group	Number of NPF participants by gender				Total, thousand people		Share by age category, %.			
	Women, thousand people		Men, thousand people				women		men	
up to 25 years old	1,7	1,7	2,5	2,3	4,2	4,0	40,5	42,5	59,5	57,5
25-50 years old	192,6	187,8	258,7	253,4	451,3	441,2	42,7	42,6	57,3	57,4
50-60 years old	100,8	101,1	122,6	122,8	223,4	223,9	45,1	45,2	54,9	54,8
over 60 years of age	80,6	84,5	128,3	132,7	208,9	217,2	38,6	48,9	61,4	61,1
Total	375,8	375,1	512,0	511,2	887,8	886,3	42,3	42,3	57,7	57,7

Source: compiled by the author on the basis of generalization of [237]

The increase in contributions in 2022-2023 was driven by an increase in contributions from both individuals (by 19.2% and 21.7%, respectively) and legal entities (by 4.9% and 5%). In 2021, the growth in contributions was also influenced by an increase in contributions from individuals (by 41.4%) and legal entities (by 5.6%).

An analysis of the indicators presented in Table 5.4 has led to the conclusion that all of them have a steady upward trend. In particular, the total value of NPF assets increased from UAH 2469.2 million in 2014 to

UAH 4889.8 million in 2023, which indicates an increase in the financial stability of these funds; the average annual growth rate is 8%, which indicates a stable but moderately positive growth;

Table 5.4 – Dynamics of basic indicators of NPP operation in Ukraine in 2014-2023 (as of the end of the year)

As of the end of the year	Total value of NPF assets, UAH million	Pension contributions, total, UAH million	Pension payments, UAH million	Amount of investment income, UAH million	Profit from investment of non-state pension fund assets, UAH million	Amount of expenses reimbursed from pension assets, UAH million	Share of expenses reimbursed from pension assets in the amount of investment income
2014	2469,2	1808,2	421,4	1266,0	1095,0	171,0	13,51
2015	1980,0	1886,8	557,1	872,2	657,0	215,2	24,67
2016	2138,7	1895,2	629,9	1080,5	834,8	245,7	22,74
2017	2465,6	1897,3	696,3	1455,5	1183,9	271,5	18,65
2018	2745,2	2000,5	809,9	1767,7	1440,5	327,2	18,51
2019	3143,3	2160,8	947,4	2200,0	1810,9	389,1	17,69
2020	3563,7	2377,9	1107,4	2635,7	2179,5	456,1	17,30
2021	3874,7	2618,3	1287,2	2957,4	2428,7	528,7	17,88
2022	4146,0	2819,0	1461,1	3285,6	2683,6	602,0	18,32
2023	4889,8	3043,2	1661,7	4088,5	3403,8	684,7	16,75
Average annual rate growth, %	8	6	16	16	17	17	-

Source: compiled by the author on the basis of generalization of [238]

The volume of pension contributions, as well as pension payments, has a stable upward trend. In 2023, NPFs in Ukraine received UAH 3,043.2 million, which is UAH 1,235 million more than in 2014; the average annual growth rate of pension contributions for the analyzed period was 6%, and pension payments -16%;

The growth of investment income and profit from investment during the period under review was almost identical – 16% and 17%, respectively;

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Expenses and their share of investment income: total expenses increased from UAH 171.0 million in 2014 to UAH 684.7 million in 2023; the share of expenses reimbursed by pension assets in 2023 will be 16.75%, which is 3.24 percentage points more than in 2014, but 7.92% less than in 2015.

In general, NPFs in Ukraine demonstrate positive dynamics of growth in assets, contributions, investment income, and investment returns. However, it is necessary to monitor the level of expenses and their impact on investment income.

Pension payments (lump-sum and fixed-term), as mentioned above, have a steady upward trend. Over three years (from the end of 2020 to 12/31/2023), they increased by 50.05% and amounted to UAH 1,661.7 million as of 12/31/2023. At the same time, lump-sum payments increased by 24.62%, and pension payments for a specified period – by 86.19%.

The dynamics of pension payments by NPFs in Ukraine in 2020-2023 is shown in Table 5.5.

Table 5.5 – Dynamics of NPF pension payments in Ukraine in 2020-2022

Indicator.	As of				Increase
	31.12.2020, UAH million	31.12.2021, UAH million	31.12.2022, UAH million	31.12.2023, UAH million	as of 31.12.2023/ as of 31.12.2021, (%)
Lump sum pension payments	649,9	711,1	757,4	809,9	24,62
Pension payments for a specified period of time	457,5	576,1	703,7	851,8	86,19
Total	1107,4	1287,2	1461,1	1661,7	50,05

Source: compiled by the author on the basis of generalization of [239]

As of the end of 2023, the NPF made pension payments to 93.8 thousand participants. This is 10.6% of the total number of participants receiving pension payments. As of December 31, 2023, the assets of the NPF of Ukraine amounted to UAH 4.89 billion, which is 19.0% more than in 2022 and 26.2% more than in 2021 (Figure 5.5).

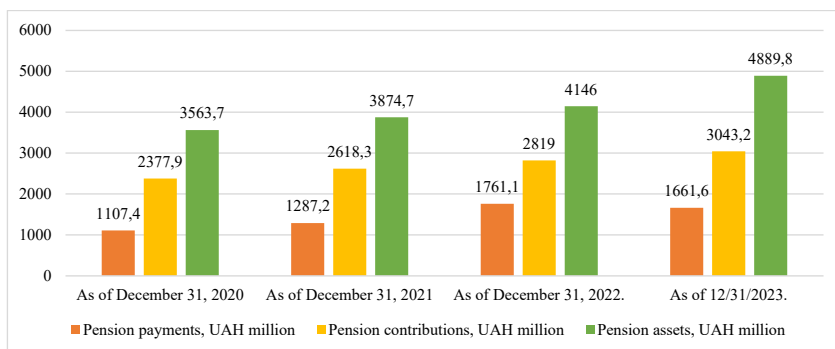


Figure 5.5 – Dynamics of key indicators of the NPF system of Ukraine in 2020-2023

Source: built by the author on the basis of generalization [30]

Non-state pension funds (NPFs) seek to build portfolios with a minimum degree of risk. To do this, they choose investment instruments that protect their depositors' money from inflation and provide capital growth.

The next step in the study of the funded private pension subsystem is to analyze how the invested pension assets are distributed and how they change over time. This data is presented in Table 5.6.

The following trends can be identified from the data in Table 5.6:

Total asset growth: The total value of assets of non-state pension funds grew during the period under review, reaching UAH 4,889.8 million at the end of 2023.

Diversification of investments: NPFs in Ukraine invest in a variety of assets, such as cash in banks, securities, corporate bonds, shares of Ukrainian and foreign issuers, real estate, precious metals, accounts receivable, etc.

Increase in cash and securities: cash and securities, which are the main components of the fund's portfolio, have increased over the past nine years; this may indicate an increase in liquidation preparedness and risk management.

Decrease in the volume of shares of Ukrainian issuers: the volume of shares of Ukrainian issuers shows a downward trend, which may reflect fluctuations in the stock market and risks associated with changes in the country's economy.

