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# ASSESSMENT OF THE ACCUMULATIVE PENSION SYSTEM

## ABSTRACT

European integration processes relate to all aspects of the country's life and require progressive changes in the reform of the pension system, primarily organizational, legal, and accounting in order to preserve and improve its effectiveness. The purpose of the article is the analysis of the current system of pension provision (first level - joint), justification and necessity of introduction of accumulative - second level. Regarding the application of the second level, in 2005, the Cabinet of Ministers adopted a decree "Strategy for the development of the pension system" with the determination of their gradual implementation, which was never implemented.

It was found that the diversification of pension financing sources is low, the dominant component in the pension system of Ukraine is the solidarity component. The increase in the role of the accumulation principle is due to the influence of demographic and socio-economic factors, and its development is restrained by low incomes of the population and inflationary processes. The differences between the joint and accumulative pension systems, which affect the level of payments to pensioners of Ukraine compared to foreign countries, are considered, the role of the accumulative system in the social protection of the population, the mechanism for its gradual transition, the peculiarities of the operation of the accumulative fund, the use of the investment potential of pension savings, as well as the prospects are recognized implementation in Ukraine. The reasons that inhibit the implementation of the accumulative pension system are indicated and the need to take them into account is indicated, using the experience of successful foreign countries. This will lead to an increase in the income of the Pension Fund, expansion of the possibility of using investments, reduction of the risk of pension savings and will determine the possibilities of its implementation after the end of the war.

**Keywords:** budget revenues, investments, inflation, internal and external control, accumulation system, taxation, tax burden, pension provision, pension fund, social security funds

**JEL Classification:** G23, G28, H62, H69, M40

## INTRODUCTION

The pension system of Ukraine in its current form has been in operation since 2004 and formally consists of three levels. At the same time, it was assumed that pension payments to future pensioners will be formed from three independent sources, which will balance the pension system and raise the standard of living of Ukrainians in old age. Today, unfortunately, only the first (solidarity) level is used, in which deductions from wages are made in the form of a single social contribution (hereinafter referred to as the Social Security Contribution), which is 22%, and these funds are immediately redistributed and paid to current pensioners. Thus, in 2022, the Pension Fund of Ukraine (hereinafter referred to as the PFU) received 594.2 billion UAH, and subsidies from the State Budget – 202.7 billion UAH, which is almost 50% of PFU revenues [31].

To date, the solidarity system cannot provide a decent level of pension, primarily due to demographic reasons (the ageing population of Ukraine - a constant increase in the number of pensioners and a decrease in the number of working people). Funds coming to the pension fund are not enough to increase the coverage of payments to pensioners. To avoid a deficit, significant additional sums are allocated from the state budget every year. The accumulative system, on the other hand, has larger monetary resources that

can be used to pay pensions to persons who make contributions to the pension insurance system from material funds earned by them during the period of labour activity, however, on the other hand, accumulative systems are available in their pure form without the so-called grid of security, unable to protect elderly citizens, including even those who earned an average income as a worker, from the risk of finding themselves in a difficult financial situation after retirement (the experience of Chile and other Latin American countries) [16, P. 56–57].

Thus, the implementation of the accumulative pension system is a long-term process, but it must be implemented after the end of the war and the creation of organizational and methodical conditions. A qualitative and positive final result should be expected only after a few years. The experience of many countries shows that it is a long way to the desired result. For a high amount of pension payments, it is necessary to build a reliable scheme of the pension system: the development of the economy, the level of wages, the increase of the minimum wage, and the maximum reduction of inflationary processes. Thus, it necessarily affects the growth of pension payments in the future. The transition to the accumulative pension system is necessary because pension expenses do not provide pension payments at the level of minimum guarantees provided for by the International Labour Organization Convention on Minimum Social Security Standards. The creation of an appropriate system of regulation and supervision in the field of accumulative pension provision and the corresponding legislative basis is a necessary condition for the effective and efficient functioning of this system.

## LITERATURE REVIEW

The scientific works of leading domestic and foreign scientists are devoted to the problem of evaluating the accumulative pension system, and the definition of ways of their improvement and implementation in practical activity is covered both in the economic literature of Ukraine and in foreign countries (Azerbaijan, Great Britain, Spain, the Netherlands, Germany, Poland, USA, etc.). A significant contribution to the reform of pension provision in Ukraine was made by: Andriiv V.M. [4], Vitka Yu.V. [48], Zazadnyi B.A. [51], Kaliuha E.V. [14], Korchynskiy I.O. [15], Kuznyetsova A. [3], Chugunov I.Ya. [6], Yu.I. Skulysh. [38], Sokolovska G.I. [39], Yu.V. Sokorynskyi. [40], Shalievska L.I. [34], Shirant A.A. [36], Shumylo M.M. [37], Yaldin I.V. [50] and others. In Ukraine, the question of the need to reform pension provision has been raised for more than a dozen years. The opinion of domestic scientists boils down to the need to focus on the positive experience of other countries. This issue was also studied by foreign scientists, namely Abdullayeva RSG [1], Berry C. [5], Hinrichs K. [12], Rutecka-Gora J. [33], Staveley-O'Carroll J. [41], Van Praag BMS [47], Walczak D. [49] and others.

In particular, in the scientific work of Abdullayeva RSG [1], the degree of state regulation of the pension system in 31 countries of the world (including developed, developing, post-socialist and countries known for their revolutionary reforms of the pension system) was assessed, which allows assessing the social consequences of the reforms. For the first time, the author created a methodology that allows measuring the degree of state regulation of the pension system, namely the Index of Liberalism (Dirigisme) of the pension system (IL(D)PS), which is calculated on the basis of four indicators: the ratio of private pension assets; the ratio of state pension costs; social security tax rates for employers; restrictions on investment of pension funds.

