

“Priority directions of improvement of state of pension coverage in Ukraine”

AUTHORS

Olga Kozmenko

Yaroslava Mospanova  <https://orcid.org/0000-0003-4868-2672>

 <https://www.webofscience.com/wos/author/record/HTL-2334-2023>

ARTICLE INFO

Olga Kozmenko and Yaroslava Mospanova (2016). Priority directions of improvement of state of pension coverage in Ukraine. *Investment Management and Financial Innovations*, 13(3-2), 300-310. doi:[10.21511/imfi.13\(3-2\).2016.02](https://doi.org/10.21511/imfi.13(3-2).2016.02)

DOI

[http://dx.doi.org/10.21511/imfi.13\(3-2\).2016.02](http://dx.doi.org/10.21511/imfi.13(3-2).2016.02)

RELEASED ON

Monday, 10 October 2016

JOURNAL

"Investment Management and Financial Innovations"

FOUNDER

LLC “Consulting Publishing Company “Business Perspectives”



NUMBER OF REFERENCES

0



NUMBER OF FIGURES

0



NUMBER OF TABLES

0

© The author(s) 2026. This publication is an open access article.

Olga Kozmenko (Ukraine), Yaroslava Mospanova (Ukraine)

Priority directions of improvement of state of pension coverage in Ukraine

Abstract

The article shows peculiarities of functioning of pension fund system in Ukraine and some foreign countries. Analysis and assessment of financial situation of Pension Fund of Ukraine are done. Imbalance of revenues and expenses of budget of Pension Fund of Ukraine is found. Factors are determined which influence on effectiveness of functioning of pension system of Ukraine. Priorities of policy concerning improvement the situation of pension coverage of Ukraine are presented.

Keywords: pension coverage, Pension Fund, revenues, expenses, pension payment, pension system, non-state pension coverage.

JEL Classification: G2, H3, O1.

Introduction

Pension coverage is the main component of state social policy and simultaneously is considered inherent component of social protection and social security system. The welfare of the population and level of stability in the society depend on effectiveness of this system. Pension coverage is the dominant component of social security of society and is basic and essential guarantee of stable development of society as it encompasses simultaneously interests of both employable and unemployable population. The pension coverage is viewed as an essential component of social function of the state as its goal is to satisfy material needs of those strata of population who, according to acting legislation, have a right to get pension.

Extent of researching social and economic issues of functioning and development of pension fund system significantly falls behind of needs of modern practice, which does give possibility to quickly and constructively solve actual problems of providing social security of society.

1. Literature review

The research of pension systems, and also problems of pension insurance was done by such foreign and native scientists as N. Barr (2004), G. Mac-Taggart, D. Gotsis, S. Gillion (2000), S. Mesa-Lago (2002), J. Stiglitz, R. Holtzman (2001), B. Zaichuk, V.S. Nykytenko, V.I. Semendyayeva (2004), Y. Konoplina, O. Kozmenko (2001) et al. In their works, they study modern problems of functioning of pension coverage and perspectives of functioning of pension insurance in the country. The directions of reforming the pension coverage system are shown in scientific works by E. Libanova (2010), O. Koval (2011), V. Onyschenko, T.M. Zavora, O.V.

Chepurnyi (2015) et al. Significant contribution into solving the problems of pension coverage was made by N. Volgin (2004), M. Viner (2000). But, taking into account international tendencies of development of pension coverage and aspiration of Ukraine to become full member of European community, it is necessary to pay more attention to study of the results of reforming in the sphere of pension coverage in Ukraine.

2. Earlier unsolved aspects of the problem

With that, notwithstanding the importance of existing developments, in conditions of transformations in Ukraine, the pension coverage system requires further reforming.

The purpose of the article is to analyze theoretical approaches to formation of financial support of pension system of Ukraine and define the directions of policy concerning reforming the pension coverage system which will promote provision of stability of functioning of pension system and economic growth of the state as a whole.

3. The main material

Every state performs the policy aimed at creating a system of social protection, support of disadvantaged citizens, avoidance of social conflicts and convulsions in society. J. Stiglitz (2001) wrote that the main task of government is not to achieve extra-high indicators in economy, not economic growth, but guarantee of stable social protection of society of which pension coverage is a component.

That is why the fundamental task of the state as main guarantor of social protection is to provide decent conditions of existence of socially vulnerable categories of society (Constitution of Ukraine). The main component of the system of social protection of the population is pension coverage organizational and legal form of which is defined by state of economy and labor market, policy in the sphere of taxes and incomes, demographic situation, development of financial and insurance institutes (Law of Ukraine "To grounds of national security of Ukraine").

