

**Kyiv National University of Trade and Economics**  
Banking department

**FINAL QUALIFYING PAPER**  
**on the topic:**

**Administration of non-state pension funds:  
domestic and foreign experience**

Student of the 2<sup>nd</sup> year, group 5am,  
specialty 072 «Finance, banking and  
insurance»  
specialization «Financial  
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**Kyiv, 2020**

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## **Task** **for a final qualifying paper**

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1. Topic of a final qualifying paper

Administration of non-state pension funds: domestic and foreign experience

Approved by the Rector's order from November 15 2019, No. 3893.

2. Term of submitting by a student his/her terminated paper (project) to 20.11.2020

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Purpose of the paper (project) is to study the theoretical bases and practical aspects of administering non-state pension funds, the directions of formation and use of their funds, and substantiate possible ways of improving the organization of activities of non-state pension funds.

Object of the research is the economic relations that arise in the process of administering non-state pension insurance in Ukraine.

Subject of the research is the activities of administering non-state pension funds in the pension system.

4. Consultants of the research and titles of subsections which were consulted:

| Section | Consultant (last name and initials) | Date and signature |                    |
|---------|-------------------------------------|--------------------|--------------------|
|         |                                     | The task given     | The task fulfilled |
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5. Contents of a final qualifying paper (list of all the sections and subsections)

INTRODUCTION

SECTION 1. NORMATIVE-THEORETICAL BASIS OF ADMINISTRATION OF NON-STATE PENSION FUNDS

SECTION 2. ANALYSIS OF THE ADMINISTRATION OF NON-STATE PENSION FUNDS IN UKRAINE

2.1 Market Analysis of Non-State Pension Funds in Ukraine

2.2 Assessment of non-state pension insurance in Ukraine

SECTION 3. IMPROVEMENT OF THE ADMINISTRATION OF NON-STATE PENSION FUNDS IN UKRAINE

3.1 Foreign experience in administering non-state pension funds

3.2 Increasing the attractiveness of NPFs

3.3 Improvement of control over NPF administration

CONCLUSIONS AND RECOMMENDATIONS

REFERENCES

APPENDICES

## 6. Time schedule of the paper

| No. | Stages of a final qualifying paper  | Terms of a final qualifying paper |          |
|-----|---|-----------------------------------|----------|
|     |   | de jure                           | de facto |
| 1   | 2   | 3                                 | 4        |
| 1.  | Approval of the Task of the FQP (Ukrainian)   | 23.12.2019                        |          |
|     | Approval of the Task of the FQP (English)   | 03.02.2020                        |          |
| 2.  | Submission of an article to the Banking department (English), paper and electronic versions   | 30.03.2020                        |          |
| 3.  | Part I. List of sources used (references)   | 27.04.2020                        |          |
| 4.  | Production (diploma) practice, review (Ukraine)   | 11.05.-<br>19.06.2020             |          |
| 5.  | Part II. List of sources used (references)  | 22.06.2020                        |          |
| 6.  | Part III, Introduction, Conclusions, References   | 05.10.2020                        |          |
| 7.  | Submission of the FQP to the Banking department (all Parts, appendices), resume of a scientific adviser                                 | 26.10.2020                        |          |
| 8.  | Preliminary FQP' protection at the Banking department, review (KNUTE, Ukraine), review (KNUTE, English)                                 | 09.11.2020                        |          |
| 9.  | Submission of completed (intertwined) the FQP to the Banking department, supporting documents (summary, supporting data, three reviews) | 23.11.2020                        |          |
| 10. | Public FQP' protection in the examination commission  |                                   |          |

7. Date of receiving the task \_\_\_\_\_, \_\_\_\_\_, 20\_\_\_\_.

8. Scientific adviser of the final qualifying paper

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9. Head of the project team

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10. The task received by the student

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### **11. Resume of a scientific adviser of a final qualifying paper**

Student Ratushnyak Denys Andriyovych completed the final qualifying paper on topic «Administration of Non-State Pension Funds: Domestic And Foreign Experience».

While working on research, the student used knowledge and practical skills, which acquired while studying at a Master's program specializing in financial intermediation.

In the Section 1 «Normative-Theoretical Basis of Administration of Non-State Pension Funds» the author explores the essence and the role of non - state pension funds in the socio - economic development of Ukraine; identifies the comparative characteristics of the subjects of non-state pension system in Ukraine and the legal aspects of the issue. The author researched a significant number of scientific sources and regulations.

In the Section 2 «Analysis of the Administration of Non-State Pension Funds in Ukraine» the author analyzes the market of non-state pension funds in

In the Section 3 «Improvement of the Administration of Non-State Pension Funds in Ukraine» the author studies the ways to implement international experience regarding the effective state control ensuring over non-state pension system in Ukraine; he develops an algorithm for increasing the attractiveness of non-state pension funds for the population of Ukraine.

The final qualifying paper on topic «Administration of Non-State Pension Funds: Domestic And Foreign Experience» completed by Ratushnyak Denys Andriyovych is an independent study, performed in accordance with the general KNUTE requirements of Final Qualifying Paper and recommended for protection in their Exam Commission and deserves an high scores.

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## 12. Resume about a final qualifying paper

A final qualifying paper of the student \_\_\_\_\_  
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can be admitted to defence in the Examination Board.

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\_\_\_\_\_. \_\_\_\_\_. 2020.

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## INTRODUCTION

Ensuring the well-being of people of retirement age is a necessary prerequisite for the formation of Ukraine as a welfare state. Fulfillment of this task along with ensuring the interests of the whole society is impossible without further reform of the domestic pension system. Today in Ukraine the pension system is in the process of transformation. The current pension system during the transition to a market economy has failed to provide sufficient benefits to retirees using a one-tier model of state pension insurance. This is evidenced by such factors as: increasing demographic burden; the inability of the traditional solidarity system, based on the principle of redistribution, to provide the necessary financial resources for the payment of decent pensions; social injustice of the existing system; low replacement rate, ie the ratio of pension to salary. Building a pension system that meets the requirements of a market economy is one of the most important tasks to be solved in the social sphere of the country.

**The relevance of the topic.** Ensuring the well-being of people of retirement age is a prerequisite for becoming Ukraine as a welfare state. Appropriate in this direction is the development of non-state pension insurance, which occupies an extremely important place in the social protection system of the working population. In Ukraine, this trend is already actively developing, and the first result is the emergence of administrators of non-state pension funds (hereinafter the administrator). Therefore, the study of the peculiarities of the administrators, their general condition and problems is currently relevant. In the context of the domestic financial system, the problems of establishing effective control over accumulative levels become especially relevant, especially in terms of regulating the activities of private pension funds and the introduction of precautionary measures to control the expenditure of accumulated funds. The success of reforming the pension system in Ukraine will largely depend on solving these tasks.



I will note that various aspects of private pension provision are considered in the works of domestic and foreign economists. A significant contribution to the formation of the national concept of pension provision was made by: Antolin P.[22],[23], Antipov O.[3], Baranovsky O.[16], Tsikanovs'ka N.[18], Vnukova N.[21], Danylenko, A.[24], Zymovets, V. [24], Shelud'ko, N.[24], Davis E.[25], Holzmann, R.[26], Hinz, R.[26], Shumko Y.[30],[31], Rippa M.[30], Verbruggen P. [34], Vittas, D.[35], Scully, M.[35].

The world experience of countries with developed non-state pension provision shows that payments from non-state funds always significantly exceed state pensions, and moreover, are gradually displacing the solidarity system of compulsory pension insurance. Therefore, the question of pension legislation reform is no longer whether to put into operation the second level of the pension system and develop NPFs, the question is when the accumulative level will be put into effect, and what state pension awaits us? It is unknown at this time, as Ukraine is only at the beginning of the path of reform and improvement, taking the experience of highly developed countries. However, if pension reform does not go further, people now aged 35-45 will not have even the meager pension to cover their basic expenses.

**Purpose of the paper** is to study the theoretical bases and practical aspects of administering non-state pension funds, the directions of formation and use of their funds, and substantiate possible ways of improving the organization of activities of non-state pension funds.

In accordance with the purpose, the following tasks were identified:

- identify normative-theoretical basis of administration of non-state pension funds;
- assess the functioning of the administration of private pension funds in Ukraine;
- analyze the activities of the administration of private pension funds;
- identify the main vectors of development in foreign countries;

- identify ways to increase the attractiveness of private pension funds in Ukraine;

- recommendations for improving state regulation of non-state pension funds.

**Object** of the research is the economic relations that arise in the process of administering non-state pension insurance in Ukraine.

**Subject** of the research is the activities of administering non-state pension funds in the pension system.

**Research methods.** In the process of analysis the following research methods were used: analytical, monographic, statistical, general - methods of analysis and comparison.

**The information base** of the study is laws and regulations on the regulation of credit activities of banks; official data of the National Commission for State Regulation of Financial Services Markets; financial statements of NPFs; monographic research and scientific publications on the researched problem.

The development and reform of the system of administration of private pension funds took place under the influence of those transformational transformations that are inherent in the entire system of public relations of our state. However, the unresolved issues and aggravation of problems in this area are largely a reflection of the situation in the economy and political system of our country.

**The scientific novelty of the obtained results is as follows:**

*improved:* methodological provisions on state regulation of administration of non-state pension funds.

**The practical significance of the obtained results** lies in the formulation of theoretical conclusions and practical recommendations for intensifying the development of NPF administration in the pension system of Ukraine.

Some results of the dissertation have found practical application in the activities of institutions: Research Institute of Economic Development - proposals for the introduction of collective occupational pension programs with the projected

amount of pension benefits (reference from 19.12.2018 № 2004/9); National Association of Non-State Pension Funds of Ukraine and Administrators of Non-State Pension Funds - a scientific and methodological approach to the rating of non-state pension funds (reference from 10/07/2019 № 24/06).

**Personal contribution of the master.** The final qualifying work is an independent completed research of the author.

**Publications.** Some results of the study are reflected in a scientific article: Ratushnyak D. Administration of non-state pension funds: domestic and foreign experience; coll. of scien. artic. of full-time students / resp. ed. Zhurakhovska L. - K. : Kyiv. nat. univ. trade and econ., 2020. - 462 p. (C.449-451). Also some results were published in the abstracts of the report at the All-Ukrainian Student Conference: Ratushniak D. Administration of non-state pension funds: domestic and foreign experience: All-Ukrainian. stud. conf. of science (Kyiv, March 16, 2020): thesis add. / resp. ed. Zhurakhovska L.– K.: KNUTE. – 462 p. – P.: 449–451.

**Scope and structure of work.** The work consists of 3 sections, introduction, conclusions, list of used sources and appendices. The volume of work is 50 pages. The paper presents 9 tables, 6 figures, 2 appendices and uses 36 scientific sources.

## **SECTION 1.**

### **NORMATIVE-THEORETICAL BASIS OF ADMINISTRATION OF NON-STATE PENSION FUNDS**

For more detailed studying of the role of the administrators, I suggest considering their responsibilities. According to the Law of Ukraine (hereinafter the Law), the next:

- maintain personalized records of pension fund participants in accordance with this Law and other legal acts;
- to enter into pension contracts on behalf of a pension fund;
- ensure payment of pension payments to fund members in cases provided by law;
- to provide to the custodian the transfer of funds for payment of expenses incurred by the pension assets in accordance with Article 48 of this Law;
- provide the pension fund with agency and advertising services related to its activities;
- to provide information in accordance with the terms of the contract and this Law, as well as other normative legal acts;
- to prepare, in accordance with the requirements of this Law and other normative legal acts, reports on the sphere of non-state pension insurance, keep accounting and submit financial reports of the pension fund to the relevant bodies of executive power and board of the pension fund;
- to inform in writing the members of the funded pension insurance system about the conditions and procedure for obtaining a life-long pension at the expense of funds accounted for in their individual retirement accounts;
- perform other duties in cases provided by law. [1]

Based on the above, I propose to highlight features such as representative, marketing, informative and guarantor role.

The main purpose of investing pension assets is to obtain non-state pension insurance participants supplementary to the mandatory state pension insurance pension benefits, together with securing pension assets return above inflation and attracting long-term investment resources needed to modernize the economy. As of March 31, 2020, the State Register of Financial Institutions contains information on 63 non-state pension funds (hereinafter NPFs) and 22 NPF administrators (for comparative: as of March 31, 2020, there were 61 NPF and 22 administrators in the State Register). In addition, information about one sole founder who made the decision to independently administer the created corporate non-state pension fund (received a license to operate such a non-state pension fund and in accordance with the law does not require entry into the State Register of financial institutions)[6].

Based on the fact, that the quantity of administrators has not changed over several years and administrators are closely associated with the NPFs, I propose to study market of NPFs.

In 1950, the American company General Motors created the first autonomous pension fund. Later, in the 1980s, Chile underwent a complete transition of state pension functions to non-state pension funds (NPFs).

"Kyivmiskbud", which gave rise to NPF in (pension funds of banking management). In 2004, the Law of Ukraine "On Non-State Pension Provision" came into force, which provides for the creation of a multi-level pension system, namely a three-level pension system. Such a system is more acceptable as the risks are divided between 3 components.

The first level is the solidarity system (Pension Fund of Ukraine). Salary deductions go to the PFC, are redistributed and paid to today's retirees.

The second level is the accumulative system of compulsory state pension insurance, which provides monthly mandatory deductions from wages to the Accumulative Fund.

The third level is the system of non-state pension provision, which is based on the principles of voluntary participation of citizens, employers and their

associations in the formation of pension savings in order to receive additional to the mandatory state pension insurance pension payments through contributions to non-state pension insurance accrued on pension payments, in the manner and on the terms in accordance with the relevant legislation.