In the scientific work of Berry C. [5], it is determined that pension provision in Great Britain has undergone upheaval for several decades, as the already liberal regime gradually liberalized, which led to the deployment of a defined contribution provision through a pseudo-mandatory automatic enrollment system. However, the system does not work because it replaces the institutional guarantors needed for pensions with vague notions of individual responsibility.

And Rutecka-Gora J. [33] studied the systems of additional professional and individual pension provision in the countries of Central and Eastern Europe (Bulgaria, Estonia, Latvia, Lithuania, Poland, Slovakia and the Czech Republic). The conducted analysis of the regulation of voluntary pension systems by age showed the main advantages and disadvantages of the proposed additional provision in old age.

Polish scientists Walczak D., Krupa D., Zoladkiewicz-Kuziola A. [49] in their work evaluated the pension system of Poland in three dimensions: consumption smoothing, protection against poverty and differences in the system itself.

Hinrichs K. [12] conducts an analysis of the pension reforms of the countries of the European Union, which took place during the last 30 years. As population ageing continues and intensifies, efforts are aimed at containing future increases in the contribution rate, improving the pension dependency ratio, reducing the payout ratio, and injecting financial resources into the system.

In turn, Van Praag BMS, Hop J. [47] consider the components of pension provision formed at the expense of voluntary individual savings, mandatory fully accumulative professional pension systems, mandatory social insurance financed by a distribution system, and accumulation of cash.

## AIMS AND OBJECTIVES

Given the relevance of the research topic, the purpose of this article is to analyze the current system of pension provision (first level - joint), justification and necessity of introduction of accumulative - second level. In order to realize the set goal, it is necessary to solve the following tasks:

- to determine the expediency of introducing an accumulative pension system, taking into account its experience in foreign countries;
- analyze the prepared bill on the accumulated pension system (identify its problematic issues);
- implementation, subject to appropriate conditions, of the accumulative pension system.

## METHODS

The research was carried out using the following methods: grouping - pensioners by the amount of pensions (Figure 1) - up to 2,000 UAH - 0.6%, from 2001 UAH up to 3000 UAH – 29.8%, 3,001 UAH up to 4000 UAH – 21.3%, 4,001 UAH up to 5,001 UAH – 15.3%, 5,001 UAH up to 10,000 UAH – 23.1%, above 10,000 UAH - 9.9%; supplementary pension payments depending on age and special merits (Figure 2): 70–75 years – 300 UAH, 75–80 years – 456 UAH, for 80 years – 570 UAH; for special services to Ukraine - from 517.8 UAH. up to UAH 1,035.6; the share of the Pension Fund's revenues - own revenues from 52.6% (2017) to 60.5% (2022), subsidy sources (State income and other sources) from 39.5% (2022) to 47.4% (2017) year); comparison - of the current systems of pension provision of pensioners in USD in Ukraine (minimum value 125.7) and in foreign countries - the maximum in Norway - 2000), i.e. more than 15.9 (Figure 4); of the balance sheet method - with the application of the minimum and maximum amount of pension provision, the minimum wage in Ukraine - from October 1, 2022. until June 1, 2023 - 6,700 UAH, the population (1990) - 45.6 million people. up to 41.2 million people. (2022); statistical and graphic analysis - the number of pensioners in 2010. 13.7 million people, as of January 1, 2022. 10.8 million people, i.e. decreased by 2.9 million people in 12 years. and the population, respectively, decreased by 4.7 million people during the specified period. (from 45.9 million people to 41.2 million people), that is, their downward trend (Table 2); observations and studies (Figure 5) regarding the exchange rate of the USD from 1.76 UAH (1996) to 36. 56 UAH (2023), that is, it increased by 20.8 times and, accordingly, inflation in 2022 due to war events amounted to 126.6%.

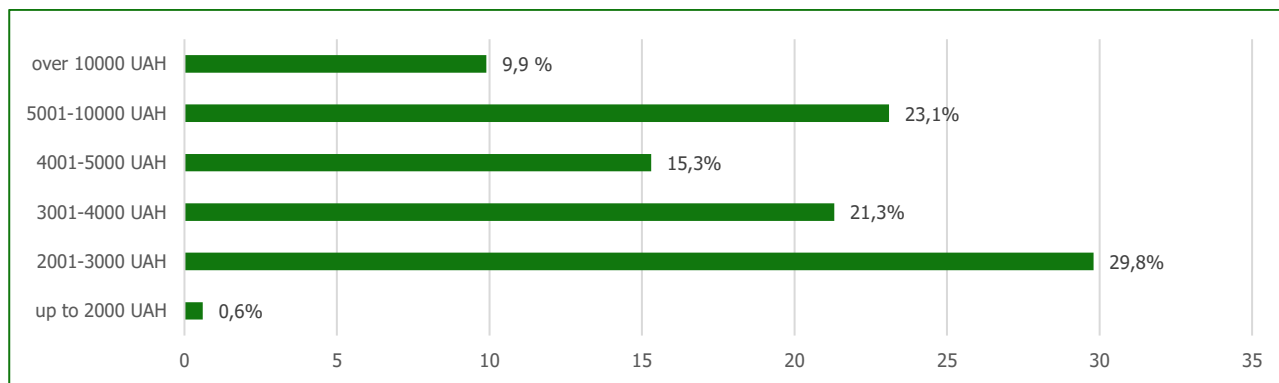
## RESULTS

Ukraine currently has a three-level pension system, but since its introduction (1991), as noted, only the first level - the solidarity system - has been functioning. The need to introduce accumulative, second-level pension provision has been discussed for more than 10 years, which is due to the need to increase pension payments for the population [1].

According to the Ministry of Social Policy of Ukraine [43], the number of pension recipients in the country as of January 1, 2023, is more than 10 million people. However, despite the scale of this social program, there are a number of problems associated with its functioning.