Table 5.6 – Dynamics of invested assets of non-state pension funds in Ukraine

Costs.	As of the end of the year, UAH million									2021/2015
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2023/2021
Cash placed on deposit accounts	780,7	884,2	1083,3	985,5	1210,8	1383,8	1290,1	1666,4	2103,2	1,65 1,63
Securities, income on which is guaranteed by the CMU	675,2	875,8	1004,9	1263,5	1443,5	1686,2	1807,1	1864,8	2416,5	2,68 1,34
Bonds of companies whose issuers are residents of Ukraine	266,3	200,8	202,4	298,6	236,7	192,5	423,3	374,3	181,0	1,59 0,43
Shares of Ukrainian issuers	65,2	15,7	11,3	43,8	42,7	50,4	64,4	42,0	44,7	0,99 0,69
Real estate objects	72,2	86,0	62,6	47,3	86,8	90,0	108,7	109,0	40,6	1,51 0,37
Precious metals	13,5	8,7	10,1	9,8	5,0	11,0	10,9	14,7	23,4	0,81 2,15
Funds on the current account	17,3	18,5	22,2	18,5	4,7	-	-	-	-	-
Assets not prohibited by the legislation of Ukraine	25,7	22,3	24,0	26,2	26,2	-	-	-	-	-
Accounts receivable	63,9	26,2	41,8	48,3	72,3	39,8	42,3	50,4	58,4	0,66 1,38
Domestic bonds local loans	-	-	-	0,0	11,6	94,8	114,3	13,4	11,1	- 0,1
Other investments	-	0,5	3,0	3,7	3,0	15,2	13,6	11,0	10,9	- 0,8
Total value of assets	1980	2138,7	2465,6	2745,2	3143,3	3563,7	3874,7	4146,0	4889,8	1,96 1,26

Source: compiled by the author on the basis of generalization of [240]

Steady growth in securities with income guaranteed by the Cabinet of Ministers of Ukraine: securities with guaranteed income have become more popular among funds, and their share in the portfolio has grown significantly.

Dynamics of accounts receivable: the increase in accounts receivable in recent years indicates the existing risks of debtor's insolvency, and this may affect the financial position of the funds.

The importance of cash and securities in the portfolio structure: cash and securities are the main assets that define the portfolio of private pension funds, acting as instruments of liquidity and guaranteed income.

The structure of NPF investments reflects their strategy of diversification and prudence. Both before and during the war, they sought to maximize returns while minimizing risks. The investment strategies of Ukrainian NPFs are simple and conservative. The largest share of assets is invested in securities with guaranteed income from the Cabinet of Ministers of Ukraine (49.4% in 2023), followed by bank deposits (43.0%), and bonds of Ukrainian companies (3.7%).

Figure 5.6 shows the structure of invested pension assets as of December 31, 2022. The largest share in NPF portfolios is made up of government securities (45%), cash on bank accounts (40%), bonds of companies issued by residents of Ukraine (9%), real estate (2.6%), and accounts receivable (1.2%).

The structure of invested pension assets displayed in Figure 5.6 highlights the significant role of government securities and cash at bank accounts in the portfolios of non-state pension funds (NPFs). Together, these two categories account for 85% of all investments, demonstrating a conservative approach to asset allocation aimed at minimizing risks and ensuring stable returns. This strategy aligns with the primary objective of pension funds, which is to preserve the value of contributors' savings while generating reliable income over the long term.

At the same time, the relatively modest share of investments in corporate bonds (9%) and real estate (2.6%) reflects a cautious attitude toward more volatile or less liquid assets. Although these investment options have the potential to yield higher returns, they may pose greater risks, particularly in the context of economic uncertainty or market instability. Diversification within the portfolio remains limited, suggesting that there is room for further optimization to balance risk and return more effectively. Notably, accounts

receivable (1.2%), shares (less than 1%), and other investments (less than 1%) constitute minor portions of the portfolio. This distribution underscores the preference for highly secure and predictable investment instruments, although it may limit the growth potential of pension assets. To enhance the long-term sustainability of pension funds, greater diversification and inclusion of alternative investments, supported by robust risk management practices, could be explored.

The purpose of investing pension assets is primarily to preserve the pension savings of citizens. The investment strategy of NPFs is more conservative than that of other financial institutions. The main areas of investment of NPFs remain government securities and cash placed on deposits (Table 5.7).

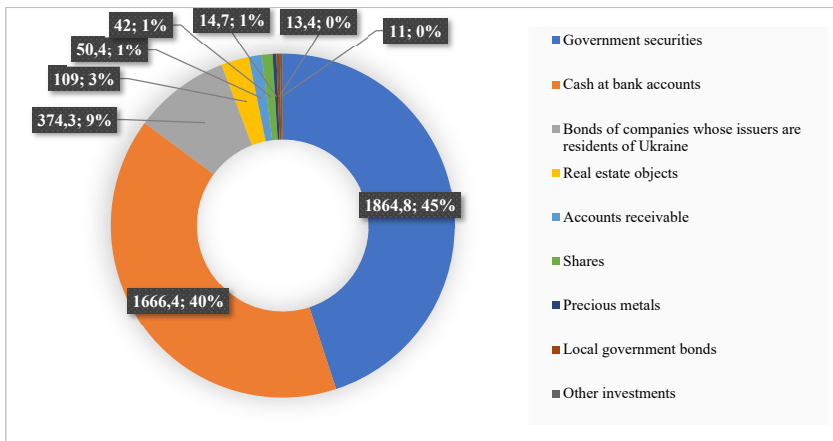


Figure 5.6 – Structure of invested pension assets of NPFs in Ukraine as of December 31, 2022

Source: compiled by the author on the basis of generalization [241]

As of December 31, 2023, compared to the same period of the previous year, there was an increase in investments in precious metals (by 59.2%), government securities (by 29.6%), cash on bank accounts (by 26.2%), and shares (by 6.4%). Accounts receivable also increased (by 15.9%).

MONOGRAPH

At the same time, the volume of investments in real estate (by 62.8%), corporate bonds (by 51.6%), local government bonds (by 17.2%), and other investments (by 0.9%) decreased significantly, as did the volume of receivables (by 19.1%), government securities (by 3.2%), and real estate (by 0.3%).

Table 5.7 – Dynamics of the structure of invested pension assets NPF of Ukraine

Asset name	As of						Increase
	31.12.2021		31.12.2022		31.12.2023		
	General cost, million UAH	% of general the amount of assets, %	General cost, million UAH	% of general the amount of assets, %	General cost, million UAH	% of general the amount of assets, %	as of 31.12.2023/ as of 31.12.2021, (%)
Government securities	1807,1	46,6	1864,8	45,0	2416,5	49,4	33,72 %
Cash	1290,1	33,3	1666,4	40,2	2103,2	43,0	63,03 %
Corporate bonds	423,3	10,9	374,3	9,0	181,0	3,7	-57,24%
Real estate objects	108,7	2,8	109,0	2,6	40,6	0,9	-62,65%
Accounts receivable	42,3	1,1	50,4	1,2	58,4	1,2	38,06%
Shares	64,4	1,7	42,0	1,0	44,7	0,9	-30,59%
Other investments	13,6	0,4	11,0	0,3	10,9	0,2	-19,85%
Local government bonds	114,3	2,9	13,4	0,3	11,1	0,2	-90,29%
Precious metals	10,9	0,3	14,7	0,4	23,4	0,5	114,68%
Total	3874,7	100,0	4146,0	100,0	4889,8	100,0	26,20%

Source: compiled by the author on the basis of generalization of [242]

The volume of investments in local government bonds (by 88.3%), equities (by 34.8%), other investments (by 19.1%), and corporate bonds (by 11.6%) decreased in 2022, which is quite logical in the context of war. The total income received from the investment of pension assets

CHAPTER V

as of 31.12.2023 amounted to UAH 4889.8 million, an increase of UAH 1015.1 million, or 26.2%, compared to 31.12.2021. Thus, during the war, NPFs are most likely to invest in precious metals. Expenses covered by pension assets in 2023 increased by 13.7% compared to 2022 and reached UAH 684.7 million (Table 5.8).