This level will be realized through financial institutions, namely

- a) non-state pension funds by concluding pension contracts between pension fund administrators and depositors of such funds;
- b) insurance organizations by concluding contracts of life pension insurance, insurance of the risk of disability and death of a fund participant;
- c) by banking institutions by concluding agreements on opening pension deposit accounts for the accumulation of pension savings within the amount determined for the reimbursement of deposits by the Deposit Guarantee Fund of individuals. [16]

Table 1.1 develops a comparative description of NPFs and other financial institutions in the implementation of private pension provision.

In general, the functioning of private pension funds combines social, economic and legal aspects. First of all, NPF is an institution of accumulative pension provision of citizens, the main task of which is to ensure the material well-being of participants through the implementation of pension benefits.

From the economic point of view, the NPF is an institutional investor that, through the accumulation, distribution and investment of pension assets, acts as a lever for the redistribution of financial resources and a source of domestic investment capital for economic development.

From the legal point of view, the NPF as a legal entity with the status of a non-profit organization, is the subject of pension relations, which determine the principles, forms and rules of pension provision for fund members.

*Table 1.1*

**Comparative characteristics of NPFs and other financial institutions during the implementation of private pension provision\***

|     |      |
|-----|------|
| NPF | Bank |
|-----|------|

|  |   |
|--|---|
| <ol style="list-style-type: none"> <li>1. The amount of future pension is equal to the amount of contributions to the NPF and investment income.</li> <li>2. NPF distributes the entire amount of investment income.</li> <li>3. NPF can not go bankrupt, the law prohibits the confiscation of pension assets.</li> <li>4. Tax legislation provides benefits for NPFs.</li> <li>5. The pension contract may provide for small periodic contributions.</li> <li>6. NPFs will place assets in various financial instruments, minimize risks by allocating funds between a large number of investment instruments.</li> <li>7. The right of ownership of citizens came from the moment of crediting the contribution to the individual pension account.</li> </ol> | <ol style="list-style-type: none"> <li>1. The amount of the future pension is equal to the amount of contributions and accrued interest.</li> <li>2. The bank gives only a part of its own income, in accordance with the established rate under the deposit agreement.</li> <li>3. There is a possibility of non-refund if the bank is declared bankrupt.</li> <li>4. Bank deposits are not subject to tax benefits.</li> <li>5. A significant amount of funds is required to open a deposit account.</li> </ol>   |
|  | Insurance company   |
|  | <ol style="list-style-type: none"> <li>1. Use pension schemes with established pension benefits, ie guarantee the amount of benefits.</li> <li>2. Use more risky schemes (it is quite difficult to guarantee pension payments in emerging financial markets).</li> <li>3. Significant market fluctuations or poor asset management can lead to the insurance company not receiving the expected investment income and bankruptcy of the company.</li> <li>4. The right of citizens to own funds with deferred and came under certain conditions.</li> </ol> |

*\*created by author based on [16]*

In my opinion, the comprehensive definition should reflect the socio-economic essence of the NPF, which lies in the appointment of funds as institutions of pension provision for citizens and at the same time institutional investors who have a long-term investment resource. This raises the question: NPF - is primarily a financial institution that performs a social function, or a social institution that operates in the financial sector. participants), the purpose (acceptable level of pension benefits) and the task of the NPF (preservation and increase of pension savings).

In Ukraine, private pension funds operate in three forms: corporate, professional and open.

Open pension fund is a non-state pension fund, the participants of which can be any natural persons, regardless of the place and nature of their work. The main thing that distinguishes an open-end fund from others is the opportunities:

- greater flexibility in the amount of pension contributions;
- participation in the non-state pension provision of only a part of the employer's staff, in contrast to the corporate fund, where the employer is obliged to transfer funds for the benefit of all without exception of its employees;
- participation of any individuals as depositors for their own benefit or for the benefit of their immediate relatives;
- to remain a member of the fund after termination of employment with the employer [21]

Corporate pension fund - NPF, the founder of which is a legal entity-employer or several legal entities-employers and which can be joined by employers-payers.

Occupational pension fund - NPF, the founder (founders) of which may be associations of legal entities-employers, associations of individuals, including trade unions (associations of trade unions), or individuals related by their nature professional activity (classes).

The dualistic nature of NPFs as financial intermediaries and institutions of the pension system requires their consideration from two points of view. NPFs can be defined as forms of institutional investors that collect, accumulate and invest funds provided by sponsors and recipients to secure future pension rights of beneficiaries [25]. The institutions of the financial system, respectively, include the state budget, local budgets, social insurance funds, stock exchanges, securities trading organizations, insurance and investment companies, credit unions and unions, banks and, in fact, private pension funds. All of them constitute the institutional foundations of the financial infrastructure of a market economy. These



systems and structures interact with each other, thus determining the evolution of the institutional financial system.

To determine the place of NPF in the architecture of the financial system, the financial market as a supporting area of the financial system of the state is analyzed by internal structure and organizational structure. In the first case, it includes stock, credit, foreign exchange markets, financial services market and precious metals market. In the second - the financial market as an organizational basis that provides pyx financial flows between the components of the financial system, represented by non-financial institutions, infrastructure institutions and financial institutions. An important place among the latter belongs to the NPF.[27]

The special role of NPFs in the structure of the financial system is explained by the fact that they remain interconnected with all other areas of financial relations:

- 1) NPFs as a subject of pension provision act as institutions of the pension system of Ukraine;
- 2) the growing role of companies with pension plans turns pension provision into one of the most important aspects of corporate finance;
- 3) NPFs, which by legal form are legal entities with the status of a non-profit organization (non-entrepreneurial company), de jure retain their membership in non-profit institutions and organizations, although in fact they act as part of financial intermediaries;
- 4) in the conditions of increase in life expectancy the role of pension as a source of means in a life of each person grows, accordingly, with distribution of private pension maintenance the share of pension assets in a portfolio of households grows also;
- 5) the growth of contractual financial institutions in the form of NPFs exacerbates competition problems for all institutions in the field of asset management and for banks, which give their traditional role of intermediaries to other institutions;

6) due to the opportunities to invest in securities of foreign issuers NPFs act as participants in the international financial market, especially in the context of the significant scale of funds of developed countries.

In today's economic and demographic environment, the most important issue is the security of the elderly. 3 development of a market economy and in the context of the global economic crisis, the state pension fund is not able to perform its tasks in full. In this regard, the issue of private pension provision is relevant. The latter plays a very important role in economic development, providing services not only in the field of supplementary pensions, but also to meet the investment needs of the real sector of the economy through the redistribution of free financial resources of businesses and individuals [28].

The main factor hindering the development of state pension insurance is Ukraine's stay in the conditions of the nation's aging, ie the ratio of the working population and pensioners is decreasing. There are 12 million pensioners and 26 million people of working age in Ukraine, of whom 16 million are officially employed, 2 million are officially unemployed, and there is no official information on the employment of 8 million. Of the 16 million workers, only 10.5 million pay the social contribution. The state pays another 1.5 million to those who receive social assistance. For example, in Poland, with the same demographics, contributions are paid by 22 million people. Total contributions become insufficient to maintain the level of pensions, their size is reduced due to "late" indexation and the replacement ratio (the ratio of pension to salary) is reduced.

In recent years, subsidies to the state pension fund have only increased (2015 - UAH 95 billion; 2016 - UAH 143 billion), in 2017 it was half subsidized by the state (UAH 141 billion), in 2018 –150 billion and in 2019 – 181 billion. This is more than is allocated for defense and security in Ukraine. [17] The three-tier pension system will reduce the burden on the system of mandatory state pension provision and increase its stability due to the following advantages of the accumulative system [3]:

- high resistance to demographic change, as the size of the private pension, the frequency of its payment does not depend on the demographic situation in the country, as well as the ratio of workers and retirees;

- direct dependence of the level of pension benefits on the efficiency of investment, and not on the state of public finances.

To study the role of non-state pension funds in the socio-economic development of the state, I propose to consider their as a socio-financial institution that is created and operates for the social protection of citizens and is designed to maintain and increase pension savings in the process of their accumulation, investment and use to finance acceptable the level of pension benefits to fund members.

The functions of NPFs derive from the unique role that funds are called to perform as socio-financial institutions. That is why we propose to consider their in the context of the dual purpose of NPF.

Functions of NPF as an institution of the pension system:

1) social protection - guaranteeing a certain level of pension benefits, NPFs perform the function of insuring the social risk of financial insecurity in old age;

2) preventive - in the crisis of the solidarity pension system NPF as institutions of supplementary pension provision can increase the welfare of pensioners, thus preventing the emergence of negative social phenomena;

3) regulatory - in the implementation of social and labor relations at the enterprise financing of pension programs is an element of an effective mechanism of personnel management, which contributes to the attraction and retention of highly qualified professionals;

4) compensatory - pension payments within occupational pension programs are a form of compensation for difficult and harmful working conditions for employees of the relevant categories;

5) incentive - private pension provision increases responsibility citizens for the level of their own well-being in old age, as part of the strategy their social self-

defense.

Analysis of scientific sources shows the division of functions of financial intermediaries into two large groups. The first of them includes functions that characterize the role and importance of financial intermediation in the economy, the second - specific tasks performed by intermediaries in a particular activity.

The functions that characterize the role and importance of NPFs and administrators in the economy are:

- 1) savings accumulation, preservation and increase of pension savings of participants, which are a source of "long" financial resources;
- 2) investment - the transformation of savings into investments;
- 3) stabilization - the positive impact of the conservative strategy of the NPF on the financial market;
- 4) activation - NPFs, which have long-term investment resources at their disposal, act as catalysts for the development of the national economy.

Functions as specific tasks performed by NPF administrators within a specific activity are as follows:

- 1) denomination of savings;
- 2) professional choice of investment objects;
- 3) ensuring the liquidity of financial investments;
- 4) diversification of assets;
- 5) monitoring of investment objects;
- 6) consolidation and risk management;
- 7) control over the activities of borrowers;
- 8) economies of scale.

The key characteristics of successful NPF administration are:

- 1) reliability, which is manifested in the preservation of pension savings of citizens and protection against internal and external threats;
- 2) profitability, ie the ability to ensure high profitability of pension assets, and, accordingly, an acceptable amount of pension benefits to fund members.

The important socio-economic significance of the system of private pension provision turns it into a full-fledged element of the system of macroeconomic regulation of the economy.

According to economists, the resources of NPFs and administrators in the context of regulatory policy could be used to achieve the goals:

- inflation targeting - changing the liquidity of the investment portfolio by diversifying the structure of assets invested in various financial instruments, will help to tie the money supply;
- exchange rate support - the possibility of partial investment of NPF funds in securities of foreign issuers is an additional tool to support the exchange rate through:

- 1) increase in the share of foreign assets of funds in periods of high market conditions and surplus balance of payments of the country;

- 2) additional foreign exchange earnings during crisis periods by reducing the share of foreign assets in the fund's portfolio;

- stimulating the development of the capital market by increasing the demand for modern financial instruments and services in the framework of expanding the funded pension system;
- conducting pro-cyclical macroeconomic policy - the amount of pension contributions to NPFs directly depends on the state of the economy (increases during high employment and economic growth and decreases in times of crisis) [10].

Thus, for developed and developing countries, the importance of NPFs and administrators for both the pension system and the economy as a whole is obvious. This specific socio-financial institution creates all opportunities to increase the level of social protection of citizens in the crisis of state pension systems and acts as a catalyst for economic growth in the country.

## **SECTION 2.**

### **ANALYSIS OF THE ADMINISTRATION OF NON-STATE PENSION FUNDS IN UKRAINE**

#### **2.1 Market Analysis of Non-State Pension Funds in Ukraine**

Over the past 8 years, the number of NPFs has decreased from 107 to 63 (of which the 20 largest manage 2 billion assets). This is due to the reasons: first, their elimination; secondly, the consolidation of the pension services market. During the entire existence of the NPF system in Ukraine, 110 funds were registered, of which 45 were deprived of their licenses (41%), which indicates that the system of private pension provision is not stable enough. According to experts [9], the consolidation of the NPF market in the context of the launch of the second tier of the pension system is a positive trend, as it will leave the most serious and reliable participants in the market.

According to the State Register of Financial Institutions, private pension funds are registered in 10 regions of Ukraine. The largest number of NPFs is concentrated in Kyiv - 45, or 71.4% of the total number of registered NPFs. In general, NPFs are registered only in eight regions of Ukraine (Donetsk, Dnipropetrovsk, Lviv, Ivano-Frankivsk, Kharkiv, Odesa and Kherson regions). Such a specific geography of location of domestic NPFs creates a problem: an obstacle to the participation of citizens in the NPF may be its actual absence within a particular region.

As can be seen from Table 2.1, pension contributions from legal entities average about 95% of the total value of pension contributions for all NPFs of Ukraine. Thus, it can be said that the level of savings deposits from the population

in order to accumulate pension benefits in the long run is low, and it can be argued that open NPFs operate inefficiently due to the fact that it occurs mainly through deposits of individuals themselves. This is due, first of all, to the low level of income of the population and, consequently, to the lack of opportunities for voluntary pension insurance contributions.