According to experts, it is advisable to agree with it, since there is a different method of pension calculation for certain categories of pensioners (judges, prosecutors, Chernobyl workers, customs officers, scientists, officials of various levels, etc.), which leads to significant discrepancies between the minimum and maximum pension. From October 1, 2022, the amount of the minimum and maximum pension according to age is equal to one (2093 UAH) and ten (20930 UAH) untaxed minimum incomes of citizens [17; 18]. Men and women are entitled to an old-age pension after reaching the age of 60, 63 or 65. In some cases, pensions may be granted before reaching the age of 60.

Recently, the number of pensioners who receive less than 2,000 UAH has decreased in Ukraine, but they still exist and their average pension is more than a thousand UAH - 1,226.77 UAH. From January 1, 2023, the subsistence minimum per person per month is set at 2,589 UAH [17], and the level of pensions is shown in Figure 1.

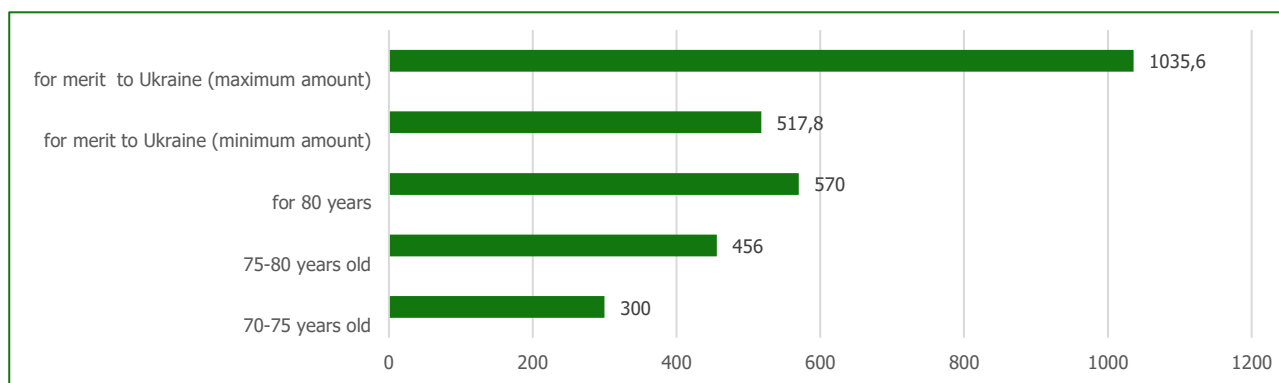


**Figure 1. The level of pensions in Ukraine as of January 1, 2023.** (Source: completed by the authors according to source [27])

According to the Law of Ukraine "On pensions for special services to Ukraine" [22], additional payments for disabled persons from 20% to 40% of the subsistence minimum are provided, and the amount of additional payments depends on the type and number of awards. Both holders of Soviet awards and modern ones will be able to receive pension supplements. The supplement is calculated from the subsistence minimum per person for pensioners. In addition, since 2023, separate allowances have been established in Ukraine for military pensioners: the Hero of Ukraine with the awarding of the "Golden Star" order, citizens who, after 2014, were awarded the Order of Bohdan Khmelnytskyi of three degrees "For Courage" or "Princess Olga".

Thanks to these measures, approximately four million pensioners (51.1%) receive a pension in the amount of 2,001 to 3,000 UAH - 29.8% and from 3,001 to 4,000 UAH - 21.3%.

In recent years, the government of Ukraine made a decision to increase the level of pension provision. In particular, supplementary payments to old-age pensions were introduced (Figure 2).



**Figure 2. Supplements to pensions depending on age and individual merits in Ukraine as of January 1, 2023.** (Source: completed by the authors according to source [22;26])

In March 2023, the indexation of pensions for 10.5 million Ukrainians took place at the level of 19.7%, which is a positive direction for the material support of pensioners.

Further studies show a rapid decline in the Ukrainian population, especially the number of able-bodied people. As of January 2023, according to the data of the Ministry of Social Policy, there were 10.8 million pensioners in Ukraine [24], after the war there will be significantly more of them, taking into account the disease of COVID-19, military pensioners, recipients of survivor's pensions, disability pensions etc. In March 2023, the number of working Ukrainians and the number of pensioners equaled for the first time in the history of the country - in fact, one worker supports one pensioner (10.7 million payers for 10.8 million pensioners). The existing trend is rapidly deteriorating and, in the future, this gap will increase even more.

The prerequisites for creating an accumulative pension system are based on the fact that a person must have a single account where he saves money for old age. Today, business entities pay a single social contribution, which is sent to the Pension Fund. It is foreseen that when the employee retires, the funds that will come from working employees will support him and pay him a pension. Today, as noted, the employee/pensioner ratio is 1:1, and before the war, the pension fund

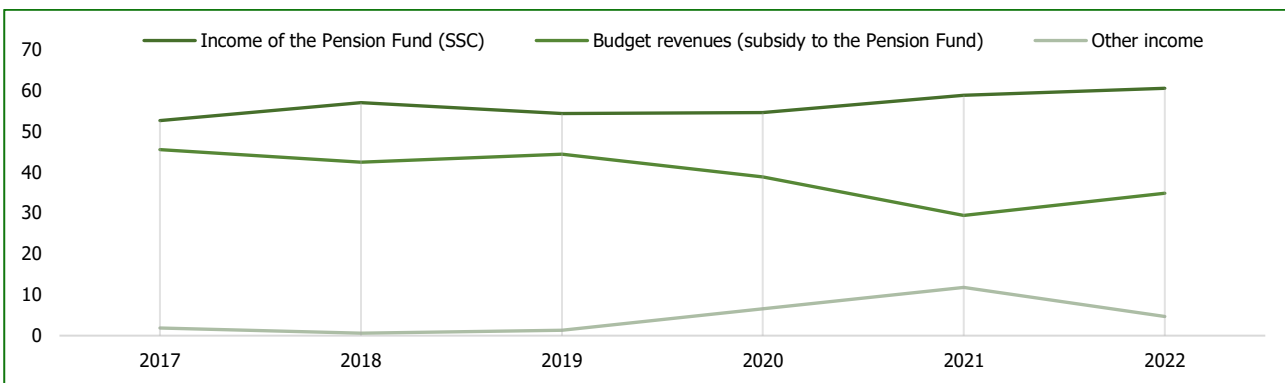
was subsidized, and today the situation is even worse, and it is unlikely to change for the better after the war. One of the consequences of such a situation is the low level of pension in Ukraine (minimum pension after indexation is 2,304 UAH, which is clearly not enough to live in war conditions since inflation for 2022 exceeded 26%). The structure of the Pension Fund's income is shown in Table. 1.