Table 5.8 – Dynamics of reimbursable expenses of private pension funds from pension assets in Ukraine

As of the end of the year	Expenses for NPF administration services, million UAH	Remuneration for the provision of asset management services to NPFs, UAH million	Payment for custodian services, UAH million	Payment for services for scheduled audits of NPFs, UAH million	Payment for services related to transactions with pension assets provided by third parties, UAH million	Payment for other services required by the current non-state pension legislation, UAH million	Total expenses reimbursed from pension assets, UAH million
2015	54,8	137,9	11,3	2,1	3,0	6,1	215,2
2016	63,6	150,7	12,8	3,2	3,2	12,2	245,7
2017	73,4	160,6	15,1	4,3	3,5	14,6	271,5
2018	92,6	187,8	18,4	5,3	4,1	19,0	327,2
2019	114,2	219,1	22,7	6,9	4,8	21,4	389,1
2020	138,2	252,6	27,7	8,6	5,5	23,5	456,1
2021	165,5	289,7	33,0	10,7	6,4	23,4	528,7
2022	192,2	327,8	38,7	12,5	6,9	23,9	602,0
2023	221,1	372,0	44,6	14,8	7,6	24,6	684,7
Average annual rate growth, %	1,19	1,13	1,19	1,28	1,12	1,22	1,16

Source: compiled by the author on the basis of generalization of [243; 244; 245]

This increase was due to the growth of all types of NPF expenses. The largest increase was in expenses for asset management services (by 13.5%), administration (by 15.0%), custody (by 15.2%), scheduled audits (by 18.4%), services related to operations with pension assets

provided by third parties (by 10.1%), and other services (by 2.9%). The dynamics of the structure of these expenses in the pre-war and wartime periods are shown in Table 5.9.

Table 5.9 – Dynamics of the structure of reimbursable expenses at the expense of pension assets of NPFs of Ukraine in 2021-2022

Costs.	As of			Deviations, 2023/2021, %
	31.12.2021	31.12.2022	31.12.2023	
	Pre-war period, %	Wartime period, %		
Remuneration for the provision of NPF administration services	31,30	31,93	32,29	0,99
Remuneration for the provision of asset management services to NPFs	54,79	54,45	54,33	-0,46
Payment for custodian services	6,24	6,43	6,51	0,27
Payment for services for scheduled audits of NPFs	2,02	2,08	2,16	0,14
Payment for services related to transactions with pension assets provided by third parties	1,21	1,15	1,11	-0,1
Payment for other services provided by the applicable legislation on NPP	4,43	3,97	3,59	-0,84
Total expenses reimbursed from pension assets	100	100,0	100	-

Source: compiled by the author on the basis of generalization of [246]

The analysis of the dynamics of non-state pension funds' expenditures in Ukraine and their structure from 2015 to 2023 allowed us to identify key trends.

Overall growth in expenses: all expense items show steady growth during the period under review; the average growth rate by expense item ranges from 13% to 28% per year, indicating an increase in financial activity and the volume of activities of non-state pension funds.

Prevalence of asset management fees: asset management fees are one of the most significant expense items, accounting for more than half of total expenses at the end of 2023 (54.33%). Steady growth in administration

fees: administration fees are also growing steadily, accounting for almost a third of total expenses (32.29%). The overall structure of expenses at the end of 2023 is shown in Figure 5.7.

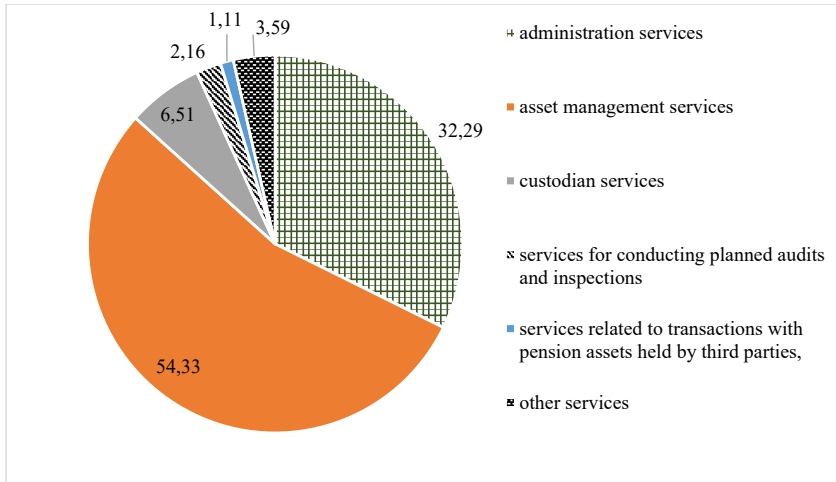


Figure 5.7 – Structure of expenditures of non-state pension funds in Ukraine (2023)

Source: compiled by the author on the basis of generalization of [246]

Diversification of cost items: not only asset management and administration expenses are growing, but also other areas of expenditure, such as custodian fees, audits, and others; this indicates a balanced approach to managing various aspects of the business.

Increased audit costs: The rise in audit costs reflects the growing focus on financial transparency and internal control.

The ratio of expenses to investment income: the share of expenses reimbursed by pension assets in the amount of investment income is characterized by a steady upward trend, which may indicate the efficiency of asset management and preservation of their value.

In general, non-state pension funds in Ukraine demonstrate steady financial growth and show a balanced approach to managing various aspects of their operations.

Thus, although private pension insurance generally tends to increase the number of participants, the war has made adjustments to the functioning of the NPF network. Their number has slightly decreased compared to the pre-war period, but the vast majority of them are concentrated in Kyiv. Total NPF assets are growing annually. The basis of NPF investments is government securities and bank deposits.

Despite the overall growth, the share of non-state pension provision in Ukraine remains low. Only about 10% of NPF participants receive pension payments. The majority of NPFs are concentrated in Kyiv, while in many regions their number is insignificant. The bulk of pension contributions come from legal entities (over 80%). The share of contributions from individuals remains low. The investment portfolio of the NPF is rather conservative and limited mainly to government securities and bank deposits. A significant share of NPF expenses is accounted for by fees for asset management and fund administration services. Thus, the data suggests that there are certain challenges in expanding the coverage of the population with NPF services, attracting contributions from individuals, diversifying the investment portfolio, and increasing the efficiency of funds' expenses.

Despite the improvement in quantitative indicators, there are many economic, organizational, legal, and psychological obstacles to the development of NPFs in Ukraine. NPFs in Ukraine face a number of problems that hinder their development. These include: low wages in Ukraine, with the average salary in 2022 amounting to UAH 14857 [247]; the shadow economy (in particular, given that according to a study by the Ministry of Economy of Ukraine in 2021 the level of the shadow economy was 31%) [248]; public distrust of financial institutions, in particular NPFs, due to low financial literacy of citizens and the lack of a tradition of responsibility for their future pension provision; ongoing reform of the pension system, which increases public distrust of NPFs; a narrow segment of investment opportunities for NPFs, which does not allow increasing the profitability of their investments.

The further development of NPFs depends on the model of the pension savings system. Some experts suggest moving to a voluntary funded system, while others believe that a mandatory funded component should be introduced. In our opinion, the introduction of a mandatory funded component has a number of advantages. It would allow for centralized

collection of pension contributions, provide a state guarantee of savings, and stimulate competition in the labor market. The main suppliers of pension reserves to NPFs are enterprises. However, most enterprises do not implement social programs that include additional pension provision for employees. To stimulate them, tax benefits and deductions should be introduced. An important task is to improve the legal framework for NPFs. In particular, it is necessary to expand the investment opportunities of the funds, strengthen the role of state regulation and self-regulation, and increase the efficiency and transparency of their activities.