*Table 2.1*

**Dynamics of key performance indicators of non-state pension funds in 2019-2020 years as of March 31\***

| Indicators   | 2018     | 2019    | 2020    | Growth rate,%               |                             |
|--|----------|---------|---------|-----------------------------|-----------------------------|
|  |          |         |         | in 2019 to 2018 as of 31.03 | in 2020 to 2019 as of 31.03 |
| Quantity of concluded pension contracts, ths.  | 66.3     | 70,4    | 79,6    | 12.7                        | 13,1                        |
| The total quantity of NPF participants, thousand people                                | 848.8    | 858,4   | 878,3   | 2.3                         | 2.3                         |
| Total value of NPF assets, UAH million   | 2,651.30 | 2 829,8 | 3 106,5 | 12.3                        | 9.8                         |
| Pension contributions, total, UAH million  | 1,964.20 | 2 036,4 | 2 219,1 | 7.6                         | 9.0                         |
| including:   |          |         |         |                             |                             |
| -from individuals  | 153.1    | 183,9   | 239,0   | 36.3                        | 30.00                       |
| - from individual entrepreneurs  | 0.2      | 0.2     | 0.2     | 0.0                         | 0.0                         |
| - from legal entities  | 1,810.40 | 1 851,7 | 1 979,3 | 5.1                         | 6,9                         |
| Pension payments, UAH million  | 781.5    | 842,0   | 986,7   | 16.8                        | 17,2                        |
| Quantity of participants, that received/receiving retirement benefits, thousand people | 80.8     | 81,9    | 84,9    | 3.1                         | 3,7                         |
| The amount of investment income, UAH million   | 1,667.20 | 1 865,9 | 2 165,1 | 22.3                        | 16,0                        |
| Income from investment of assets of non-state pension fund, UAH million                | 1,355.30 | 1 522,3 | 1 758,8 | 22.9                        | 15,5                        |
| Amount of expenses reimbursed from retirement assets, UAH million                      | 311.9    | 343,6   | 406,3   | 19.6                        | 18,2                        |

\*created by the author according to the data [7]

In addition, the development of voluntary insurance programs is limited by the low level of public confidence in financial institutions, as well as the lack of financial instruments to invest the accumulated funds of NPF participants.

In pension payments there are significant disparities in the payment of private pensions for one-time and one-time pension payments, of which about 80-90% are one-time pension payments (the basis for receiving this type of benefits is critical health, departure of NPF participants for permanent residence abroad Ukraine and if the amount of pension savings of the participant has not reached the minimum allowable value). This trend of significant growth in pension benefits for a period has a positive effect on the development of the private pension system.

In international practice, to assess the effectiveness of administration of NPFs [15], the value of the aggregate compound annual growth rate (hereinafter CAGR) is used, which allows to estimate the aggregate interest rate growth rate of assets:

$$\text{CAGR} = \left( \frac{\text{Ending value}}{\text{Beginning value}} \right)^{\frac{1}{\text{number of years}}} - 1 \quad (2.1)$$

, where End value - the final value;

Begin value - initial value.

Figure 2.1 shows the calculation of the CAGR indicator at the net asset value during 2013-2019 pp. for Ukrainian NPFs in terms of their types and in general in Ukraine for 7, 5 and 1 year, respectively. Appendix A shows the data of this indicator for all NPFs of Ukraine, which operate as of 2019

An important indicator of the level of efficiency of NPFs is the ratio of net asset value per participant, its ability to provide pension benefits to its participants.



This table presents the top -5 NPFs on this indicator in Annex D for all NPFs of Ukraine.

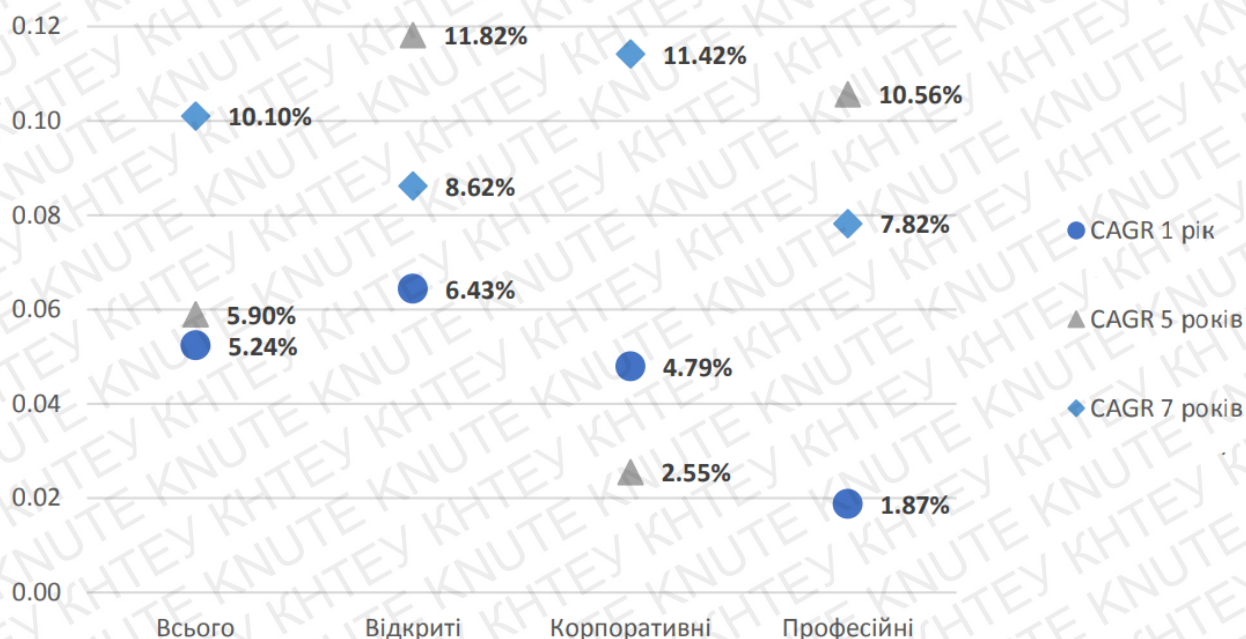


Figure 2.1 CAGR of net asset value of Ukrainian NPFs by types for 7, 5 and 1 year (in national currency) \*

\*created by author, based on [9]

Table 2.2 shows that the most well-off among the considered NPFs in terms of the ratio of net asset value per participant are members of NPF "NBU" and NPF "Ukreximbank" (as of 2019, the security is 88 thousand UAH and 33 thousand UAH, respectively).

Table 2.2

**The ratio of net asset value per participant of the top 5 NPF in terms of net asset value, thousand UAH 2014-2019pp. \***

| NPF            | 2014 | 2015  | 2016  | 2017 | 2018 | 2019 |
|----------------|------|-------|-------|------|------|------|
| NBU            | 80,3 | 104,6 | 124,6 | 79,1 | 85,2 | 88,0 |
| Ukreximbank    | 16,7 | 19,0  | 21,0  | 25,2 | 30,9 | 33,9 |
| OTP Pension    | 1,9  | 2,3   | 3,2   | 4,8  | 3,0  | 3,2  |
| Privatfund     | 0,7  | 0,9   | 1,3   | 1,6  | 2,1  | 2,2  |
| Emeryt Ukraine | 1,0  | 1,1   | 1,3   | 1,6  | 1,9  | 2,0  |

\*created by autor, based on [20]

As for the other considered NPFs (appendix B), the level of their provision is about 2-3 thousand UAH per participant, which indicates the underdevelopment of the administration of NPFs system in Ukraine, given that the best NPFs in Ukraine are taken into account. an indicator of the net asset value. In general, in Ukraine, 15% of operating NPFs are low-net worth of assets per participant, and 9 of them generally have a ratio of less than UAH 500.

As shown in Figure 2.2, the main areas of investment pension savings are:

- 1) placement of funds on deposit accounts of banks;
- 2) purchase of securities, the income from which is guaranteed by the Cabinet Ministers of Ukraine;
- 3) purchase of bonds of enterprises whose issuers are residents of Ukraine;
- 4) investing in shares of Ukrainian issuers.

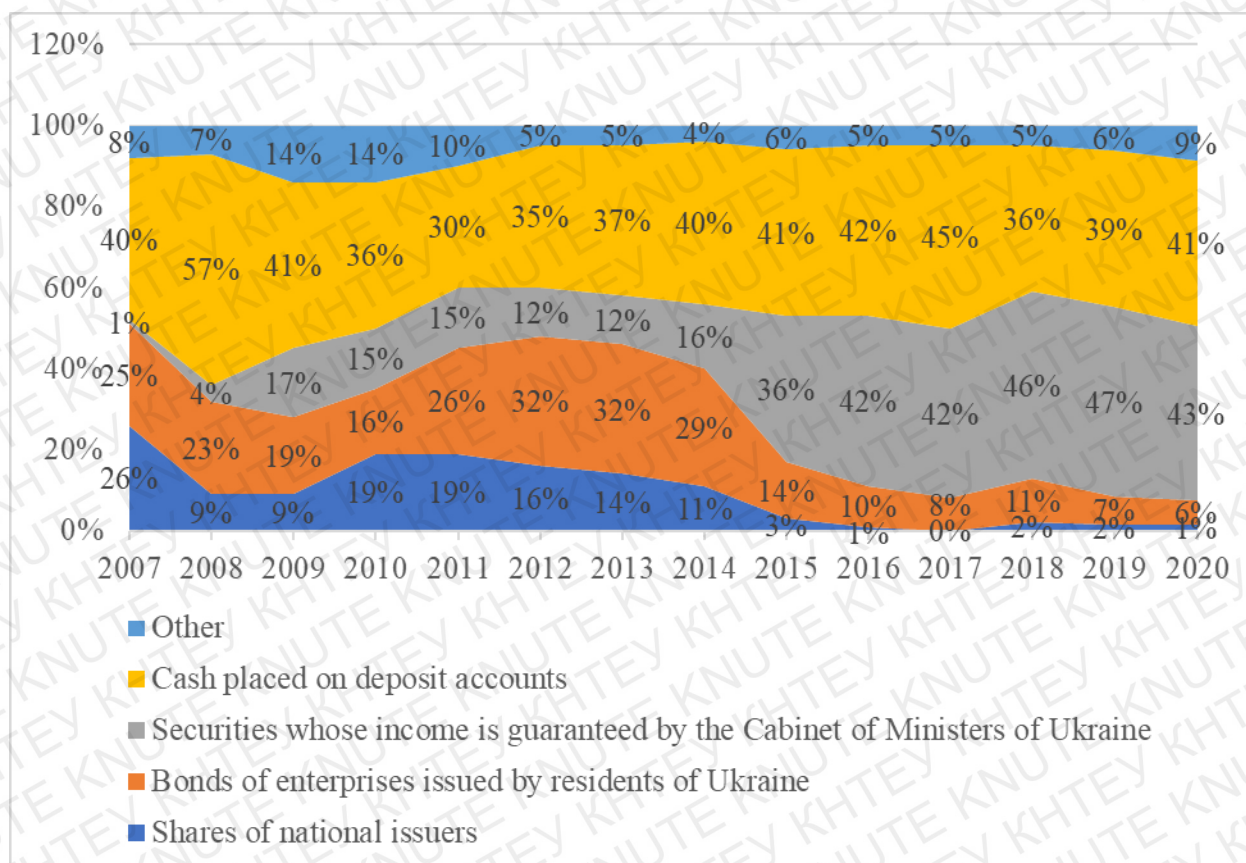


Fig. 2.2. The structure of the investment portfolio of NPFs,%

\* built by the author according to the data[6],[7],[8]

At the same time, there is a tendency to reduce the share of investments in shares and bonds of Ukrainian companies (from 26% of investments in shares in 2007 to 2% in 2018, and from 32% of investments in bonds in 2012-2013 to 11% in 2018), a consistently high share of funds on deposit accounts of banks (from 30% to 45%, except for 2008, when this share reached 57%), as well as an increase in investments in securities, the income of which is guaranteed by the Cabinet of Ministers of Ukraine (from 1% in 2007 to 46% in 2018). Thus, the reorientation of NPFs to invest in fixed income instruments is obvious, but such investment tactics do not protect fund investors from the depreciation of pension savings in conditions of high inflation.

If we compare the structures of NPF investment portfolios in Ukraine and in other countries of the world, it becomes obvious that the investment portfolio of domestic NPFs is very conservative. This difference in the areas of investment of pension assets is explained by the fact that in countries with developed financial markets, high investment income can be obtained mainly by investing in corporate shares, while the return on bank deposits in such countries is low.

It should be noted that from the received investment income NPFs must pay the costs of services for the administration of NPFs, asset management, asset storage, audits and other services to the funds.

We think, that the level of development of domestic NPFs can be assessed only on the basis of comparing their indicators with the indicators of funds in other countries. Thus, Figure 2.3 shows the ratio of assets of non-state pension funds and Gross Domestic Product (hereinafter GDP) in other countries in 2019. Ukraine's GDP in 2019 is 3 974 564 mln UAH[19] and total amount of assets of NPFs is 3 143 mln UAH[8], based on this Ukrainian's ratio is 0.079%.