**Table 1. Components of the Pension Fund.** (Source: completed by the authors according to source [31])

Period	Share in total revenues, %		
	Pension fund	Budget revenues	Other revenues
2017	52.6	45.5	1.9
2018	57.0	42.4	0.6
2019	54.3	44.4	1.3
2020	54.6	38.8	6.6
2021	58.8	29.4	11.8
2022	60.5	34.8	4.7

Since the Pension Fund for the last analyzed years (2017-2022) is subsidized, that is, it covers only 50-60% of needs, the rest of its replenishment is directed from budget revenues and other revenues.

Figure 3 shows the constant increase in the Pension Fund's income.



**Figure 3. The dynamics of the formation of the Pension Fund.** (Source: completed by the authors according to source [31])

According to the regulatory document "Convention on Minimum Standards of Social Security" (ratified in 2016) [8] it is not possible to ensure a decent level of pension payments in Ukraine since the replacement ratio (the ratio of the amount of the pension to the employee's salary) has already decreased to 28% at a minimum level of 40%. The normal level of the replacement rate in Europe is considered to be 60%.

The draft law "On accumulative pension provision" [10] has been registered in the Verkhovna Rada. According to the explanatory note, it was developed with the aim of transforming the pension system of Ukrainian citizens by creating an additional basis - a mandatory savings system that will allow citizens to make additional individual pension savings for old age.

For this purpose, it is planned to open savings accounts for Ukrainians and credit them with part of the social contribution from wages and the same amount from state subsidies. It is assumed that these funds will work for the economy and should become another source of payments at retirement.

At the same time, there are risks regarding the implementation of the accumulative pension system.

Among the risks, according to Shapravskiy R. [35], today is not the best time to launch the reform, the burden on the state budget and the lack of guarantees that the money will not "disappear". Until the beginning of 2022, the organizational and methodological issues of the accumulative pension were not actively resolved for two reasons: firstly, it is necessary not to unbalance the solidarity pension system, and secondly, not to increase the tax pressure on businesses and citizens. Until this period, submitted bills on reforming the pension system remained at the same level in the parliament, that is, without its movement. At the beginning of 2022, the Draft "Law on mandatory accumulated pension provision", which

defined the rules of the accumulated pension, was submitted. In particular, future pensioners will be able to receive not only a solidarity pension but also an accumulation pension. That is, the more you save, the more you will receive, that is, the income depends on the amount of contributions.

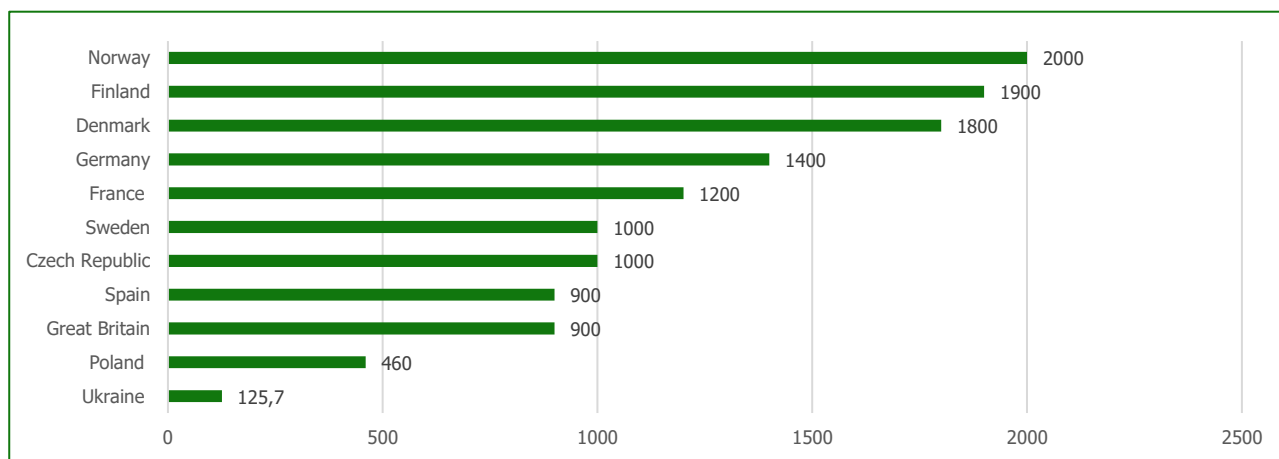
It was initially planned to admit citizens under the age of 35 to the second level so that they would have time to accumulate enough funds before retirement. In the end, it was decided that from January 2023, contributions of working Ukrainians under the age of 55 will be credited to personal accounts. But they will not be able to receive a seniority pension or an old-age pension. At the same time, the burden on the business and the employees themselves will not increase. At least as long as the cumulative contributions will remain within the limits of the Social Insurance Institution - 22% of the salary, and from this money the Pension Fund currently, as noted with the subsidy, pays funds for a joint pension.