The operation of NPF funds in Ukraine during the war faces a number of challenges and risks that could seriously affect their operation and performance. Some of the main challenges and risks include: economic instability – war may lead to economic instability and reduced financial market activity, which will affect the return and stability of NPF investments; changes in investment strategies – the unstable situation may force funds to review and change their investment strategies to reduce risks and preserve the value of pension assets; losses in financial markets – war may lead to a sharp decline in financial markets, which will affect the value of securities. All of these factors interact to create a complex landscape of challenges and risks for NPFs in the context of military conflict, which requires adaptation to changes and the development of strategies to mitigate the negative impact of these factors.

Main conclusions about the trends in the development and operation of non-state pension funds in Ukraine. The number of non-state pension funds in Ukraine is 63, most of them are concentrated in Kyiv. There has been a slow but steady increase in the number of pension contracts and the number of fund depositors. Private persons prevail. The total assets of the funds increased by 7% in 2022 compared to last year, reaching UAH 4.1 billion. The volume of pension contributions increased by 7.7% in 2022, amounting to UAH 2.8 billion. More than 80% of contributions come from legal entities. The investment portfolio of the funds remains conservative, with the bulk of investments in government securities and bank deposits. The amount of pension payments increased by 13.5% in 2022, amounting to UAH 1.46 billion. About 10% of fund participants receive payments. There are challenges in covering the population with NPF services, attracting contributions from individuals, diversifying investments,

and cost efficiency. The war poses significant risks and challenges for the funds, including economic instability, possible financial losses, inflation, social tensions, and others.

Based on the analysis presented in the text, the following main problems related to the functioning of NPFs in Ukraine can be identified: insufficient coverage of the population with NPF services – only about 10% of participants actually receive pension payments; low share of pension contributions from individuals (about 20%), while contributions from legal entities dominate; limited regional network of funds – most are concentrated in Kyiv; conservative investment policy with a high share of low-yielding but reliable instruments; relatively high share of asset management costs, etc. Therefore, the main areas for improvement are expanding public access to NPF services, increasing investment efficiency, strengthening public confidence, and overcoming the consequences of the war.

5.3 Analysis of the Corporate Non-State Pension Fund of the National Bank of Ukraine

The National Bank of Ukraine, within the scope of its powers, may carry out activities aimed at developing and supporting the pension system in the country. The Corporate Non-State Pension Fund of the National Bank of Ukraine is one of the NBU's initiatives in the field of pensions. It can provide pension services to help ensure the financial security of employees at retirement age. The National Bank of Ukraine (NBU), within its authority, plays a significant role in the development and maintenance of the country's pension system. One of its key initiatives in this domain is the Corporate Non-State Pension Fund (CNPf), which aims to enhance financial security for employees upon retirement. The CNPF facilitates pension provision through a structured framework, as illustrated in Figure 5.8, encompassing several core activities. These include the collection and management of pension contributions, investment of funds, provision of pension benefits, dissemination of information to participants, as well as accounting and reporting.

The CNPF is responsible for accumulating contributions from employees and affiliated companies, ensuring the effective investment of collected funds to achieve profitability and capital growth. Additionally, the fund administers pension benefits for participants reaching retirement

age, ensuring timely and adequate payments. To enhance transparency, the CNPF provides informational support to participants regarding their pension status and capital. Furthermore, the fund maintains rigorous accounting and reporting practices, ensuring compliance with legal requirements. Through these functions, the NBU's CNPF contributes to the stability and efficiency of the national pension system, reinforcing financial sustainability for future retirees. The NBU's CNPF activities are shown in Figure 5.8.

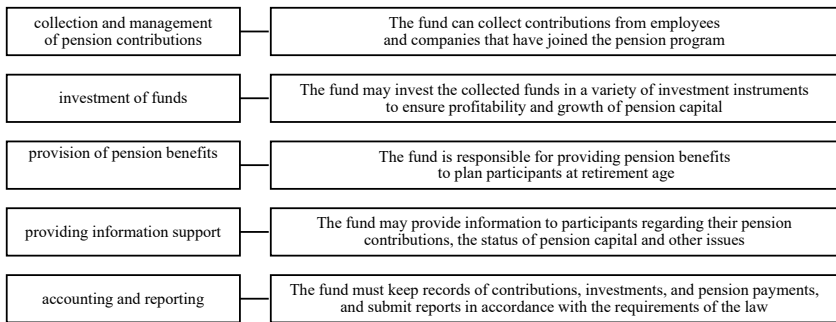


Figure 5.8 – Areas of NBU's CNPF activity

Source: built by the authors on the basis of generalization [249]

In general, the NBU's activities are aimed at improving the financial security of pensioners and can contribute to the development of a sustainable and efficient pension system in Ukraine. The annual report of the NBU Pension Fund Council on the implementation of the Fund's Development Strategy for 2017-2025 discloses information on the implementation of the Fund's strategic goals for the period from 2017 to 2022 [250] and from 2023 to 2025 [251] (Figure 5.9).

For each strategic objective, the expected and actual results are presented, as well as the measures taken to achieve them.

1. Growth in the value of pension assets. The report [255] states that the target return on assets was partially achieved. In 2017-2020, the actual return exceeded the target. In 2021, the yield was 0.34% less than the target. In 2022, the actual yield was also below the target. For the period 2017-2022, the average annual return on assets was 12.2%, while the target for this period was 12.3%. The main reasons for the failure to achieve

the target yield in 2021-2022 were the negative revaluation of domestic government bonds and restrictions on assets available for investment due to martial law. In terms of optimizing the asset structure, the share of non-target assets was reduced from 19% in 2017 to 4.7% in 2022. Based on the results of claims and lawsuits, the share of completed court cases increased from 26% in 2017 to 85% in 2022.

Growth in the value of pension assets

- achievement of planned profitability, optimization of asset composition, claims and lawsuits in relation to distressed assets

Trust in the fund, provision of modern services

- ensuring transparency of activities, raising awareness of participants, maintaining an effective dialogue with participants, improving the quality of service
- encouraging participants to increase their pension contributions, attracting participants' family members, preparing for the launch of the defined contribution system, and introducing innovative services

Risk management

- adherence to a conservative investment policy, development of a risk management system, and advanced training of employees in risk management

Implementation of best practices

- Ensuring transparency of operations, preparing high-quality financial statements, participating in the improvement of legislation on funded pensions

Figure 5.9 – Strategic objectives of the NBU’s CNPF

Source: compiled by the author on the basis of generalization of [252; 253]

The report identifies the following main problems and challenges to the growth of the value of the NBU’s pension assets:

– Volatility of financial markets and the economic situation in the country, which makes it difficult to forecast profitability and achieve targets. In particular, the report notes the negative impact of military operations and the economic crisis.

– The high share of government securities (government bonds) in the Fund’s assets is about 50%, which makes the investment portfolio sensitive to interest rate fluctuations and other macroeconomic factors.

– Presence of non-target assets (assets not provided for in the investment declaration) and distressed assets in the Fund’s portfolio. This complicates the process of portfolio management and achievement of the required return.

- Restrictions on investment instruments due to the specifics of the Fund's activities as a corporate pension fund.
- Legal restrictions on asset transactions during martial law.
- A lengthy process of resolving distressed assets through court procedures.

Thus, the main challenges in 2017-2022 were adapting to changing market conditions, improving the efficiency of risk management, and accelerating the process of optimizing the asset portfolio.