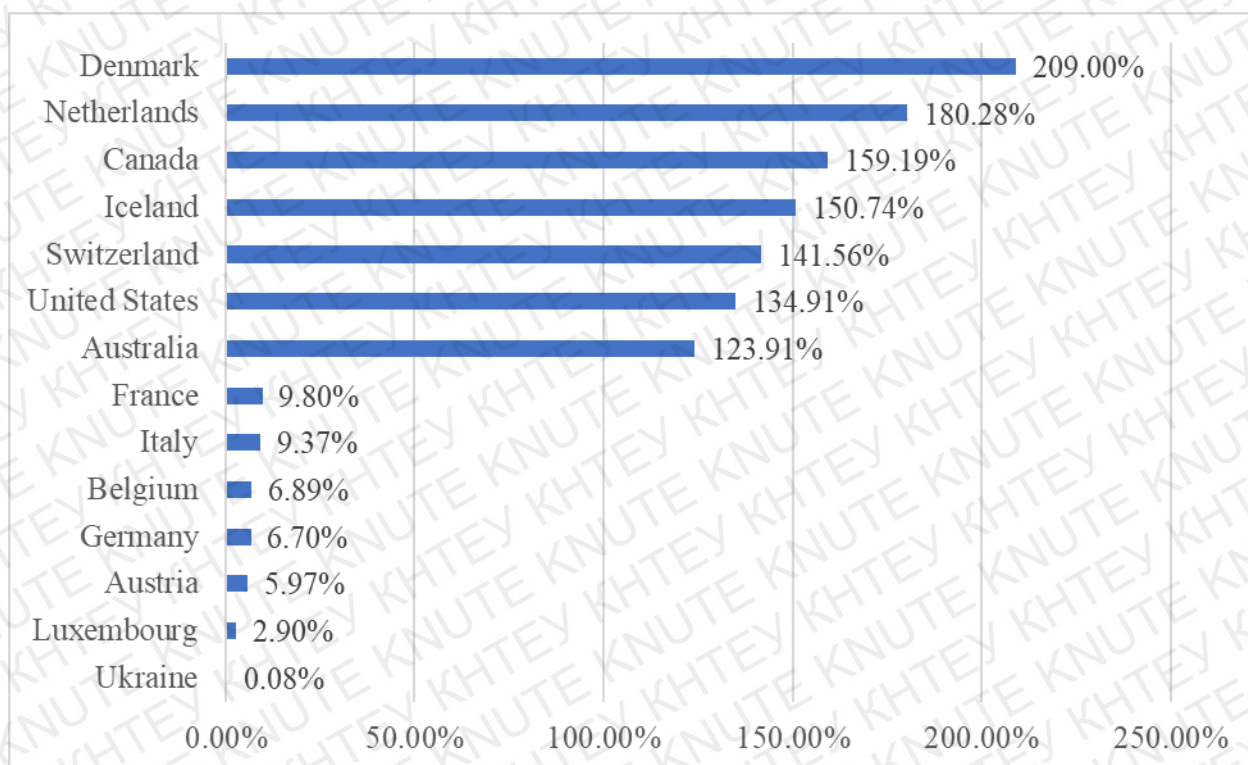


Fig. 2.3. The structure of the investment portfolio of NPFs, %

\* built by the author according to the data [32]

According to the data in this figure, in some countries the amount of assets of private pension funds exceeds 100% of GDP - these are countries such as Denmark (209%), the Netherlands (180.28%), Canada (159.19%), Iceland (150, 74%), Switzerland (141.56%), USA (134.91%), Australia (123.91%). At the same time, in some developed countries of Western Europe the ratio of assets of private pension funds and GDP is not very high - it is in France (9.8%), Italy (9.37%), Belgium (6.89%), Germany (6.7 6%), Austria (5.97%), Luxembourg (2.9%). This fact suggests that each country has its own model of pension system, which determines the limits of development of NPFs. However, regardless of the reasons, the level of NPF development in Ukraine, compared to other countries, is insignificant - only 0.079% of GDP. This indicates the need to develop measures to intensify the development of NPFs in Ukraine.

Thus, the dynamics of financial performance of the NPF shows development of these funds in the pension system of Ukraine. The main trends in the development of NPF in Ukraine are the following:

1) reducing the number of registered NPFs on the growth fund the total value of fund assets, which indicates the gradual consolidation of the NPF market and increasing the concentration of pension assets of funds;

2) functioning of NPF mainly of open type;

3) the number of individual depositors increased to 56.5 thousand in 2019, but is less than 1% of working citizens;

4) the number of depositors-legal entities during all years of NPF operation remains stable - about 2 thousand people. At the same time, the vast majority of pension contributions (91–96%) NPFs receive from legal entities;

5) the average size of the pension contribution per one depositor paid by legal entities is UAH 26.5-39.3 thousand, while for individuals - from UAH 200 to 790;

6) the number of participants reached 855.3 thousand people, which is less than 5% of the population of Ukraine aged 15-70 years;

7) gender and age structure of NPF participants indicates that significant the number of citizens (mostly men) became members of the NPF shortly before retirement, because of which they do not have time to take full advantage private pension provision, instead of able-bodied citizens age gradually lose interest in the formation of pension savings;

8) NPF participants receive mostly one-time pension payments, due to the low level of pension savings, insufficient for payment of pensions for a specified period. The size of the one-time pension payments amounted to 7.1 thousand UAH. in 2019;

9) fixed-term pension payments in the amount of an average of 63.4 thousand.

UAH received mainly participants of the corporate NPF of the National Bank Ukraine;

10) NPF pension assets increased to UAH 3.1 billion in 2019 and were formed both at the expense of pension contributions and at the expense of investment income from investing pension contributions. However, the ratio the value of pension assets and GDP is insignificant - only 0.079% of GDP;

11) in 2015 there was an "investment failure" NPF, when the cost assets decreased by UAH 0.5 billion due to the liquidation of a significant number of banks, on deposit accounts of which NPFs held up to 50% of pension contributions;

12) the main areas of investing pension savings are: placement of funds on deposit accounts of banks (in 2018 - 36%) and purchase of securities, the income on which is guaranteed by the Cabinet of Ministers Ukraine (in 2019 - 43%). This allows us to characterize the investment the policy of domestic NPFs is too conservative compared to the NPFs of others countries; most of the costs of NPFs fall on the payment of management services assets - about 60-70% and the administration of funds - from 20% to 30%, with thus, the total cost increased from 4.4% of the total value of NPF's assets 2006 to 11.9% in 2018;

13) the level of NPF development in Ukraine remains insignificant compared to other countries of the world, which indicates the need to develop measures for its activation.

## **2.2 Assessment of non-state pension insurance in Ukraine**

The introduction of non-state pension insurance (hereinafter NPI) in Ukraine has become one of the main stages and important steps in reforming Ukraine's pension system. The NPI system is the third level of the pension system in Ukraine. Thus, on January 1, 2004, a private level pension system was introduced in Ukraine.

The law stipulates that private pension provision is provided:

first, pension funds by concluding pension contracts between pension fund administrators and depositors of such funds;

secondly, by insurance organizations by concluding contracts of life pension insurance, insurance of the risk of disability or death of a fund participant;

thirdly, by banking institutions by concluding agreements on opening pension deposit accounts for the accumulation of pension savings within the amount (UAH 200 thousand for May 2018) determined for the reimbursement of deposits by the Deposit Guarantee Fund of individuals established by law [1].

Currently in Ukraine, deposit pension accounts in a bank do not have both demand among the population and supply from banks, but every citizen can open an account to save money. Depending on the wishes of the individual, banks may offer different types of such accounts:

- Current - funds can be withdrawn or deposited at any time, but the interest rate on such accounts is low, and therefore hope to make a profit from savings on such accounts is useless;

- Accumulative - also have enough free access to the use of funds; they provide for a higher interest rate, but for its accrual funds must "lie" a certain period stipulated by the bank's policy;

- Deposit (with capitalization of interest, with interest paid monthly, annually, etc.) - the most attractive in terms of profitability accounts. The highest interest is accrued on funds stored in accounts of this type, but only on condition that the depositor does not terminate the agreement on their storage ahead of time. As of May 2018, the average deposit rate is 15% per annum. This allows not only to compensate for rising prices, but also to earn a little.

However, given the situation in the banking sector today (with numerous bankruptcies of banking institutions), people are wary of keeping funds in such accounts. Most banks enter into a contract for 12 months. That is, bank deposits are

rather an instrument for short-term accumulation. There is also a tendency for large banks to create corporate or open-ended private pension funds of the same name.

Another type of financial institution operating in the private pension insurance system is insurance companies. These companies are also called

"Life": in their names they contain the word life (from the English. "Life"). During the implementation of non-state pension insurance programs, such companies offer a product of accumulative life insurance. In this case, the client enters into a long-term contract with the insurance company (usually at least 10 years), during which he pays the contributions. The amount of such contribution is divided by the company into 2 parts: one forms the client's life insurance against the risk of injury, hospitalization, disability or death, and the other - goes to the client's individual account for savings.

The borrowed funds are invested by the company in order to provide a return on investment and protect them from depreciation. In this "life" companies are similar to NPF.

It is important to know that when insuring under such a program, they are entitled to reimbursement by the state of 15% of the amount paid for the year of the contribution.

*Table 2.3*

**Number of insurance companies in Ukraine during 2017-2019**

| Number of insurance companies            | As of 31.12.2017 | As of 31.12.2018 | As of 31.12.2019 |
|--|------------------|------------------|------------------|
| Total number                             | 294              | 281              | 233              |
| incl. Life Insurance Company             | 261              | 251              | 210              |
| % of the ratio of SC "Life" to the total | 33               | 30               | 23               |

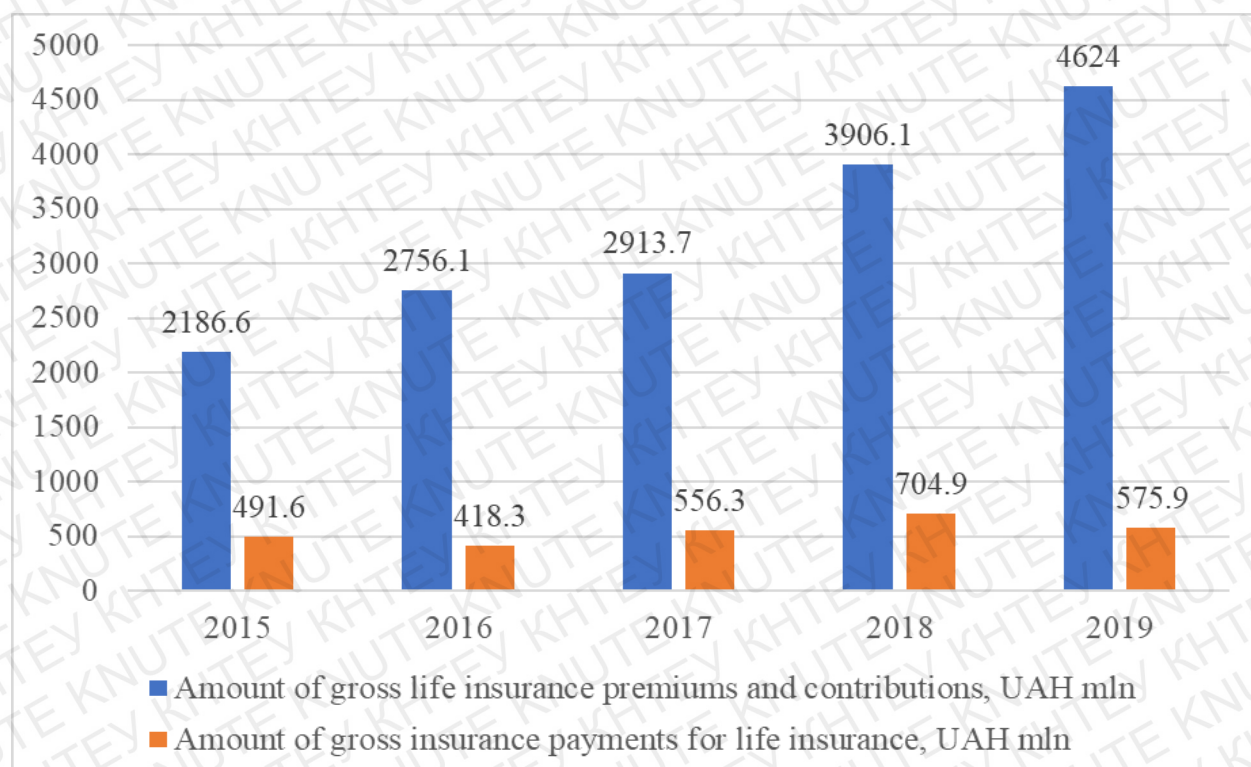
\*created by the author according to the data [8]



Today in Ukraine there are many life insurance companies, the main of which are MetLife (METLIFE), TAS, UHIKA Life (UNIQA), PZU Ukraine Life Insurance (PZU), ASKA-Life, Knyazhna Life (Jupiter), AXA life insurance , INGO Ukraine of life, KD Life, ORANTA-Life, Blue Policy. Data on changes in the number of insurance companies are presented in table 2.3

As can be seen from the fig.2.4 for all surveyed companies there was an increase in insurance premiums. This can be explained by the increase in business activity of the population, as well as the efforts of people to protect their savings by purchasing life insurance policies.

As we can see in the fig.2.4 in recent years there has been an increase in insurance premiums and contributions, but the general trend for 5 years of payments shows a decline, while in NPFs in recent years (Table 2.1) there is an increase in total contributions and payments in absolute terms and in percentage payments increased more than contributions.



*Fig. 2.4. Dynamics of premiums, contributions and payments of insurance companies for 2015-2019\**

*\* built by the author according to the data[8]*

In recent years, there has been a slight growth in the life insurance market in Ukraine. This is primarily due to increased business activity in the country, which in turn has led to increased welfare. It is also worth taking into account the active work of life insurance companies that have been established over the past 3 years, which use modern forms and methods of selling insurance services.

However, there are problems that hinder the development of life insurance in Ukraine, namely: underdevelopment of the stock market, instability of the political situation, lack of legal framework to ensure transparency of investment instruments, lack of relevant life insurance traditions, inflation, instability of national currency, insolvency of population and enterprises buy insurance services due to lack of free cash, a large number of insurance companies with a low level of capitalization, as well as the weak development of the national reinsurance market, insufficient capacity of the insurance market.