The essence of the accumulative pension reform, which is planned by the government, is that it was planned to direct 1% of savings in the first year, 1.5% in the following year, and 2% a year later. It is planned to allocate a similar amount from the State budget, as a result of which contributions will be doubled. In Ukraine, the planned labour fund for the year is about UAH 1.5 trillion, and taking into account budget subsidies, the accumulation fund will amount to UAH 30 billion.

For the first three years at least, the savings accounts of future pensioners will be entrusted to the state-authorized fund, which will be established by the Cabinet of Ministers. Starting from 2026, commercial structures (banks and private funds that have passed verification for such work) will be allowed to contribute to pension savings. After five years, the account holder must decide whether to stay in the state fund or switch to another (if better conditions for service and savings yield are offered). The main task of the savings fund is not only to preserve funds but also to multiply and ensure investment income. To do this, it is necessary to adopt the Draft Law "On the creation of a system of multiplying and guaranteeing pension payments to participants of the accumulation level" [42]. At the same time, it was stated that an alternative to state loan bonds can appear only with more active development of the stock market in the country. At the same time, 20% of assets can be cash, company shares, bonds and mortgage bonds of Ukrainian issuers, securities whose repayment is guaranteed by the governments of countries with a high credit rating, etc. Funds from a personal account will become available not only when reaching retirement age, but also when treatment (including family members) is necessary for serious and critical diseases, such as cancer, heart attack, stroke, kidney failure, etc. The contribution will be returned when moving to a permanent place of residence abroad or in case of receiving a disability of the I or II group.

The law will also make it possible to choose and calculate a convenient method of receiving an accumulated pension - monthly, but not less than 10 years from the date of appointment or once a month until the end of life. A husband/wife can receive a pension after the death of one of the spouses, but only after reaching retirement age. And in any case, it is provided that savings will not be lost even after a person's death, and this money can be inherited.

Pensions for workers should protect retirees from poverty and allow them to enjoy a decent standard of living. They are the main source of income for around a quarter of the population of the European Union, with public pensions being the main source of income for older people in Europe. The European Framework of Social Rights defines the following pension rights: the right of workers and the self-employed to a pension compatible with contributions and ensuring an adequate income, the right to equal opportunities to obtain pension rights for both women and men, the right to resources that ensure a decent life in old age. The monthly pension level in Western countries is shown in Figure 4.



**Figure 4. Average monthly pensions in European countries in 2021, USD.** (Source: completed by the authors according to source [12; 20; 27])

As a result of existing negative factors of influence, pensions paid by the Pension Fund in Ukraine are quite low, especially in comparison with pension payments to pensioners in foreign countries (see Figure 4). Ukraine (USD 125.7) has one of the lowest pensions in Europe, while Norway (USD 2,000) is almost 16 times higher.

When retiring, Ukrainians do not receive even 30-40% of the average salary in the country, and therefore cannot count on the same standard of living as when they were of working age. The cumulative pension, if it does not solve this problem, will at least somewhat improve the solvency of future generations of pensioners.

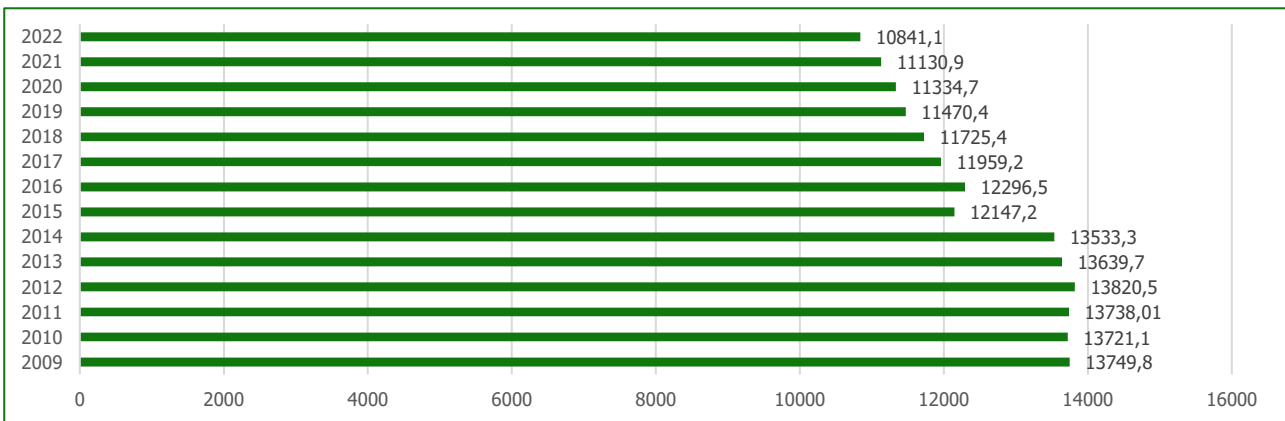
A low birth rate, a high death rate and other negative factors affected the decrease in the population from 51.8 million people (1990) to 41.2 million people. (2022).

**Table 2. The population of Ukraine from 1990 to 2022.** (Source: completed by the authors according to source [28])

Date, on	Number, million	Date, on	Number, million	Date, on	Number, million
01.01.1990	51.8	01.01.2001	48.9	01.01.2012	45.6
01.01.1991	51.9	01.01.2002	48.5	01.01.2013	45.6
01.01.1992	52.1	01.01.2003	48.0	01.01.2014	45.4
01.01.1993	52.2	01.01.2004	47.6	01.01.2015	42.9
01.01.1994	52.1	01.01.2005	47.3	01.01.2016	42.8
01.01.1995	51.7	01.01.2006	46.9	01.01.2017	42.6
01.01.1996	51.3	01.01.2007	46.6	01.01.2018	42.4
01.01.1997	50.8	01.01.2008	46.4	01.01.2019	42.1
01.01.1998	50.4	01.01.2009	46.1	01.01.2020	41.9
01.01.1999	49.9	01.01.2010	46.0	01.01.2021	41.6
01.01.2000	49.4	01.01.2011	45.8	01.01.2022	41.2

As noted, there are fewer people working in the country compared to pensioners, and therefore the maintenance of the latter costs more and more to the State budget, which subsidizes the payment of pensions. The dynamics of the number of pensioners in 2009-2022 are shown in Figure 5.