In 2023, the NBU Pension Fund made significant progress in fulfilling its tasks aimed at ensuring a stable growth in the value of pension assets [256]. The main results include:

1. Achieving the target return on pension assets. In 2023, the actual return on assets of the NBU's CNPF was 18.8%, exceeding the target return of 17.7%. This figure is the highest over the past few years, which demonstrates effective asset management even in difficult economic conditions.

2. Optimization of the asset structure. In 2023, we managed to reduce the share of non-target assets to 0.7%, which is a significant progress compared to previous years. By 2025, the plan is to reduce this figure to 0.4% by selling assets that do not comply with the Investment Declaration.

3. Diversification of the investment portfolio. Due to the martial law and related restrictions, portfolio diversification was not started in 2023. However, the monitoring of possible instruments continued, and after the end of martial law, the Investment Declaration is expected to be updated with the addition of new low-risk and highly liquid assets.

4. Increasing transparency of activities. The transparency of the Fund's activities is an important factor of trust on the part of participants. In 2023, there were no complaints about lack of transparency, which confirms the effectiveness of the Fund's communication strategy. The publication of daily, monthly and annual information provided participants with access to up-to-date data on the Fund's activities.

The 2023 report identifies the following key issues and challenges to the growth of the value of the NBU's pension assets:

- Martial law and economic instability – these factors limit the instruments available for investment and cause high risks. After the situation stabilizes, the investment portfolio is expected to expand.

– Legislative restrictions on asset transactions make it difficult to manage the portfolio efficiently. After the end of martial law, the Fund plans to take advantage of new investment opportunities.

Thus, in 2023, the NBU Pension Fund showed significant results in fulfilling the objectives of the Strategy 2023-2025, despite the challenges. Successful implementation of the measures will ensure even more stable and sustainable growth in the value of pension assets in the future.

2. Trust in the Fund, provision of modern services. The NBU's CNPF is a corporate pension fund, so its participants are NBU employees. Pensions are paid to participants through pension contributions from the employer (the NBU) and personal contributions from participants. The report for 2022 [259] mentions that despite the martial law in 2022, the NBU Pension Fund operated normally and made timely and full payments to pensioners. There is also information that the Fund sent SMS messages to participants about pension payments. Thus, it can be assumed that the payment of pensions in this Fund is timely and in full in accordance with the terms of pension contracts. The following key information can be highlighted from the section "Participants' Trust". Regarding transparency of activities: according to the results of independent surveys in 2018-2021, 93-99% of respondents considered the activities of the NBU Pension Fund transparent; in 2022, the survey was not conducted due to military operations; 29,000 unique views of the monthly reporting section on the Fund's website for the period; more than 35,500 people read the information in the "Knowledge Base" section. Raising awareness of participants: 100% of new participants were trained on the basics of the NPP; over 29,000 unique views of the training materials on the website. In terms of communication with participants: more than 6500 consultations were provided through the hotline; more than 3500 responses were sent by e-mail; more than 1.67 million SMS messages were sent to participants. As for the quality of service: according to the results of surveys in 2018-2021, 98-99% of respondents were satisfied with the quality of service. Thus, the report provides sufficient evidence that the Fund pays considerable attention to increasing the confidence of participants.

New opportunities for participants: according to the report on the implementation of the NBU's CNPF Development Strategy for 2017-2022, the Fund has developed the following new opportunities for its participants:

the possibility for relatives of the Fund's participants to make pension contributions in the name of a specific participant of the Fund, for which a corresponding pension contract was developed; a number of innovative services for convenient interaction of participants with the Fund were introduced: a participant's personal account, electronic document management, SMS informing, online consulting, etc. In summary, the NBU CNPF has been actively developing modern financial and information services to improve the service to participants and simplify their interaction with the Fund.

In 2023, the NBU's CNPF paid considerable attention to maintaining a high level of confidence of its members and improving services focused on their needs [260]. Thanks to the introduction of innovative services and systematic quality control, the KDIF achieved significant results in the following areas:

1. Transparency of activities. Complete and up-to-date information on the Fund's activities is available to participants through open sources: the website, monthly digests and electronic reports. In 2023, there were no complaints about the transparency of activities, which indicates the trust of participants.

2. Training of newly accepted participants. The Fund provided 100% of new participants with the necessary training materials on pensions. Updating the "Knowledge Base" section and holding video conferences helped to raise awareness of participants about the functioning of the private pension system.

3. Effective dialog with participants. In 2023, the Fund provided more than 900 consultations through the hotline, processed about 800 requests and sent more than 314 thousand SMS messages. As a result, there were no complaints about the quality of information exchange and a high level of participant satisfaction.

4. Client-centered service model. The Fund's employees have undergone training on service quality, which has contributed to raising service standards. According to the survey, 96% of respondents are satisfied with the level of services provided by the NBU's CNPF.

The main achievements of the NBU's CNPF in strengthening confidence in the Fund and providing modern services in 2023 can be summarized:

- Ensuring full transparency of activities, which helped to strengthen the trust of participants.
- Raising awareness of the private pension system among newly recruited participants.
- Expanding communication channels and improving the quality of service through the introduction of modern services and training activities.
- No complaints about the Fund's activities and no letters of appreciation for its effective work.

Thus, the Fund successfully continues to implement the strategy of increasing the level of trust and providing quality services that meet the needs of participants, creating the basis for further development of the client-centered service model.

3. *Risk management*: according to the Report on the Implementation of the NBU's CNPF Development Strategy for 2017-2022 [262], the following key measures were taken by the Fund in the area of risk management:

- Daily monitoring of compliance with the established investment limits and restrictions on investment in accordance with the Investment Declaration was introduced.
- Continuous monitoring of compliance with the financial risk limits (market, credit, liquidity) set by the Fund's Board has been introduced.
- The Regulation on the Risk Management Policy related to the management of the Fund's pension assets was developed and approved.
- A number of trainings were held for the Fund's employees in the field of risk assessment and management.
- The methodology and tools of the Fund's risk management system were improved with the support of an external consultant.

Thus, the NBU's CNPF took a number of measures to implement best practices in risk management and improve the level of "risk culture" in investment activities. This allowed to effectively control and minimize risks, ensuring reliable growth of pension assets.

In 2023, the NBU's CNPF focused on implementing effective risk management measures in the context of martial law and a dynamic financial environment [263]. The main achievements in this area include:

1. Ensuring business continuity. As part of the NBU's General Business Continuity Plan, the NBU developed and implemented an Action Plan to support the NBU's Pension Fund. In the reporting period, the NBU ensured

the provision of all non-state pension services, and reviewed the relevance of the Action Plan, which helped to avoid disruptions in the Fund's operations.

2. Adherence to a conservative investment policy. In 2023, the NBU CNPF complied with the requirements of the Investment Declaration, financial risk limits, and regulatory restrictions. The temporary exceeding of the limit of expected interest rate risk losses in November 2023 was quickly eliminated by adjusting the risk limits, which was the result of adaptation to the changed target yield.

3. Maintaining a comprehensive financial risk management system. The risk management methodologies and risk limits for all financial instruments permitted by the Investment Declaration have been approved. All risk management procedures are kept up-to-date, which helps to reduce financial risks and ensure the Fund's stability.

Key risk management challenges for the NBU's CNPF in 2023 and ways to address them:

- Adaptation to market changes. Martial law and economic instability increase uncertainty, but timely reviews of risk limits and comprehensive management ensure stability.
- Prompt elimination of violations. Cases of excessive risks are promptly resolved, which minimizes the impact on the Fund's overall performance.
- Ensuring that policies and procedures are up-to-date. Regular reviews and updates of the Action Plan and financial risk limits ensure adaptation to new challenges.