Another type of financial institution operating in the private pension insurance system is private pension funds, and although the law formally provides for three equal players in the refinery market, this form is currently the most common, corresponding to the American pension model.

Financial regulation of NPF activities is implemented on the basis of application of a set of measures of influence aimed at streamlining the financial activities of funds by establishing by the state certain requirements and rules of their operation, in order to maintain the balance of financial interests of all participants in private pension provision. Such requirements include requirements for registration and accounting of NPF activities, licensing of institutions performing administration, asset management and storage of fund assets, implementation of state supervision over the operation of funds, as well as application of financial sanctions and measures of administrative coercion if necessary.

The financial regulators of the NPF are:

- firstly, the National Securities and Stock Market Commission (NSSMC) - monitors the activities of NPF asset management companies and the depository activities of custodian banks;
- secondly, the National Bank of Ukraine (NBU) supervises banking activities of custodians.

In our opinion, state intervention in the sphere of activity of NPFs should be timely, appropriate and limited. Practical experience shows that excessive over-regulation of NPFs leads only to negative consequences, namely: decrease in the level of public confidence in the funds; short-term planning of fund activities; reducing the level of return on funds, etc. And, as you know, the main objectives of financial regulation of NPFs are to protect the financial interests of participants in non-state security, reduce systemic risks, ensure effective and transparent operation of funds.

In accordance with current legislation and in accordance with Art. 1 of the Law of Ukraine "On Non-State Pension Provision", NPF is a legal entity that has the status of a non-profit organization (non-profit company), operates and conducts activities only for the purpose of accumulating pension contributions for the benefit of pension fund participants with further management of pension assets. pension payments to the participants of the specified fund in the order determined by the laws of Ukraine. In other words, the procedural mechanism of NPF activity is based on the implementation by the depositor on a voluntary basis of pension contributions to NPFs, which are accounted for in an individual pension account and on which investment income is accrued. As a result, the fund participant receives a certain additional non-state pension upon reaching retirement age. In Ukraine, NPFs are divided into three types, depending on the characteristics of their depositors and participants (Table 2.3). Thus, a participant in an open NPF can be any individual, regardless of place and type of work. The founders of such a fund may be one or more legal entities, subject to the restrictions imposed on budget organizations. Based on the functional focus, open NPFs meet the needs for

additional pension provision for those individuals and legal entities who do not have the opportunity to be served by corporate and professional funds. It should be noted that the participants of the corporate NPF can be only individuals who have been in employment with the founders of the fund, and as the latter - only a legal entity (or several) that is the employer. It should be noted that the employer-payer is not the founder of the corporate pension fund, at the same time enjoys the privileges of servicing its employees in NPFs. Examples of such funds are the corporate NPF of NBU, Ukrposhta, Ukreximbank. Finally, a professional NPF is a foundation that can be founded by associations of legal entities - employers and individuals, including trade unions, or individuals. It should be emphasized that the participants of such a fund can be only individuals related to the type of professional activity (occupation) defined in the charter of the NPF. The functioning of the NPF involves the interconnected activities of individual interconnected structures. First of all, it is the Board of the Fund, the functionality of which includes control over the current activities of NPFs.

At the same time, the Chairman and members of the NPF Council undergo mandatory special training and receive certificates of specialists in non-state pension provision and must periodically update their qualifications.

Such an employer enters into an agreement on participation in a corporate pension fund with its Board. In addition, according to the Law, the following must be involved in the activities of NPFs:

- administrator of the fund responsible for pension contracts, pension accounts and contributions, pension income and pension payments to participants, preparation and publication of reports;
- asset management company that organizes the placement temporarily free assets of the fund in accordance with the legally established requirements and forms the profile of return on assets;
- custodian bank, the functions of which include the implementation of settlement and cash, depository services, servicing of securities transactions).

It should be borne in mind that the participants of the corporate NPF can be only individuals (table 2.4) who have been in employment with the founders of the fund, and as the latter - only a legal entity (or several) that is the employer. It should be noted that the employer-payer is not the founder of the corporate pension fund, at the same time enjoys benefits to serve their employees in the NPF.

*Table 2.4*

**Characteristics of types of private pension funds in accordance with the legislation of Ukraine**

| Type of NPF  | Founders  | Participants  |
|--------------|---|---|
| Open         | any, one or more legal entities   | citizens of Ukraine, foreigners and stateless persons regardless of the place and nature of their work        |
| Corporate    | legal entity-employer or several legal entities to which employers-payers can join  | only citizens who are in employment with the founders or employers of the fund                                |
| Professional | associations of legal entities-employers, natural persons, including trade unions or natural persons related by type of professional activity | exclusively citizens related to the nature of their professional activity, defined by the charter of the fund |

*\* built by the author according to the data[1].*

The administrator, asset management company and custodian bank may provide NPF services only if the relevant requirements are met, which include: licensing requirements for the activities of NPF management entities, requirements for the authorized capital of the asset management company and NPF administrator, qualification requirements for employees of NPF management entities, requirements for software and hardware for personalized accounting of pension savings of NPF participants, maximum amounts of payment for services of institutions serving NPF activities, etc.

The established requirements indicate that the state policy on financial regulation of non-state pension provision is focused not only on strengthening the financial reliability of funds, but also on the transition from quantitative to qualitative characteristics of their activities. Thus, each NPF participant has the opportunity to transfer their own pension assets to another fund once a year.

This right has been introduced as a protective measure against dishonest funds and asset management companies, but it somewhat complicates the process of investing pension savings funds. This situation is explained by the presence of a short-term planning horizon, which does not allow to invest in high-yield long-term projects. In turn, extending the period of transfer of pension savings between funds will increase the planning horizon and, consequently, will increase the profitability of funds.

One of the financial incentives for the development of NPFs is tax benefits for the payment of personal income tax. The taxation scheme depends on the type of pension payment. In particular, due to pension savings on an individual pension account, fund members may receive the following types of payments:

- first, a fixed-term pension, which provides for the payment of pension savings in installments for 10 years or more when the participant reaches the retirement age specified in the pension contract;
- secondly, the payment of the entire amount of pension savings at once (so-called "one-time pension payment"), which is carried out in exceptional cases, when the grounds specified by law;
- third, a lifetime pension paid by an insurance company selected by a NPF member.

Pension payment for a specified period or a one-time payment of the entire amount of savings is made by the administrator of the NPF, to which contributions were paid by the depositor, and lifelong payment - by the insurance company selected by the participant.

Early receipt of pension benefits is prohibited. This requirement is established so that the participant can use the accumulated funds solely to meet the needs that arise after retirement.

In today's world, employers have a certain financial interest in participating in such private pension schemes, due to the possibility of allocating the amount of insurance premiums to the cost of up to 15% of wages accrued to employees, but not more than 2.5 times the minimum wage established by law on the State Budget of Ukraine for the relevant year.

An individual - a depositor is taxed on contributions to the NPF, by applying a tax rebate when making contributions in their favor (as a participant in the NPF) - deducting a discount in the amount of the full amount of social tax benefits per month. In favor of relatives of the first degree as participants in the NPF - deducting a discount of 0.5 of the amount of social benefits per month for each relative of the first degree of kinship [2].

Consideration of the issue of financial regulation of NPF development will be incomplete if we ignore the peculiarities of the formation of the structure of the investment portfolio of NPFs. It is worth noting that to the following restrictions apply to such a portfolio:

- on the concentration of ownership, ie the maximum percentage share in the share capital of the issuer;
- the share of one financial instrument in the investment portfolio of the fund;
- the share of securities of one issuer in the investment portfolio of the fund;
- the level of risk associated with a particular asset, characterized by the issuer's rating;
- the list of issuers, which are assigned a rating not lower than the established one;
- list of securities with available trading platforms [187].

If you group the main categories of securities into which they can invest NPF funds, according to the degree of risk, we can distinguish the following three groups:

- 1) contingent risk-free assets, including bank deposits, government bonds and debt obligations of state-owned companies, for which the government acts as a guarantor;
- 2) risky assets - liquid corporate, local bonds with a high investment rating;
- 3) high-risk assets - shares and corporate debt, including those not included in the stock exchange listing, derivative instruments, etc.

To prevent conflicts of financial interests between participants and founders of pension funds, the legal framework of developed economies necessarily contains restrictions on the investment of pension funds in the assets of their founders, including employers. It is clear that NPF participants are interested in maximizing the return on placement pension assets, reducing risks by diversifying investment areas and minimizing the current amount of payments. Founders, raising funds from NPFs, tend to maximize the concentration of cash flows from the fund to finance their own business. Therefore, the legislator limits the investment of pension funds in one investment object and to the structures affiliated with the fund. But it is clear that it is difficult to really identify the set of companies associated with a non-profit organization.

An important issue is the feasibility of setting limits on investment in foreign assets. It should be noted that foreign investment contributes to the diversification of country risk, which arises in the case of dominance of assets and liabilities of the fund in the same currency. The differentiation of the fund's assets among the set of instruments of different countries causes a decrease in the volatility of the return on the investment portfolio. We consider it reasonable investing in foreign assets in the absence of the possibility of efficient allocation of financial resources within the country, when the domestic capital market is underdeveloped. At the same time, setting restrictions on investing in foreign assets is appropriate during



the period of economic growth in Ukraine, as NPF investments can help deepen the domestic capital market.

In addition to regulating the structure of the investment portfolio, the state may set real or nominal, absolute or relative minimum target returns of the portfolio. As a reference level, it is legitimate to use the return on the market portfolio or the average return on the portfolios of all pension funds.

Thus, the Law of Ukraine [1] stipulates the obligation of the asset management company to ensure the minimum return on pension assets at the level of the official inflation index in the event that such a requirement is established by the NPF Council. The law also provides for the right to change the asset management company in the event of a decrease in the net asset value of NPF pension assets during the year by more than 20%.

To compensate for losses caused to NPF participants in the implementation of operational and credit risks, the Law of Ukraine [1] provides for property liability of administrators and asset management companies, namely, payment of compensation from the reserve fund, and in case of insufficiency - from other property. The Custodian is also liable for damages caused to NPF participants as a result of non-compliance or improper performance of the terms of the fund maintenance agreement by the Custodian, and reimburses them in accordance with the terms of the agreement and in the manner prescribed by law. The law also provides for property liability of council members, but the grounds and mechanism for bringing to such liability have not yet been regulated.

The Law of Ukraine [1] restricts the types of pension schemes that are allowed to use NPFs, in particular, does not provide for schemes with certain payments. This prevents non-fulfilment of NPF obligations in case of insufficient pension savings to pay such pensions to fund members. It is clear that the investment risks are transferred directly to the fund participants.

Usually, legal restrictions on the structure of the NPF's investment portfolio are somewhat relaxed in the process of developing the pension system and

improving the efficiency of the financial market, as such restrictions lead to a loss of investment income due to lost profits, which reduces future pension savings provided to funds.

In countries with developed capital markets, the state supports only fundamental prudential restrictions and applies the "smart investor rule", according to which the asset manager must act as a smart and prudent professional who clearly understands financial matters, has sufficient experience and has the appropriate level of financial education. [34.]. In our opinion, the behavior of economic agents in such cases should be controlled by self-regulatory associations.

Ukraine has the following self-regulatory organizations that control the activities of NPFs and fund management institutions: National Association of Private Pension Funds of Ukraine and Administrators of Private Pension Funds, Ukrainian Association of Pension Fund Administrators, Ukrainian Association of Investment Business, Professional Association of Capital Markets, Derivatives, etc. The essential content of self-regulation is characterized by the development and definition of standards and rules for the services offered, as well as control over their observance, which is carried out to protect the interests of both members of self-regulatory organizations (SROs) and consumers of services.

What caused the need for self-regulation of financial activities of NPFs? The answer to this question, in our opinion, is revealed through the identification of the main advantages of this process. These include:

- 1) elasticity of SRO norms in contrast to state ones, and rapid adaptation to changes in the geopolitical, financial, economic and political situation on the market;
- 2) the possibility of influencing public authorities in order to position the professional interests of society by establishing a dialogue between government and business. Such influence is conditioned by participation in the development of bills, promotion of their representatives to elected bodies of state power, etc .;

3) building a mechanism for pre-trial consideration of certain situations that arise between consumers of various financial services and financial institutions. According to a study of foreign experience, the implementation of such measures is more economical and efficient than the court procedure;

4) introduction of best practices of professional regulation of pension provision.

Thus, we can conclude that the functioning of self-regulatory organizations increases the openness and social responsibility of NPFs.

An important task is also the introduction of the institution of prudential regulation and prudential supervision of NPFs, as provided by the Concept of introduction of prudential supervision of non-bank financial institutions [12] and the Concept of introduction of prudential supervision of professional stock market participants [11]. At the same time, the key purpose of prudential supervision, first of all, is to prevent violations, not to apply administrative measures in the form of fines, suspension or revocation of licenses, etc. Given this, financial regulation should become more flexible through a set of measures, such as: increasing the requirements for large NPFs; change of license conditions; transfer of part of functions from the regulator to SRO; increasing the confidence of consumers of financial services (table 2.4).