According to scientists, negative demographic processes occur faster in Ukraine than in a number of other countries. According to the World Bank, more than 7 million people in Ukraine are below the poverty line. An analysis of the submitted draft law "On accumulative pension provision" [10] shows that there are a number of unfinished provisions regarding the impossibility of implementing an accumulative system of deductions.



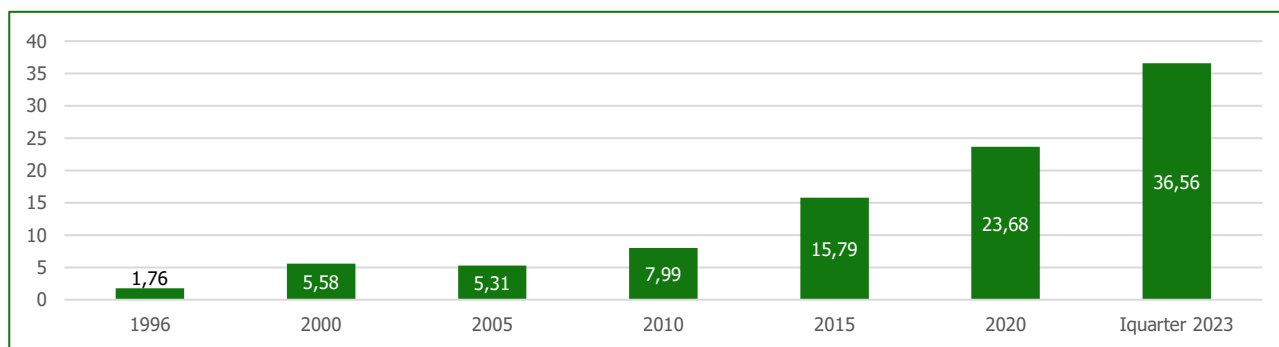
**Figure 5. Dynamics of the number of pensioners in 2009-2022.** (Source: completed by the authors according to source [13; 20])

So Shapravskiy R [35] believes that: the current state of the economy will not give the desired return on these savings, taking into account the martial law and the existence of the "covid" pandemic. In addition, the third pension level (non-state) is considered a "failed experiment", since few participants were registered in 14 years and, accordingly, a small volume of assets was formed; the negative experience of Eastern European countries (they had smaller economies, financial infrastructure, and investment tools are more developed than in Ukraine) shows the following: in Hungary, the authorities, in fact, nationalized savings from private funds; in the Czech Republic, the accumulative level was completely

eliminated and it was introduced only in 2013; in Poland, the tools for investment are limited by the pension fund, that is, by reducing its profitability.

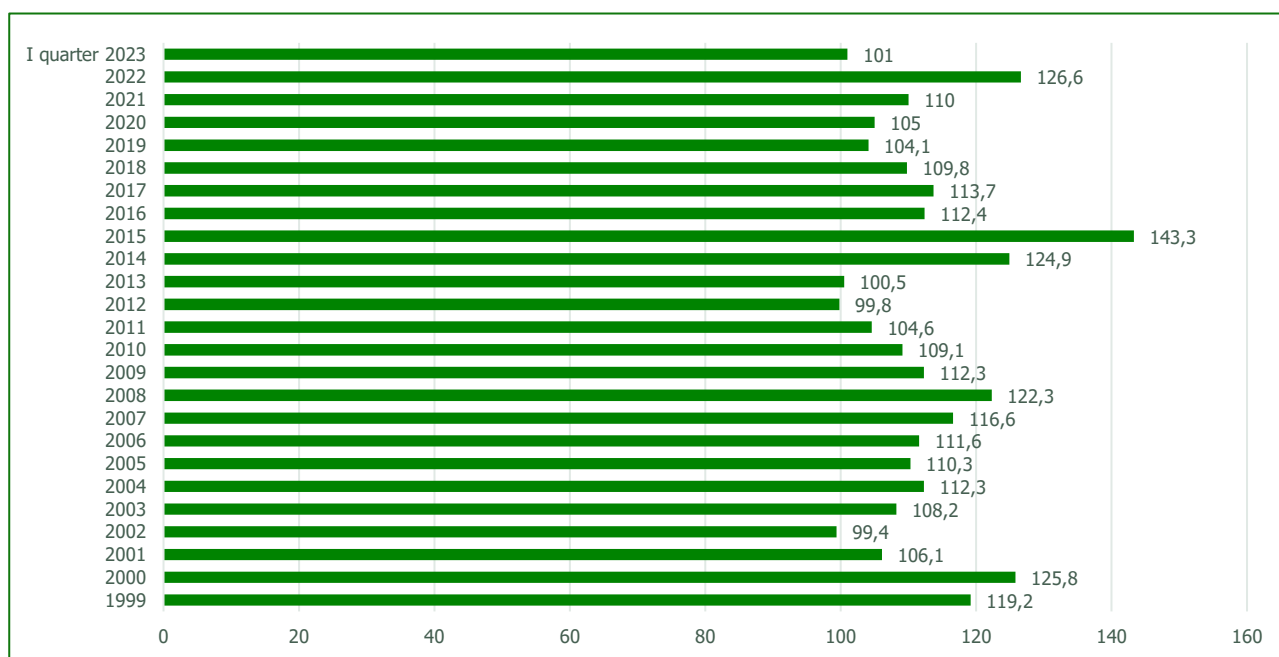
Lobanova E. and Kompan I. [24; 45] believe that there are a number of unfinished provisions regarding the impossibility of implementing a cumulative deduction system: determination of the place of investment of invested pension contributions, receipt of taxable income, determination of the tax burden, control (internal and external), risk management regarding the determination of tax and providing information to employees; creation and control of the Unified Social Register (instead of the State Register of mandatory state social insurance), personal electronic cards, accounting and reporting of payers in the accumulation system, state investment of pension contributions, as well as the possibility of excluding them from the accumulation system; a clear definition of the composition and control of the "pension assets" of the authorized fund (the draft law states that their size is at least 80% of securities); the currency of pension assets must be 80% Ukrainian and denominated in hryvnias for the purposes of applying risks (hryvnia has not become the investment currency today).