The effective risk management system implemented by the NBU CNPF in 2023 allowed the Fund to ensure stable operations even in the face of increased risks caused by martial law. Further work to improve risk management procedures will be a key factor in the Fund's successful development in the future.

4. *Implementation of best practices.* According to the 2022 Report [264], the NBU's CFPB has taken the following measures in this area:

- Transparency and openness of the Fund for inspections and supervision are ensured: timely reporting is published, auditors' recommendations are implemented, and contracts with leading audit companies are concluded.
- High-quality financial statements of the Fund have been prepared in accordance with IFRS – in 2020-2022, unconditionally positive audit opinions on the financial statements were given.

- An active part in improving the legislation on funded pension provision was taken: a number of draft laws and submitted proposals to the regulator were reviewed.

- An electronic document management system and a personal account were introduced to improve the quality of service.

- An annual survey of participants was conducted to assess the level of service and satisfaction – more than 97% of respondents positively assessed the quality of the Fund's services.

Thus, the NBU's CNPF has been systematically working to implement the best international practices in its operations in all aspects, from financial reporting to customer service.

In 2023, the NBU's CNPF actively implemented the best international practices in the field of non-state pension provision [265]. The main areas of work included ensuring openness, transparency, and effective corporate governance.

2. Openness and transparency for audits and oversight. In 2023, all financial and management reports were prepared in accordance with International Financial Reporting Standards. The audit of the financial statements for 2023 conducted by KPMG Audit PrJSC resulted in an unqualified opinion. All the necessary data on the Fund's activities are published on the official website of the NBU's CNPF. No comments were received from the supervisory authorities on the Fund's activities in 2023, which confirms the high level of transparency.

2. Effective corporate governance. In 2023, all key governance bodies functioned properly: The NBU's CNPF Council, the Asset Management Council, and the Risk Management Committee. In 2023 the Department's SharePoint-based Electronic Library was introduced, which greatly simplified access to internal documents and increased the efficiency of collegial bodies. A number of new regulations were developed and approved, covering the organization of the Council's work, PP operation, monitoring compliance with risk limits, interaction with participants and updating information on the official website.

The main achievements of 2023 include: ensuring full transparency of activities, which is confirmed by positive audit reports and the absence of comments from regulatory authorities; improving corporate governance through the introduction of modern digital tools (Electronic Library) and

updating internal regulations; strengthening interaction with participants through new work regulations and updating information on the Fund's website. Implementation of the best practices in 2023 allowed the NBU KDIF to increase transparency of its operations, efficiency of corporate governance, and adaptation to modern challenges. These achievements create a solid foundation for the further development of the Fund within the framework of the Strategy 2023-2025.

Particular attention should be paid to the introduction of innovative services for participants. In 2023, the NBU's CNPF continued to introduce innovative services aimed at improving the quality of interaction with participants, simplifying the exchange of information and documents, and adapting global practices to Ukrainian realities. The main areas of work in this context included:

1. Development of the Participant's Personal Account; continuous improvement of the Personal Account functionality in accordance with the needs of participants and legal requirements; improvement of the interface to increase the convenience of use; integration of new functions, such as displaying the pension payment schedule, application templates and additional agreements.

2. Expanding electronic document management: introducing new formats of interaction between participants and the Fund, including electronic applications and contracts; automating document processing to speed up processes; ensuring reliable protection of personal data in the electronic document management system.

3. Analysis of innovative technologies: monitoring of global experience in the field of private pension provision to study new approaches to client service; adaptation of best practices to the Ukrainian market and their integration into the Fund's work.

The NBU's CNPF implemented measures to introduce innovative services for participants in 2023:

- January 2023: An e-learning course on private pension provision was launched on the official website of the Fund, which helps to raise financial awareness of participants. An application template for the transfer of pension funds was developed, which greatly simplifies the paperwork process.

- April 2023: The function of displaying the schedule of pension payments in the Personal Account was integrated, which improved transparency and convenience of obtaining information.

– July 2023: Additional functions for concluding and managing contracts, including signing supplemental agreements to defined benefit contracts (DB contracts), are introduced.

– August 2023: A supplementary agreement to the DB agreement was created to simplify the management of pension terms.

The results of such innovations of the NBU's CNPF can be summarized as follows: stable functioning of new innovative services that simplify interaction with participants is ensured; efficiency and speed of information exchange are increased due to improvement of electronic document flow; the level of transparency of the Fund's activities is increased through integration of new tools into the Personal Account.

The introduction of innovative services in 2023 was an important step to improve the customer focus and quality of services of the NBU's CNPF. The measures taken helped to increase member satisfaction, simplify processes, and strengthen trust in the Fund. Further development of the Personal Account and electronic document management will allow maintaining high standards of service and meeting the needs of modern participants.

Peculiarities of settlements with the Fund's participants based on the results of 2022. Pension schemes of NBU's CNPF are documents that define the terms and procedure for non-state pension provision provided by the fund. They are developed in accordance with the requirements of Ukrainian legislation, the fund's charter and other regulations on private pensions. The fund has one NBU defined contribution pension program. The program participants are employees of the National Bank of Ukraine, the University of Banking and the Ukrainian Academy of Banking. As of December 31, 2022, the total number of participants in the fund was 12,750, of which 2,594 were individual depositors of the fund. Participation in the fund is voluntary.

Amendments to pension schemes are made by the decision of the fund's management board. The decision to amend the pension schemes is made taking into account the opinion of the fund's participants. Pension schemes may be canceled by a decision of the fund's board. The decision to cancel pension schemes is made taking into account the opinion of the fund's participants. In 2022, no changes were made to the fund's pension schemes.

CHAPTER V

Procedure for concluding pension contracts with the NBU's CNPF. A pension contract is an agreement between the Fund and its depositor, which is concluded on behalf of the Fund by its administrator and regulates the non-state pension provision of the Fund's participant at the expense of the depositor's pension contributions. As of December 31, 2022, as well as December 31, 2021, the Fund's depositors are: the founder of the Fund and individuals who have entered into individual pension contracts with the Fund.

In the event of termination of labor relationships between the Fund's participant and the founder of the Fund, the latter shall terminate the pension contract concluded in favor of the participant. The latter must conclude a new pension contract with the administrator of any other pension fund or, in case of reaching retirement age in accordance with the law, conclude a life pension insurance contract with an insurance organization, or open a pension deposit account with a bank. The transfer of pension funds of this participant to another financial institution is carried out within five business days after receipt of the relevant application and the necessary documents.

The individual pension account of a participant of the NBU's CNPF will be closed after the pension funds accounted for in his/her individual pension account are transferred. In the event of termination of the Fund's participant's employment relationship with the Fund's founding employer, the participant may remain a member of the Fund, subject to the conclusion of an individual pension contract with the Fund.

A participant in the NBU's CNPF has the right to unilaterally terminate an individual pension contract or demand its amendment.

Pension contributions to the NBU's CNPF are monetary funds contributed by the depositor in accordance with the pension contract and are regulated by the terms of the chosen pension scheme. The amount of pension contributions by the Fund's founder is determined by the contract based on the salary and/or minimum wage of the Fund's participant, except for employees receiving pension payments and those on childcare leave. Pension contributions in favor of the latter amount to one tax-free minimum income. The Founder of the Fund may unilaterally suspend pension contributions for a year.

Peculiarities of settlements with the Fund's participants based on the results of 2023. Pension schemes of the NBU's CNPF are documents that

define the terms and procedure for non-state pension provision provided by the Fund. They are developed taking into account the requirements of the Ukrainian legislation, the Fund's charter and other regulations on private pension provision. The Fund has one pension scheme of the NBU's CNPF – a defined contribution program.