*Table 2.4*

**Generalization of measures aimed at achieving flexibility of financial regulation of NPF development\***

| # | Name of instruments                                     | Short description  |
|---|---|--|
| 1 | Increased capital formation requirements for large NPFs | Formation of the basis of financial security for major players, to what extent are systemic risks inherent in comparison with activities of small companies for which it must comply compliance with the minimum requirements. Thanks to this, requirements for the amount of own funds of financial market participants will be differentiated depending on the chosen criterion. |

|   |  |  |
|---|--|--|
| 2 | Change of license conditions                                 | The regulator has the ability to control the quantitative and qualitative composition of participants, the level of competition in the market, as well as to establish criteria for entering the market of new players through the weakening or strengthening of licensing requirements. Note that given the current dynamics of consolidation of financial market players, we can predict a further trend of increasing licensing requirements and, consequently, the reduction of participants by merging existing or terminating the activities of individual economic agents |
| 3 | Transfer of some functions from the regulator to the SRO     | According to the analysis of foreign experience, it is positive to perform certain functions of the regulator is the SRO (for example, support of licensing procedures, certification of specialists, inspections of members of such self-regulatory organizations, etc.).   |
| 4 | Increasing the confidence of consumers of financial services | Intensification of measures to increase the financial literacy of the population, change the taxation system in view of the growing attractiveness of investments in financial market instruments, identification and prevention of financial pyramids, etc. And also, consideration of possibilities of creation of institute of financial ombudsmen, formation of compensation funds at SRO.   |

*\* built by the author according to the data[30],[31]*

Summing up the above, it should be noted that in Ukraine, simultaneously with the development of NPFs, the system of financial regulation of funds gradually improved. The role of financial regulation of NPF development in modern conditions is primarily to create a favorable financial environment for the functioning of NPFs by improving the legal framework of funds, special tax policy, creating financial incentives for citizens and employers to participate in private pensions, the introduction of prudential supervision of NPF .

## SECTION 3.

### IMPROVEMENT OF THE ADMINISTRATION OF NON-STATE PENSION FUNDS IN UKRAINE

#### 3.1 Foreign experience in administering non-state pension funds

Reforming Ukraine's pension system has sharpened interest in foreign construction experience. It should be noted that there is no single approach to building a national pension system, as each state has its own characteristics of socio-economic development.

One of the important borrowings from abroad, in my opinion, is the guarantee of the level of profitability, because they determine the minimum increase in pension savings of participants. These guarantees cover both mandatory storage systems and NPFs. World experience offers various options for building a system of guarantees for the preservation of pension assets, the main characteristics of which are: a fixed value of a minimum income, nominal or real expression, the period during which guarantees are applied.

As can be seen from table. 3.1, in the practice of different countries guarantees of absolute or relative investment return on pension assets are applied. If the first type involves mostly the return of the nominal or real value of pension assets, the second allows to ensure a return close to the market average.

*Table 3.1*

#### **Guarantees of investment income of NPFs in foreign countries\***

| <b>Country</b> | <b>Guarantees of investment income</b>  | <b>Note</b> |
|----------------|---|-------------|
| Czech Republic | Asset management companies (hereinafter AMC) have to guarantee the preservation of the nominal value of pension contributions every year. |             |
| Singapore      | The minimum investment income is 2.5% per annum.  |             |

|          |   |   |
|----------|---|---|
| Sweden   | The minimum investment income guaranteed by pension funds is 1.5%.  | The guarantee is provided in two stages: at transition to another fund and upon retirement. |
| Hungary  | Pension funds must provide a minimum investment income of 85% of government bond yields.  |   |
| Poland   | Yield guarantees are set in the range: 50% of the average investment income of all funds or the average nominal investment income minus 4%. | The shortage is covered by the funds' own resources.  |
| Slovenia | The minimum investment income is set at 40% of the average annual yield on government bonds.  |   |
| Slovakia | AMCs of pension funds have to guarantee investment income of 0% every 6 months.   | AMC fees are charged only in case receipt of a positive income rate                         |
| Belgium  | Occupational pension plans must provide an annual income of at least 3.75% on employee contributions and 3.25% on own contributions.        | Actual market income will be used if it is higher than the minimum guaranteed.              |

\*created by the author according to the data [29]

Different countries solve this problem in different ways, in particular by setting: a certain amount of profitability (Hungary, Slovenia), a fixed rate of minimum (Switzerland, Singapore) or weighted average income (Chile, Poland), guarantees of maintaining the nominal value of contributions paid (Slovakia, Czech Republic) .

Table 3.2

**Share of net asset value and contributions of total value in foreign countries \***

| Value                | Capital guarantee (amount of contributions) upon retirement | Investment income guarantee of 2% upon retirement | Investment income at the level of inflation at retirement | Annual capital guarantee | Annual investment income guarantee 4% |
|----------------------|---|---|---|--------------------------|---------------------------------------|
| % of net asset value | 0,06  | 0,22  | 0,24  | 0,39                     | 0,89                                  |

|                    |      |      |      |       |       |
|--------------------|------|------|------|-------|-------|
| % of contributions | 1,24 | 4,94 | 4,94 | 18,36 | 18,36 |
|--------------------|------|------|------|-------|-------|

\*created by the author according to the data [15]

The cost of the guarantee system will depend on the level their (nominal amount of contributions or a fixed amount of investment income) and the period of application (annually, when transferring to another fund, upon retirement) (Table 3.2). At the same time, the cost of the guarantee, which is applied constantly (annually), significantly exceeds the cost of the guarantee, which is provided once at retirement.

Another aspect of world practice that will be useful for Ukraine, in my opinion, is the approach of automatic inclusion of employees in funded pension programs, but only on a voluntary basis (there is a possibility to withdraw from the program at any time). This will increase the coverage of non-state pension funds by the population. Experience has shown that even while employees have the freedom to choose, automatic inclusion in the pension scheme is critical to stimulating participation in private pension provision. The first countries to use the automatic application model at the national level were Italy and New Zealand, and this approach has been used successfully by employers in the United Kingdom and the United States. The KiwiSaver funded pension scheme, introduced in New Zealand in 2007, provides for the automatic inclusion of ycix employees, but is voluntary. The minimum contribution in the year of implementation of "KiwiSaver" was 2% of earnings paid by both employees and employers. Each participant had two months to decide whether to participate in the program. Through three years after its implementation, the program covered 55% of the country's working population [31].

Tax benefits can also be a tool to stimulate the participation of citizens in the private pension system today. However, while this type of incentive has a certain

impact on high-income people, its benefits are less noticeable for other middle- and low-income populations.

Therefore, in order to provide financial incentives to citizens in some countries, subsidies to individual pension accounts are used at the expense of employer or state contributions. Relevant contributions can cover all members of the pension system (New Zealand), as well as some of their categories: women, young people (Chile), low-income people (Australia). This approach is used in the United States. Thus, in some voluntary 131 occupational pension plans (401 (k)), employers pay a certain percentage of wages to their accounts in addition to employee contributions. One type of private pension insurance in Germany, which provides incentives for the insured person by the state, is the Riester Pensions. As incentives, the state provides the insured person with a subsidy to the pension contributions paid by him and tax benefits. The roster pension can be used by all persons subject to mandatory state pension insurance, except for recipients of a full old-age pension, a pension due to disability and social assistance, as well as students. All participants can apply for grants and tax benefits from the government, the level of which depends on the specific amount of the contribution and the number of children. To receive the full state subsidy, participants must invest at least 4% of their previous year's income in the Riester Fund. For low-income or unemployed people, the minimum insurance premium is reduced to 60 euros per year.[36]

At the request of the depositor, the insurance premium can be reduced by the amount of the state subsidy or paid in parallel. In 2008, the amount of grants was increased: the basic annual state grant is 154 euros for single people, 308 euros for couples and 185 euros for each child (300 euros for children born in 2008 or later). In this case, paid pension contributions (with appropriate restrictions) are not included in the income tax base [30].

Another way to increase the interest of employees in private pension provision may also be to simplify the steps and decisions that are necessary to join



the NPF. The US Quick Enrollment Program is designed to simplify the registration process by selecting default contributions and 133 asset allocation proportions. Later, participants can change these parameters at will, but at the time of joining the fund, they do not make a choice.

In foreign practice, risk-oriented supervision is becoming increasingly popular. It is used to strengthen the financial stability of NPFs. Australia, Denmark, the Netherlands and Mexico were among the first to use risk-based supervision. The tools used by regulators include: regulations, including recommendations on minimum risk management standards; rules for maintaining solvency (capital adequacy); risk assessment models, on the basis of which both remote and on-site monitoring is built [26]

So, given the peculiarities of our state, in my opinion, will be important "lessons" learned from foreign experience: the introduction of risk-oriented supervision, guarantees of profitability, automatic inclusion of employees in funded pension programs, subsidizing individual pension accounts and simplifying the system of joining NPF.

### **3.2 Increasing the attractiveness of NPFs**

The domestic system of private pension provision is still in its infancy. The NPF sector, although showing stable growth rates, still does not play a significant role as a component of the pension system and institutional investor. An important deterrent to the development of HP3 is its unpopularity among ordinary citizens. Analysis of the causes of this situation allowed to suggest the following ways to solve it [28]:

- 1) ignorance of citizens with the possibilities of HP3 - conducting state programs to inform the public about the possibilities of supplementary pensions with an emphasis on its main benefits, which will be carried out through television,

press, as well as PFC institutions and private financial institutions that enjoy the trust of citizens;

2) low level of financial capacity to participate in the NPF - the beginning of the practice of co-financing of pension contributions by the employer and the employee at the initiative of the latter;

3) citizens' distrust of NPFs - a list of risks of private pension funds and ways to avoid and minimize them are given in Table 3.3;

4) impossibility of withdrawing funds until retirement age - granting the right to individuals-depositors to receive loans at preferential rates in state banks, to educate children at the expense of budget funds, as well as to withdraw part of funds to pay for medical services, pay contributions for purchase houses (apartments), etc.

*Table 3.3*

**Risks of non-state pension funds in Ukraine and ways to minimize them\***

| Name and nature of risks                           | Ways to avoid and minimize  |
|--|---|
| Financial (related to financial activities market) | Insurance, accounting, threat scanning  |
| Management (making the wrong management decisions) | Creating an optimal hierarchical structure management of a private pension fund, introduction of special educational programs for future employees of NPF |
| Actuarial  | Improving the level of qualification of NPF employees; automation of calculations   |
| Political (change of political system)             | Reducing the impact of the political situation on economic sphere through further integration into the world economic space                               |

\*created by the author

To date, government securities are quite reliable financial instruments for NPFs. However, the disadvantages of investing in government bonds are low income, which can often be lower than inflation. Therefore, in order to use the potential of NPFs as a national investor, it is necessary to issue long-term debt with

a floating rate of income, which will take into account the level of inflation. This option, on the one hand, provides a long-term source of internal financial resources to the state, and on the other - provides reliable financial assets for NPF [30].

The investment potential of the funded pension system plays an important role both for the development of the country's economy in general and for the local economy in particular. However, the possibilities of its use at the regional level require the active participation of local authorities in the process of involving citizens in the formation of pension savings. One of the options for such participation could be the creation of municipal pension funds. The activities of such funds will not only increase the level of pensions for employees of a particular region, but also ensure the concentration of financial resources within it and their focus on the development of the local economy [28]. Contributors to MPF, in contrast to other types of NPF, can be communal enterprises, local budget organizations, self-employed persons. Involvement of enterprises and organizations of communal ownership in the refinery should be preceded by a decision of the local council, according to which these legal entities will have the right to be the founder of a corporate or payer of an existing NPF of any kind. The local council should also oblige the relevant employers to participate in the NPF with the allocation of adequate budget funding for the payment of pension contributions. We believe that the control over the work of the MPF by local governments can be ensured by delegating their representatives to the Board of the Fund.

### **3.3 Improvement of control over NPF administration**

Today in the scientific literature there are two conceptual approaches to the degree of state intervention in the development of the private pension system and the activities of private pension funds. According to the first approach, the influence of the state is minimized, because this system is considered self-regulatory. This

regulatory option is typical of most developed countries. Instead, according to another approach, the state guarantees the efficiency of non-state pension funds, prevents the loss of funds by depositors. During the implementation of the HP3 system in Ukraine, the second option of state intervention in the activities of the subjects of the private pension system was chosen. [33]. 3 In 2004, more than thirty legislative acts and normative documents regulating the activities of non-state pension funds were adopted. However, despite significant regulatory support, a number of actions aimed at accelerating the introduction of the third level of pension provision, the HP3 system is still developing too slowly.

With regard to legal restrictions, today there are requirements for the areas of investment of pension assets and their diversification, namely: bank deposits and savings certificates not more than 40% and not more than 10% of the total value of pension assets in one bank; mortgage securities not more than 40%; bank metals, including by placing on deposit accounts in bank metals not more than 10%; bonds of residents of Ukraine not more than 40%; securities of foreign issuers not more than 20%; shares of residents of Ukraine not more than 40%; securities guaranteed by the Council of Ministers of the Autonomous Republic of Crimea and local loan bonds not exceeding 20%; securities guaranteed by the Cabinet of Ministers of Ukraine, not more than 50%; securities of one issuer (except for securities guaranteed by the Cabinet of Ministers of Ukraine) not more than 5%; real estate objects not more than 10% of the value of pension assets; other assets not prohibited by law - not more than 5% of the total value of pension assets [1].

The Law also prohibits the misuse of non-state pension fund assets. Pension assets can only be invested in securities specified by law, as well as to pay for the services of the founders and persons managing the fund (administrator, asset management company, custodian).

In order to ensure the bankruptcy of NPFs, requirements have been established regarding the separation of the pension fund's assets from the assets of

its founders and employers. Pension funds do not have the right to attract other than pension assets. According to the law, the NPF cannot be declared bankrupt and liquidated under the bankruptcy law. The only possible option to liquidate the fund is to transfer all its pension assets to another NPF.