Figure 6 shows the change in the exchange rate (USD) for the period from 1996 to the first quarter of 2023. That is, if in 1996 one USD was equal to 1.76 UAH, then already in the first quarter of 2023 its value reached 36.56 UAH, i.e. increased by 20.8 times).



**Figure 6. Exchange rate of the UAH to the USD for the years 1996–2023.** (Source: completed by the authors according to source [19])

The presence of negative factors in the state (corruption, high inflation (Figure 7), recovery of the economy in connection with military actions) does not contribute to the implementation of the accumulation system in the near future. Inflation for the period 1999–2023 was absent only in 2002 and 2012. Accordingly, in 2022, in connection with military events, its level was 126.6%.



**Figure 7. Inflation index in Ukraine for 1999–2023.** (Source: completed by the authors according to source [7])

It is foreseen that the filling of private pension funds will be carried out at the expense of state funds, it is also foreseen to reduce the rate of the single social contribution, but entrepreneurs must transfer the difference to pension funds (accordingly, the deficit of the State budget and the Pension Fund will increase even more):

- the functioning of the accumulative pension system and the control and identification of risks requires the state to spend significant funds every year: to finance the pension treasury, various competition commissions, management companies and bodies for monitoring their activities;
- a high level of inflation and an increase in the USD exchange rate (see Figures 6, 7) by almost 21 times, the functioning of private pension funds (setting a commission of up to 7%) will not contribute to the introduction of an accumulative pension system, i.e., to solve this problem, investment projects must bring very large income to cover said expenses;
- private pension funds may go bankrupt, and their client's funds will be lost; in addition, the state is tempted to use citizens' funds, which have been stored for many years, to solve current financial problems (for example, Hungary and other countries);
- the right and exercise of control should be established to prepare financial statements according to international standards, to monitor the change of their savings daily and to change the functioning of the fund at any time without incurring fines.

We believe that the deficit of the solidarity system in Ukraine has arisen as a result of a change in the method of calculation of social security. That is, until 2016, the pension fund was formed from two sources (calculation of social insurance on wages - from 36.76% to 49.7% (depending on the class of professional risk) and deductions from wages (from 2% to 6.1%) Since January 2016, the SSC rate has been reduced to 22% without taking into account the professional risk class and the withholding from wages has been completely eliminated. The existing difference is covered by state subsidies (state budget funds are sent to the Pension Fund, received from other taxes). due to the appointment, the proposal to direct the SSC to savings accounts is unrealistic. A semi-friendly version of pension savings, with the presence of shortcomings and risks, can give an impetus, both for the economy and for a reassessment of the personal financial situation of Ukrainians. In any case, these risks will affect pensioners, which will usually lead to negative consequences.

In addition to highlighting the problematic issues, it is advisable to dwell on the proposal of Yu. Boyko [35], who claims that the main prerequisite for the implementation of the accumulation system is the end of the war and the creation of the corresponding prerequisites (the construction of the system itself - the approval of the law and the establishment and regulation of all structural subdivisions, which will accordingly take some time). In addition, the supervisory body (supervisor) should get the necessary time when the growth of the pension industry accelerates.

Guarantees of preservation of pension contributions must be justified. To this end, politicians and citizens must understand that guarantees are not free: in the end, someone must be responsible and pay for them, under adverse conditions. Unfavourable circumstances can be conditionally divided into political, economic and infrastructural ones (inherent in the professional participants of the process). As a result, it is combined into one integrated risk: the variability of the expected size of accumulations. Guarantees can be paid by the state (citizens through taxes), participants (with contributions or assets), service providers (with their own funds), centralized institutions (guarantee fund from predetermined sources).

Accordingly, the guarantee fee reduces the final savings: 1% of the deductions for the guarantee is equal to the loss of 20% of the final savings over the investment horizon of 40 years. The implementation of guarantees, as a balanced system of relationships, with all their positive features, trust in the system, also carries risks: moral hazard (neglect of risk, because contributions are insured), complex behaviour, excessive caution of providers.

An institution for the storage of savings is mandatory and must be reliable. At the initial stage of choosing a pension provider, we consider it expedient to create a default fund under the close supervision (control) of the state while simultaneously ensuring the independence and impartiality of its governing body and involving market institutions for effective asset management.

For other subjects of the accumulation system, this institution can be an example of organization, implementation and control of management and investment standards. Fund management is "by default" and crucial to the success of the reform.

## DISCUSSION

The content of the prepared draft law "On accumulative pension provision" [10] is widely discussed in scientific and political circles and is almost unanimously supported as a well-founded and stabilizing body. At this stage, only the solidarity system cannot adequately face socio-economic and demographic challenges. The highest level of social protection for pensioners is provided by those countries where several levels (component parts) of pension provision function [5; 12; 38; 49]. The functioning of the national solidarity pension system in the conditions of transformational processes has negatively affected the social justice of pensioners, in particular, there is a large discrepancy in the amount of pensions. The crisis of the domestic solidarity system of pension provision causes the acceleration of the introduction of the mandatory accumulative component of the pension reform. At the same time, certain concerns are expressed regarding the storage system and emphasis is placed on the creation of appropriate prerequisites (a proper system of control over regulation and supervision). To date, neither among the adopted acts regulating the accumulative pension system, nor among the registered draft laws are there any that would consolidate supervisory functions in the field of accumulative pension provision and the necessary powers, independence and institutional capacity of the supervisory body.