As of December 31, 2023, the total number of participants in the Fund was 12,778, of which 2,580 were individual depositors. Participation in the Fund is voluntary.

Changes to the pension schemes are made by the decision of the Fund's Management Board, taking into account the opinion of the participants. In 2023, no changes were made to the Fund's pension schemes.

The procedure for entering into pension contracts with the NBU's CNPF remains unchanged. A pension contract is an agreement between the Fund and its depositor that regulates the non-state pension provision of the participant at the expense of the depositor's pension contributions. As of the end of 2023, the Fund's contributors are the founder of the Fund and individuals who have entered into individual pension contracts.

In the event of termination of the labor relationship between the Fund's participant and the founder, the pension contract concluded in favor of the participant shall be terminated. The participant may transfer pension funds to another Fund or financial institution or enter into a life pension insurance contract. In 2023, the transfer of funds was carried out within five business days after receipt of the application.

The amount of the founder's pension contributions was determined in accordance with the contract, taking into account the participant's salary or minimum wage. Pension contributions in favor of persons on childcare leave amounted to one tax-free minimum income. Pension payments for 2023 amounted to a total of UAH 1,038,003,269.61, of which UAH 691,611,366.08 was paid for a fixed term, and one-time payments amounted to UAH 346,391,903.53.

The total number of people receiving pension payments amounted to 6,889, of whom 3,405 received payments for a fixed period of time and 6,283 received lump-sum payments. The net value of the Fund's assets at the end of 2023 amounted to UAH 2,088,821 thousand, an increase of UAH 310,549 thousand compared to 2022.

The amount and frequency of pension contributions of the NBU's CNPF participants are determined by individual contracts, and the maximum amount is not limited. In 2021-2023, pension contributions were paid in national currency, and their payment was made by transfer to the current account of the Fund through its custodian. Pension contributions are recognized in the statement of changes in net assets when they are credited to the participant's individual pension account. Pension contributions credited in favor of the Fund's participants are presented in Table 5.10.

Table 5.10 – Pension contributions credited to the participants of the Corporate Non-State Pension Fund of the National Bank of Ukraine in 2021-2023

(in thousands of UAH)

Indicator	2021	2022	2023	Relative growth rate, %
Contributions paid by the founder of the Fund	59 890	76 170	77 450	29.32
Contributions paid by individual depositors	1017	854	1149	13.0
Transfer of funds of individuals from other NPFs	204	8	-	-
Total contributions	61 111	77 032	78 599	28,62

Source: compiled by the authors based on [270]

Thus, during the year, contributions paid by the founder of the Fund increased by 29.32%, from UAH 59,890 thousand in 2021 to UAH 77,450 thousand in 2023; the positive growth rate indicates an increase in contributions received from the founder. Contributions paid by individual depositors increased by 13.0% from UAH 1,017 thousand in 2021 to UAH 1,149 thousand in 2023; the growth rate indicates an increase in contributions from individual depositors during the period under review. The total amount of deposits (including contributions from the founder, individual depositors and transfers) increased by 28.62%, from UAH 61,111 thousand in 2021 to UAH 78,599 thousand in 2023. The overall growth rate indicates a positive trend in the growth of contributions to the Fund.

Therefore, it can be concluded that the growth of contributions from the founder and the total amount of contributions indicate a certain

economic development of the Fund and increased interest from the founder. The decrease in contributions from individual contributors may be due to various factors, such as changes in financial situation of the population or changes in the Fund's strategy. A dramatic decrease in transfers of individuals' funds from other NPFs may be the result of changes in market conditions or specific strategies of individuals. Thus, the analysis of contributions to the Fund for 2021-2023 allows us to identify certain trends in the financial performance and economic condition of the Fund.

The pension assets of NBU's CNPF are the money contributed by the Fund's members and the income earned on their investments. This money is used to pay pensions to the members of NBU's CNPF who have reached retirement age or become disabled. In addition, a portion of the pension assets is used to cover expenses of NBU's CNPF related to its operations. The amount of pension funds of each member of NBU's CNPF is determined by the number of units of pension assets held by the member and the price of each unit. The net asset value of NBU's CNPF is the total amount of all pension assets owned by the Fund's participants. The number of units of pension assets is the number of shares into which the pension assets of each participant are divided. Net asset value per unit of pension assets is the price of one share of pension assets. The net asset value of the Fund, the number of pension asset units and the net asset value per unit of pension assets are determined on each business day.

Pension benefits are money that NBU's CNPF pays to participants or their heirs after they reach retirement age or become disabled. Pension benefits are paid out of the money contributed by the Fund's participants and the income from their investments. Pension payments may be lump-sum or periodic. A lump sum pension is a payment of the entire amount of accumulated pension funds at one time. A periodic pension is a payment of a part of the accumulated pension funds over a certain period of time. A periodic pension may be paid monthly, quarterly, once every six months or once a year. A participant in NBU's CNPF can choose the frequency of pension payment.

A lump-sum pension is money that the Fund pays to a participant or his or her heirs if one of the following grounds arises:

- A participant of the Fund became seriously ill and was given a short time to live.

CHAPTER V

- A participant of the Fund became disabled.
- The amount of accumulated pension funds of a Fund participant as of the date of his/her retirement age does not reach the minimum amount established by law.

- A participant of the Fund moves outside Ukraine for permanent residence.

- A participant of the Fund died.

Pension funds are paid within five business days after the Fund receives the relevant application and the necessary documents.

Table 5.11 shows the types of pension payments made by the NBU's corporate non-state pension fund (CNPF) in 2021-2023.

Table 5.11 – Types of NBU's CNPF pension payments in 2021-2023

(in thousands of UAH)

Indicator	2021	2022	2023	Relative growth rate, %
Periodic pension payments for a contractual period, including:	148	99 787	115 026	22,2
- with a maturity of 10 to 15 years	93 880	99 478	114 641	22,1
- with a maturity of 15 to 20 years	268	309	385	43,7
One-time pension payments, including:	15 998	14 198	15 886	-0,7
- in case of a medically confirmed critical health condition, disability	7 106	6 417	6 921	-2,6
- due to failure to reach the minimum amount of savings	1 995	2 308	2 859	43,3
- in case of death of the participant – to his heirs	5 284	5 262	5 887	11,4
- in connection with leaving for permanent residence outside Ukraine	1 613	211	219	-86,4
Transferred to other NPFs	1476	647	-	-100
Total payments	111 622	114 632	130 912	17,3

Source: compiled by the author based on [267]

The data show how the volume of payments changed by the main categories: periodic pension payments, one-time payments, and payments related to the transfer of funds to other non-state pension funds. In addition to absolute values, relative growth rates are provided, which allows us to analyze trends in the development of pension payments over this period.

Table 5.11 shows the following conclusions about the types of pension payments by the NBU's CNPF in 2021-2023. In 2021-2023, the total volume of pension payments by the NBU's CNPF increased by 17.3%, which indicates an increase in the fund's activity. Periodic pension payments for a contractual period of time showed the highest growth rates, especially in the segment of payment terms from 15 to 20 years (43.7%), which indicates an increase in the number of participants choosing long-term pension programs. Lump-sum pension payments remained almost at the level of 2021, but certain categories, such as payments due to critical health conditions, showed a slight decrease (-2.6%), while payments due to failure to reach the minimum savings amount, on the contrary, increased (43.3%).

The sharp decline in payments due to leaving Ukraine for permanent residence (-86.4%) may be due to the difficult international situation. In general, the structure of pension benefits reflects the fund's adaptation to changes in the demographic and economic situation, with an emphasis on long-term programs and a decrease in one-time payments.