Another important aspect of state regulation of the private pension system should be the restriction of investing assets in government debt securities, which currently serve as a source of covering the budget deficit of Ukraine, and vice versa, should expand opportunities to invest in income securities of foreign enterprises.

It is necessary to evaluate the effectiveness of investment for each NPF, which will identify problem assets or pension funds in general. But it should signal a review of investment policy for the AMC, the administrator and the Board of the Fund. If this trend continues during the next year, the issue of liquidation of the fund with subsequent transfer of pension assets to another NPF or change of KYA should be considered.

Introduction of a system of public assessment of the financial condition of NPFs through the adoption of relevant regulations and the introduction of a system of disclosure of information about private pension funds. This can be done by developing a special format of financial indicators and the introduction of a publicly available database on the results of NPFs on the Internet, as well as regular publication of such information in the press.

To assess the performance of private pension funds in financial markets requires [4]:

- ensure high-quality, by world standards, rating of financial instruments and issuers for investing NPF assets;
- to introduce at the legislative level a unified system of pension savings accounting with the use of a unit of pension contribution and ii daily calculation;
- increase the responsibility of custodian banks for assessing and monitoring the structure of pension fund assets;
- solve the problems of valuation of assets in illiquid markets;

- make the transition of HP3 market participants to international financial reporting standards;
- to develop and implement a system of financial indicators for monitoring the effectiveness of the HP3 system entities
- establishing a clear interaction of “regulators” with stock exchanges and rating agencies on the procedure for providing information on implemented agreements with securities of Ukrainian issuers.

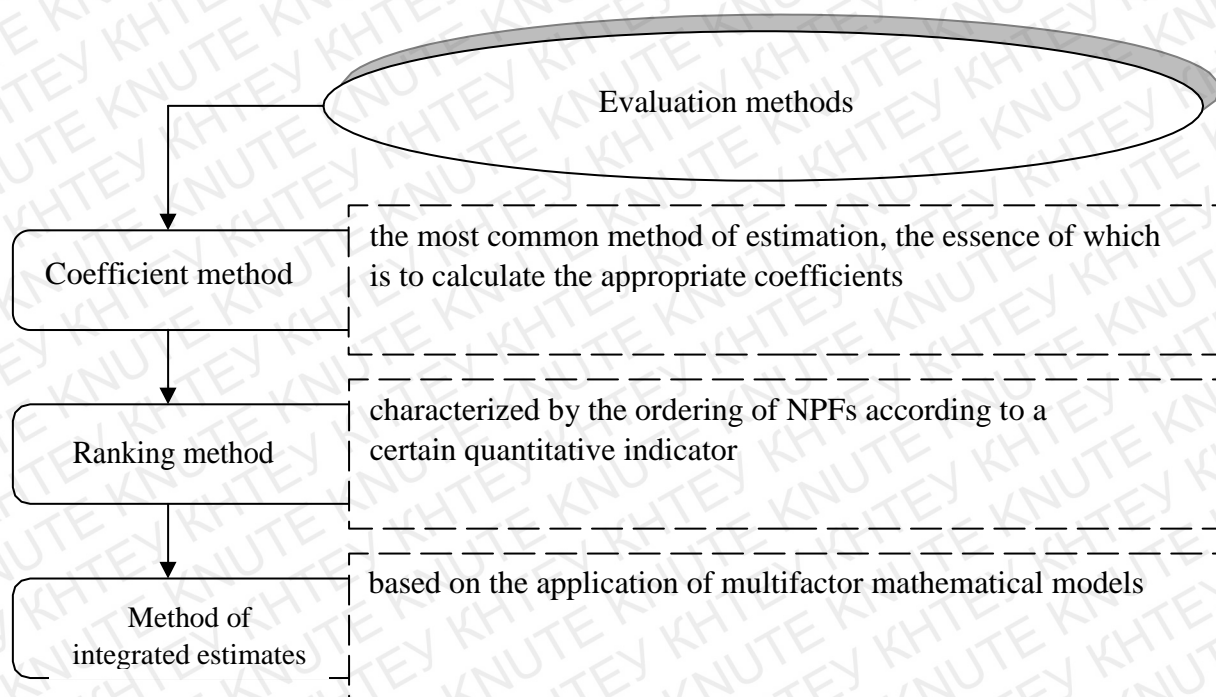


Fig 3.1 Main methods of assessing financial reliability in accordance with the quantitative approach\*

\*created by author based on [33]

The existing variety of methods for assessing the financial soundness of NPFs, we propose to group according to two approaches to the assessment - quantitative and qualitative. Thus, the quantitative approach to assessing financial soundness is focused on the calculation of various indicators. The basis for such an assessment is the fund's reporting. The advantages of the quantitative approach are the comparability of estimates of different funds.

Figure 3.1 presents the main methods of assessing financial reliability in accordance with the quantitative approach.

Recently, a qualitative approach to assessing the financial soundness of NPFs has become widespread, which includes expert, rating, scoring methods and the method of indirect assessments (Fig. 3.2).

It should be noted that in practice there is often a combination of different methods inherent in both quantitative and qualitative approaches.

Regarding the evaluation of NPF activities, methods have been developed to assess the financial stability of NPFs [16], financial security of NPFs [18], financial condition of NPFs [13], investment activities of NPFs, etc.

These methods contain a variety of indicators that allow you to assess various aspects of the funds

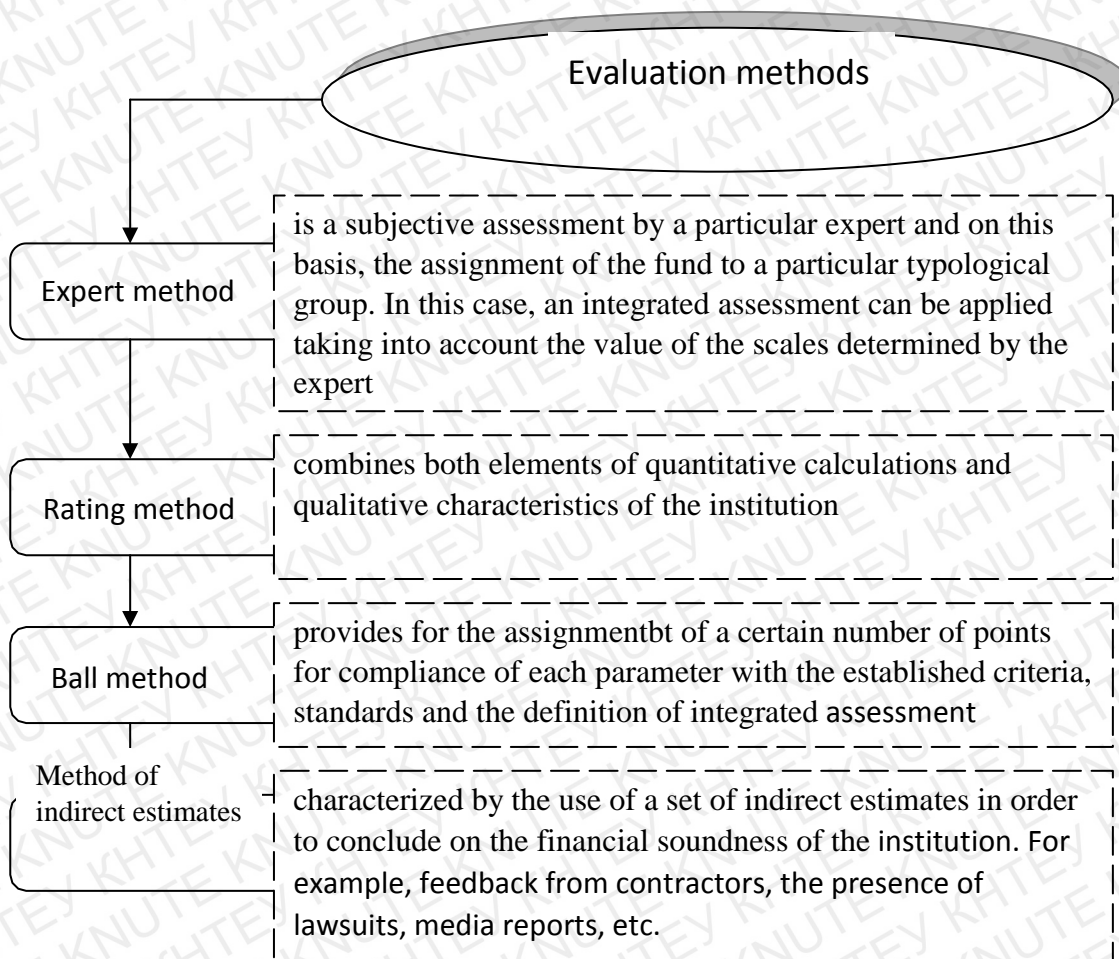


Fig. 3.2. Methods for assessing financial soundness in a qualitative approach\*

\*created by author based on [33]

Thus, today the state regulation of the system of non-state pension provision extends to almost all aspects of the activity of non-state pension funds and is insufficient for preservation, especially for the expanded reproduction of pension resources.



## **CONCLUSIONS AND RECOMMENDATIONS**

### **WHERE ARE RECOMMENDATIONS?**

1. The state pension system is designed to provide citizens with a reliable, sufficient, real and adequate income in old age. However, the problems of socio-economic development complicate the task. Negative demographic and economic trends indicate the need to find additional sources for financial support of citizens in old age and financing the needs of the economy. That is why, as part of the reform of pension systems, there is a gradual reorientation to the accumulative principles of operation. In this aspect, the construction of a three-tier pension system has been identified as a key tool for achieving a balance of interests between the state and citizens in the field of pension provision.

2. NPFs have a special place in the structure of the financial system of the state, because, being cy6ets of the financial market, they maintain the relationship with all other areas of financial relations: state finances, business finances, household finances. The need to develop private pension provision through NPFs confirms their socio-economic significance, which is manifested in: increasing the stability of the domestic pension system and pensioners' incomes, meeting the needs of economic entities in investment pecypcax, developing financial market infrastructure, increasing financial system stability in general.

3. Given the peculiarities of our state, in my opinion, will be important "Lessons" borrowed from foreign experience: the introduction of risk-based supervision, guarantees of profitability, the system of automatic inclusion of employees in funded pension programs, subsidizing individual pension accounts and simplifying the system of joining NPFs.

4. In Ukraine, non-state pension provision is presented in 3 forms: pension accounts in banking institutions, pension insurance contracts in life insurance companies and an account in a non-state pension fund. In practice, the latter two are represented. This is due to the unstable banking system and the actual lack of long-term savings products for the population.

5. The current state of development of NPF does not allow them to fully realize both their own social purpose and financial capabilities. The reason for this situation is the low level of participation of citizens and employers in the private pension system due to low incomes, lack of proper motivation system, ignorance of the functioning of NPFs, distrust of new financial institutions and more.

6. A characteristic trend of the NPF market is its gradual concentration. Thus, the twenty largest pension funds accumulate 85% of the total amount of pension contributions. At the same time, there are a large number of NPFs, which, although registered with Natskomfinposlug, actually serve a small number of participants. The increase in the pension capital of NPFs is mainly due to the quantitative component - pension contributions in favor of participants. At the same time, the NPF market is developing mainly due to the corporate segment of investors.

7. In the field of financial resources management, NPFs prefer conservative investment strategies and a passive approach to investment management. In the structure of the consolidated investment portfolio, the lion's share (65.7%) consists of bank deposits and bonds of domestic enterprises, ie low-risk assets with a stable level of income. The reasons for this situation are: first, the small amount of assets of most NPFs; secondly, the unsatisfactory state of the stock market. The main problems of the latter include: excessive volatility and low liquidity of securities, lack of effective hedging mechanisms, insufficient level of information support and protection of investors' rights, lack of conditions for investing in securities of foreign issuers, etc.

8. For the development of NPF it is necessary to attract funds from the general population. Therefore, a promising direction is the active interest of citizens in individual participation in the NPF and ensuring the reliability of the receipt of additional payments by pension fund participants. To do this, it is necessary to regularly inform citizens about the benefits of NPFs compared to other long-term savings instruments. In addition, it is necessary to provide

guarantees for the implementation of pension benefits by funds, as well as to create additional mechanisms to protect pension savings.

9. Given the small scale of development of private pension funds in Ukraine, to enhance the personal participation of citizens in pensions, it is proposed to use methods developed by international practice, namely: automatic inclusion of participants while retaining the right to withdraw from the pension program. Zealand), providing financial incentives by initiating the practice of co-financing pension contributions (subsidizing individual pension accounts through employer or state contributions), conducting financial and educational programs to familiarize citizens with the benefits of private pension provision, simplifying the service delivery system, providing opportunities to withdraw pension savings ("holiday contribution", use of funds to pay for medical services, education costs), etc.

In order to improve the process of administration of non-state pension funds, the following proposals were developed:

1. A significant impetus for the development of NPFs in the context of pension reform will be their participation in the mandatory funded and occupational pension systems. The mandatory nature of pension contributions and the delimitation of their sources of payment, as well as the maximum coincidence of the participants of both systems allow the introduction of an occupational pension system within the accumulative and at the same time. In my opinion, such an approach will not only ensure easier perception of the pension reform by the society, but will undoubtedly speed up its process.

2. Guarantees for the protection of pension savings, defined by law at all stages of the functioning of private pension funds, are insufficient for the most risky of them - investing pension assets. That is why at the initial stage of functioning of the second level it is necessary to ensure the preservation of pension savings of participants, ie their protection against depreciation and excessive administrative costs. To do this, NPFs must provide a minimum investment

income in excess of inflation and cover the administrative costs of carrying out activities.