According to Yu. Boyko [35], it is expedient to reduce the debatable issues regarding the application of the accumulation system to five areas of control: the conditions for starting the reform, guaranteeing the preservation of contributions, managing money, purchasing assets, and creating a balanced system of state supervision.

Conditions for starting the reform. In the process of its implementation, it is necessary to: ensure a social contract between the state (offers a savings system), politicians (they vote for it) and citizens; carry out parallel processes: regulatory support, authorization of providers, creation of fund infrastructure; ensure a deduction in the amount of 5-7% and provide for a preparatory stage of at least 12 months (after the end of the war and the presence of a strong regulator - the adopted Law and obtaining the necessary potential by the supervisory body and its growth with the pension industry.

Contribution preservation guarantees are a complex balanced system of relationships. They cannot be free and are an insurance case in case of adverse circumstances. Conventionally, they can be divided into political, economic and infrastructural ones (inherent in the professional participants of the process). As a result, this is combined into one integrated risk: the variability of the expected size of accumulations. Guarantees and their payments reduce final savings and can be paid by the state (citizens through taxes), participants (contributions or assets), service providers (own funds), centralized institutions (guarantee fund from predetermined sources).

Money management. To this end, it is necessary to provide a pension provider and a reliable and efficient method of savings for such individuals. We support the opinion that the correct solution would be to create a fund by default under the close supervision of the state while ensuring the independence and impartiality of its governing body and the involvement of market institutions for effective asset management (implementation and control of management and investment standards). The development of market infrastructure implies competition when citizens will be able to choose between a default pension fund and an authorized provider.

Purchase of assets. For effective implementation of management and distribution of funds entrusted by participants, a structured structure of investment portfolios is necessary.

The creation of a balanced system of state supervision of the pension industry will allow it to lay a reliable foundation for the further sustainable and effective development of mandatory accumulative pension provision in Ukraine.

We support the proposal of the Minister of Finance Serhiy Marchenko [23] that the Ukrainian government should wait to introduce the pension reform. In particular, before a full-scale invasion, the idea was fully supported and aided in its promotion. But today the ministry supports the reform, but in the conditions of war, its implementation may be too difficult a task. In order to launch the accumulation system (second level), a special bill must be adopted (yet not yet adopted), where the details of the functioning of this level, the amount of contributions, proper control of the structures and participants of the accumulation level should be prescribed.

## CONCLUSIONS

Thus, the idea of introducing an accumulative pension system in Ukraine has long been expedient and timely, so that our future pensioners do not find themselves below the poverty line after reaching retirement age. Today, the current state of war only worsens their condition in the conditions of a sharp decline in the economy, when prices rise almost every day, and pensions, despite periodic increases, remain low. In connection with the above, it is necessary to take into account all risks, to think over mechanisms of accumulation so that Ukrainians do not lose the funds saved for many years, to take

into account the experience of other successful countries. In the case of the proposed combination of a well-thought-out and state-protected system, Ukrainians can finally get a chance for a dignified old age.

The reform of the existing pension system in the state, which will affect every working Ukrainian, should not be implemented with critical mistakes that will lead to the loss of funds for future pensioners. In this regard, we support the warnings of experts regarding the finalization of the draft law and its implementation after the end of martial law in the country.

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## ОЦІНКА НАКОПИЧУВАЛЬНОЇ СИСТЕМИ ПЕНСІЙНОГО ЗАБЕЗПЕЧЕННЯ

Євроінтеграційні процеси стосуються всіх аспектів життєдіяльності країни та вимагають прогресивних змін у реформуванні пенсійної системи, у першу чергу організаційному, правовому, обліковому, задля можливості збереження та покращення її дієздатності. Метою дослідження є аналіз чинної системи пенсійного забезпечення (першого рівня – солідарного), обґрунтування та необхідність уведення накопичувального – другого рівня. Стосовно використання другого рівня – ще 2005 року прийняте розпорядження Кабінету Міністрів України «Стратегія розвитку пенсійної системи» з визначенням поступового впровадження накопичувальної системи, яка так і не була впроваджена.

Виявлено, що диверсифікація джерел фінансування пенсій низька, домінуючим у пенсійній системі України є солідарний компонент. Збільшення ролі накопичувального принципу обумовлено впливом демографічних і соціально-економічних чинників, а стримують його розвиток низькі доходи населення та інфляційні процеси. Розглянуто відмінності солідарної та накопичувальної систем пенсійного забезпечення, що впливає на рівень виплат пенсіонерам України порівняно з зарубіжними країнами; визнано значну роль накопичувальної системи в соціальному захисті населення; окреслено механізм поступового переходу до неї, особливості функціонування накопичувального фонду, використання інвестиційного потенціалу пенсійних накопичень, а також перспективи впровадження накопичувальної системи в Україні. Зазначено причини, які гальмують упровадження накопичувальної пенсійної системи, та необхідність їх урахування із застосуванням досвіду успішних зарубіжних країн. Це призведе до збільшення доходів Пенсійного фонду, розширення можливості використання інвестицій, зменшення ризику пенсійних накопичень та визначить можливості впровадження накопичувальної пенсійної системи після завершення війни.

**Ключові слова:** доходи бюджету, інвестиції, інфляція, внутрішній і зовнішній контроль, накопичувальна система, оподаткування, податкове навантаження, пенсійне забезпечення, пенсійний фонд, фонди соціального захисту

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