Thus, the overall positive growth rate of the amount of periodic pension payments indicates the stability and development of the NBU Corporate Non-State Pension Fund. The decrease in the amount of lump-sum payments may be due to various factors, such as changes in the payment strategy or the volume of applications from participants. A decrease in transfers to other NPFs may indicate changes in the fund's strategy or internal processes, which may be caused by various factors, including regulatory changes or strategic decisions of the fund.

In general, in retrospect, the Fund has positive dynamics of defined benefit payments (by years of the Fund's operation), as shown in Figure 5.10.

According to [269], the total number of participants in the NBU's CNPF as of the end of 2022 was 12,750. Of these, 2,594 were also individual depositors. In 2022, 57 new participants joined the fund. The total amount of pension contributions and transferred funds to the pension fund in 2022 amounted to UAH 1,382,728,283.24. The bulk of this amount – UAH 1,374,762,180.83 – was made up of contributions from the NBU, the sole corporate contributor.

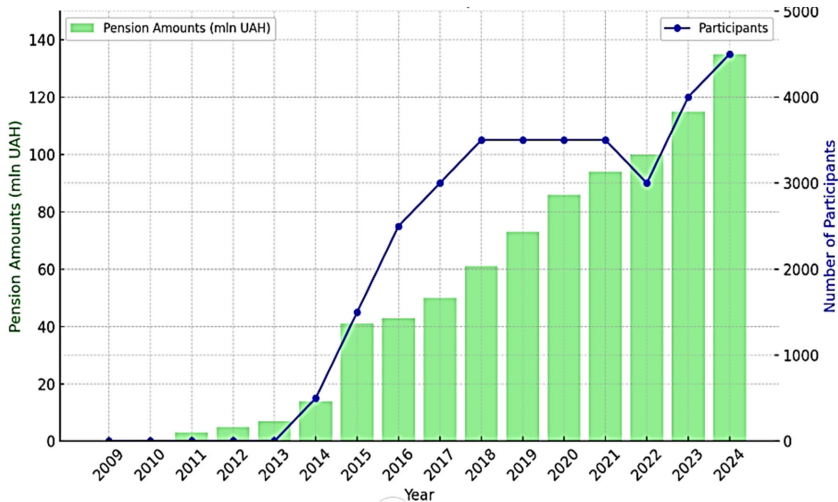


Figure 5.10 – Dynamics of defined benefit pensions paid by the NBU's CNPF in 2009-2024

Source: compiled by the author based on [268]

Contributions from individuals amounted to only UAH 5,899,899.16. The total amount of obligations fulfilled by the fund to participants through pension payments in 2022 amounted to UAH 984,649,717.91. In particular, periodic pension payments for a specified period of time in the amount of UAH 576,602,705.26 and one-time pension payments in the amount of UAH 330,505,280.65 were made. The net value of the fund's assets increased by UAH 97,845,783.22 during 2022 and amounted to UAH 1,778,272,794.42 at the end of the year. The cost per unit of pension assets increased from UAH 5.4808 to UAH 5.5621. The investment income of the fund for the year amounted to UAH 136,116,409.20. The basis of investments is government securities and term bank deposits.

As of the end of 2023, the total number of participants in NBU's CNPF amounted to 12,778. Of these, 2,580 were also individual depositors. In 2023, 28 new participants joined the Fund. The total amount of pension contributions and transferred funds to the pension fund in 2023 amounted to UAH 1,651,143,645.87. The bulk of this amount –

UAH 1,645,007,514.35 – was provided by the Fund’s sole corporate contributor, the National Bank of Ukraine. Contributions from individual depositors amounted to UAH 6,136,131.52. The total amount of obligations fulfilled by the Fund to participants through pension payments in 2023 amounted to UAH 1,038,003,269.61. In particular: periodic pension payments for a specified period were made in the amount of UAH 691,611,366.08; one-time pension payments were made in the amount of UAH 346,391,903.53. During 2023, the net value of the Fund’s assets increased by UAH 310,549,087.49 and amounted to UAH 2,088,821,881.91 at the end of the year. The cost per unit of pension assets increased from UAH 5.5621 to UAH 5.7653. The Fund’s investment income for 2023 amounted to UAH 223,976,761.49. The basis of investments, as before, was government securities and term bank deposits. These data indicate the stable development of NBU’s CNPF in 2023, in particular, the growth in the number of participants, the increase in revenues and assets, as well as the fulfillment of obligations to participants. The analysis of the NBU’s KDIF’s performance in 2022-2023 demonstrates the dynamics of the fund’s key indicators. Table 5.12 shows a comparative description of the key metrics.

**Table 5.12 – Types of NBU’s CNPF pension payments
in 2022-2023**

Indicator	2022	2023	Change %
Total number of participants	12 750	12 778	+0.22%
Number of individual depositors	2 594	2 580	-0.54%
New members for the year	57	28	-50.88%
Total revenue (UAH)	1 382 728 283,24	1 651 143 645,87	+19.41%
Contributions from the NBU (UAH)	1 374 762 180,83	1 645 007 514,35	+19.66%
Contributions from individuals (UAH)	5 899 899,16	6 136 131,52	+4.00%
Total amount of payments (UAH)	984 649 717,91	1 038 003 269,61	+5.42%
Net asset value (UAH)	1 778 272 794,42	2 088 821 881,91	+17.46%
Cost per unit of pension assets (UAH)	5,5621	5,7653	+3.65%
Investment income (UAH)	136 116 409,20	223 976 761,49	+64.55%

Source: compiled by the authors based on [270]

Conclusions from the comparative analysis:

- Financial indicators demonstrate significant growth: investment income increased by 64.55%, which indicates the effectiveness of the investment strategy; total revenues increased by 19.41%, mainly due to an increase in contributions from the NBU; net asset value showed an increase of 17.46%.

- Demographic indicators show a certain stagnation: the number of participants increased slightly (+0.22%); there is a significant decrease in the inflow of new participants (-50.88%); a slight decrease in the number of individual depositors (-0.54%).

- Benefits and returns show moderate growth: total benefits increased by 5.42%; unit value of pension assets increased by 3.65%.

In general, the fund demonstrates stable financial development with a slowdown in the number of participants. Particularly notable is the significant increase in investment income, which indicates effective asset management.

Thus, based on the above analysis of the NBU's CNPF activities, the following main conclusions can be drawn. The fund has been successfully operating since 2004, providing pension services to NBU employees and contributing to the development of the private pension system. The number of fund members remains stable and amounts to about 12.5-13 thousand people. Only about 2.5 thousand of them are individual depositors. The main contributor is the NBU, which accounts for over 99% of contributions. Individual deposits are insignificant. The total assets, pension contributions and investment income of the fund show positive growth dynamics. The volume of pension payments is also growing, mainly due to periodic payments for a certain period of time. The investment portfolio is conservative, with a large share of low-risk but low-yielding assets. The Fund is actively implementing the latest financial and information services, improving the quality of service for its members. In sum, the NBU KPF successfully performs its functions, although it has some reserves for development, in particular, in attracting retail deposits and improving investment efficiency.

Based on the analysis of NBU's CNPF, the following main problems and shortcomings can be identified: a small share of contributions from individual depositors, which indicates insufficient involvement of individuals

in the Fund; high dependence of the Fund on pension contributions from the sole founder and depositor, the NBU, which creates risks in case of possible financial difficulties of the NBU; conservative investment policy with a large share of low-yielding financial instruments (government bonds, deposits), which limits the growth of the value of pension assets; relatively high share of Thus, the main problems are insufficient involvement of individuals, high risks of dependence on a single depositor, insufficiently effective investment policy, and relatively high administrative costs.