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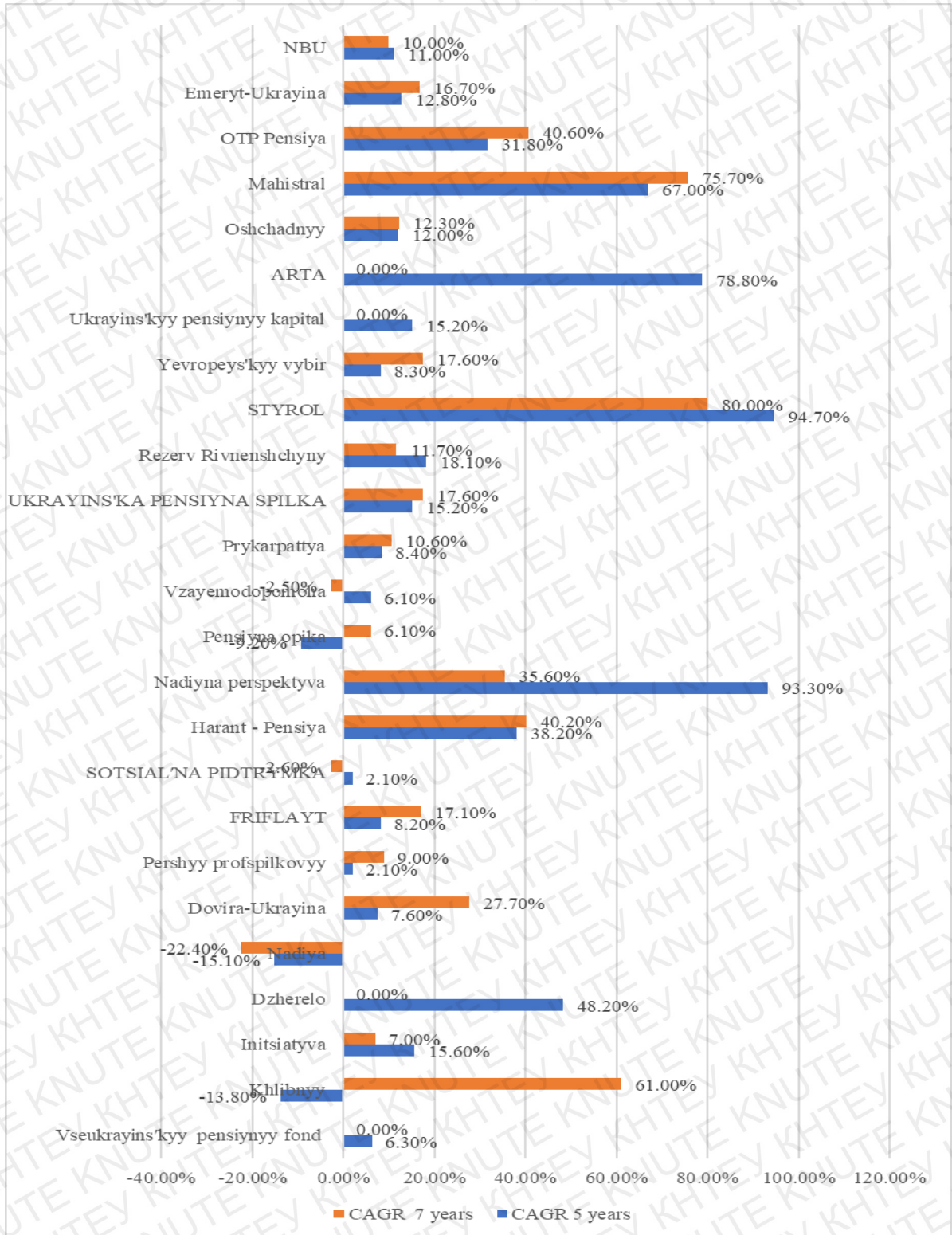
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# APPENDICES

## Appendix A

### CAGR of Ukrainian NPFs for 7 and 5 years (calculation in national currency)



created by author based on [35]

## Ratio of net asset value per participant of NPF of Ukraine, thousand UAH \*

| NPF  | 2012 | 2013 | 2014  | 2015  | 2016 | 2017  | 2018  | 2019  |
|--|------|------|-------|-------|------|-------|-------|-------|
| Open Pension Fund "Nika"                           | -    | -    | -     | 1,37  | 1,33 | 0,95  | 0,7   | 4,2   |
| « Pensiyna Opika «                                 | 1,9  | 3,7  | 4,15  | 4     | 4    | 4     | 2,5   | 1,46  |
| « Vseukrayins'kyy pensiyyny fond «                 | -    | -    | -     | -     | 0,3  | 1,4   | 1,64  | 1,59  |
| « Harant-Pensiya «                                 | 0,57 | 0,74 | 0,77  | 0,81  | 0,8  | 0,83  | 0,85  | 0,87  |
| « Dzherelo «                                       | -    | -    | -     | 0,73  | 1,16 | 3,27  | 3,74  | 3,96  |
| « Emerit-Ukraine «                                 | 0,96 | 0,96 | 0,96  | 1,1   | 1,33 | 1,6   | 1,87  | 1,97  |
| « Yevropeys'kyy vybir «                            | 0,38 | 0,35 | 0,34  | 0,34  | 0,42 | 0,51  | 0,5   | 0,49  |
| « Initsiatyva «                                    | 2,74 | 3,34 | 3,87  | 4,10  | 4,39 | 4,85  | 7,41  | 7,48  |
| « Kremyn»  | -    | -    | -     | 2,70  | 3,92 | 6,12  | 8,64  | 9,04  |
| « Laurus «   | 3,25 | 4,21 | 5,26  | 5,86  | 7,62 | 8,84  | 10,83 | 11,76 |
| « Nadiyna perspektyva «                            | 0,54 | 0,76 | 1,23  | 1,27  | 2,23 | 0,54  | 1,31  | 1,57  |
| « Pensiyyny fond robotnykiv mors'koho transportu « | 0,27 | 0,27 | 0     | 0,01  | 0,01 | 0,01  | -     | -     |
| « Pershyy Naftohazovyy»                            | -    | -    | -     | 0,32  | 0,22 | 5,52  | 5,43  | 5,50  |
| « The first national open pension fund «           | 2,20 | 2,45 | 2,06  | 1,80  | 1,51 | 0,82  | -0,04 | 0,05  |
| « Prykarpattya «                                   | 2,25 | 0,85 | 0,54  | 0,57  | 0,66 | 0,67  | 0,80  | 0,86  |
| « Prychetnist «                                    | 2,09 | 2,72 | 3,52  | 4,36  | 6,08 | 6,22  | 6,48  | 6,09  |
| « Rezerv Slobozhanshchyny «                        | -    | 0,38 | 0,43  | 0,46  | 0,43 | 0,57  | 0,65  | 0,69  |
| « Stolychnyy rezerv «                              | 1,84 | 2,20 | 3,20  | 4,21  | 4,04 | 5,13  | 5,24  | 5,89  |
| « Turbota «  | -    | -    | 0,66  | 2,65  | 5,29 | 7,37  | 11,21 | 12,76 |
| « Ukrayins'kyy pensiyyny kapital «                 | 3,18 | 3,82 | 3,95  | 4     | 5,33 | 7,77  | 7,56  | 7,80  |
| « Ukrayins'ka pensiyina spilka «                   | 2,80 | 2,39 | 2,77  | 3,27  | 4,38 | 6,35  | 7,33  | 6,7   |
| « Natsional'nyy »                                  | 2,53 | 2,34 | 1,90  | 2,03  | 2,15 | 0,57  | 0,57  | 0,59  |
| «Ukrayins'ka oshchadna skarbnytsya»                | -    | -    | 23,31 | 24,39 | -    | 31,41 | 31,58 | 28,43 |
| Sotsial'ni harantiyi                               | 2,20 | 2,30 | 2,50  | 3,00  | 3,19 | 3,49  | 4,44  | 4,53  |
| Dovira-Ukrayina «                                  | 0,60 | 0,51 | 0,53  | 0,59  | 0,69 | 0,72  | 0,76  | 0,78  |
| «ARTA»   | 1,16 | 1,29 | 1,44  | 1,63  | 2,42 | 4,04  | 4,57  | 4,46  |
| «Vzayemodopomoha»                                  | 5,85 | 4,48 | 2,25  | 2,25  | 2,12 | 2,01  | 2,06  | 2,17  |
| «Friflyt «   | 0,39 | 0,4  | 2,11  | 2,66  | 2,97 | 3,39  | 3,66  | 3,79  |
| « Konkord «  | 0,3  | 0,25 | 0,33  | 0,34  | 0,41 | 0,36  | -     | -     |
| « Oshchadnyy «                                     | -    | 0,04 | 0,47  | 0,55  | 0,64 | 0,72  | 0,83  | 0,91  |
| « Pensiyyny kapital»                               | -    | 0,44 | 0,55  | 0,7   | 1,55 | 2     | 2,4   | 2,47  |
| « IFD» Kapital «                                   | 4,3  | 3,66 | 3,60  | 3,52  | 2,86 | 2,31  | -     | -     |
| « Rezerv Rivnenshchyny «                           | 0,41 | 0,79 | 1,23  | 1,66  | 1,92 | 2,52  | 2,98  | 3,24  |
| « Rezerv Ternopillya «                             | 0,16 | 0,25 | 0,31  | 0,37  | 0,42 | 0,41  | 0,57  | 0,61  |
| « Sotsial'na perspektyva «                         | 0,63 | 0,76 | 0,92  | 0,81  | 1,13 | 1,38  | 1,67  | 1,75  |
| «USPP»   | -    | -    | -     | -     | -    | -     | -     | -     |
| «Dnister «   | 1,48 | 1,35 | 1,15  | 1,30  | 1,36 | 1,46  | 1,56  | 1,58  |

*Continuation of Appendix B*

|                                     |           |       |       |      |       |      |      |      |
|-------------------------------------|-----------|-------|-------|------|-------|------|------|------|
| « Zolotyy vik «                     | 4,69      | 0,54  | 0,52  | 0,47 | 0,55  | 0,61 | 0,74 | 0,82 |
| « Ukrayins'kyy pensiyyny kontrakt « | 8         | 7,6   | 8     | 5,57 | 6,71  | 7,1  | 7,77 | 8,23 |
| «Fond pensiynykh zaoshchadzen»      | 0,03      | 0,02  | 1     | 0,96 | 0,95  | 1,39 | 3,42 | 3,35 |
| « Dynastiya «                       | -         | -     | -     | 4,13 | 7,63  | 9,8  | 3,47 | 3,86 |
| «Sotsial'nyy standart»              | 4,74      | 3,92  | 2,19  | 3,23 | 5,33  | 6,21 | 7,15 | 7,56 |
| «Pershyy profspilkovyy»             | 1,64      | 1,78  | 1,16  | 1,22 | 1,22  | 1,28 | 1,37 | 1,38 |
| « Pokrova «                         | 1,01      | 1,15  | 1,31  | 1,4  | 2,06  | 2,72 | 3,15 | 3,03 |
| « Sotsial'na pidtrymka «            | 1,86      | 1,58  | 1,73  | 1,71 | 1,67  | 1,53 | 1,56 | 1,5  |
| « Autoalliance «                    | 0,10      | 0,17  | 0,23  | -    | -     | -    | -    | -    |
| « Pensiya dlya vsikh «              | -         | -     | -     | -    | -     | -    | -    | -    |
| « Universal'nyy «                   | 7,08      | 6,04  | 6,02  | 6,35 | -     | -    | -    | -    |
| « Del'ta «                          | 0,03      | 0,03  | 0,04  | 0,04 | -     | -    | -    | -    |
| « Rezerv Zaporizhzhya «             | 1,42      | 1,61  | 1,61  | 1,78 | -     | -    | -    | -    |
| « Korporatyvnyy standart «          | -         | -     | 2,58  | 2,48 | -     | -    | -    | -    |
| « Khreshchatyk «                    | 7,03      | 5,7   | 3,54  | 3,05 | 4,67  | -    | -    | -    |
| « Svyata Sofiya «                   | -         | -     | 5,51  | 5,59 | -     | -    | -    | -    |
| «Ob'yednanyy pensiyyny fond «       | -         | -     | 5,44  | 5,55 | -     | -    | -    | -    |
| « Chornomornaftohaz                 | 1,31      | 1,48  | 1,28  | 1,48 | -     | -    | -    | -    |
| « Astrum, Pensiyne zabezpechennya « | -         | -     | -     | 2,25 | 3,75  | 3,57 | -    | -    |
| « Brokbizneskapital «               | 22,2<br>3 | 26,74 | 32,58 | 36,8 | 27,56 | -    | -    | -    |
| « UkrsotsFond «                     | 0,28      | 0,33  | 0,37  | 0,46 | 0,55  | 0,70 | -    | -    |
| « Moya pensiya «                    | 1,67      | 1,31  | 1,3   | 2,23 | 1,61  | 2,05 | -    | -    |
| « Forum»                            | 4,69      | -     | -     | -    | -     | -    | -    | -    |
| «EU»                                | 0,77      | -     | -     | -    | -     | -    | -    | -    |
| « Chornomors'kyy rezerv «           | 1,17      | 1,45  | 1,58  | 1,88 | -     | -    | -    | -    |
| «Mahistral»                         | 0         | 0,02  | 0,03  | 0,06 | 0,07  | 0,08 | 0,1  | 0,1  |

*created by author based on [9]*