© Olga Kozmenko, Yaroslava Mospanova, 2016.
Olga Kozmenko, Dr., Professor, Kharkiv National University of Economics, Ukraine.
Yaroslava Mospanova, Ph.D. Student, Education and Research Institute for Business Technologies "UAB", Ukraine.

Pension coverage is a basic and one of the most important social guarantees of stable development of society, as it directly concerns all its strata (Law of Ukraine "On pension coverage"). The analysis of existing approaches to interpret the notion "pension coverage" allowed to make generalization of its definition as a system of material support and service of people who due to objective reasons can not have due income.

The main tasks of pension coverage remain the decrease of level of poverty and levelling of incomes of population, elimination of economic, political and demographic risks. The aims of pension coverage system are to protect from poverty after reaching pension age; to provide guarantee income after finishing labor activity the amount of which is usually a certain sum proportional to sum of wages; to protect this income from further decrease of living standards because of inflation.

Pension insurance belongs to main institutes of protection of persons after reaching pension age as one of the most important guarantees of social protection the aim of which is to support of material welfare of citizens and their family in case of retirement pension, disability or in case of loss of breadwinner. With that, pension insurance is a total of redistributive relationship between its participants on the issues of formation at the account of money contributions of specialized pension fund for providing financial support to citizens retired (Zaichuk B.O., Nykytenko V.S. and Semendyayeva V.I., 2004). Simultaneously, pension insurance is an important mechanism on which state system of social protection is based which provides fair and effective saving and targeted distribution of financial resources, due material state of the aged and other categories of unemployable with event of the corresponding risk.

During the last years a characteristic feature of economic policy of the majority of developed countries of the world is carrying out of pension reforms. The necessity of reforming pension systems is explained by general tendency to deterioration of demographic situation which is seen in decrease of birth rate, overall ageing of population and, as a consequence, increase of load on employable population. As a result, pension systems which are based on grounds of solidarity of generations, in modern conditions are not able to perform the functions laid on them and demand of reforming.

The systems of pension insurance of countries of Eastern Europe in the second half of 90s have undergone systemic changes caused by performing market transformations in them and presence of

specific problems of transition period: low activity of state mechanism of saving of pension contributions, insufficient level of personal incomes of population, incompliance of declared social standards with realities of economy. As a result of performing pension reforms in these countries the aligned subsystem was complemented by contribution subsystem and non-state pension insurance.

In such a way, for example, pension system of Poland was reformed which came in force in 1999 and unites three levels of pension insurance:

1. Conventional and contribution subsystem (NDC Level I) which is fully under the supervision of Social Insurance Office (ZUS);
2. contribution pension system participation in which until 2014 was compulsory for all working citizens. With coming into force in 2014 of new Law of Poland "On reform of pension system" voluntary nature of participation in second level is stipulated, and the current participants are allowed to leave this level of pension system and transfer the money accumulated from their pension account to personified account opened at first level;
3. accounts of additional voluntary contribution pension system. Let us note that after coming in force of changes to pension legislation which provide for voluntary nature of participation in the second level, interest of Polish citizens to take part in this level of pension system has significantly decreased.

Insurance contributions to conventional and contribution level of the pension system (first level) is at 16.6% of the amount of the wages, including employees who take part in first and second levels pay 6.84%, and employers – 9.76%. The rate of insurance contributions to second level is 2.92% of the sum of the salary of the employee and until 2017 must be increased to 3.5%. Thus, at this time, aggregate premium to two levels of pension system of Poland equals 19.52% of the sum of salary of the employee. If the employee made a decision to leave the second level, he himself pays insurance contribution to first level in full amount, including employer's share and contribution which was earlier paid to second level.

In 2014, the contribution pension system (second level), apart from defining its voluntary nature and decrease of rate of contributions, underwent also other significant changes. In particular, assets invested by open pension funds – participants of the second level in state government bonds were transferred to accounts of ZUS, as a result of which OFE lost 51.5% of present pension assets (153 milliard zł.). The main aim of such a step was to

relieve state debt of Poland and invest pension money into treasury obligations, but the right was left to invest them in bonds of other type and foreign state bonds.

Polemical nature within the scope of reforming Polish pension scheme is given to issue of pension age. If in 2013 Poland, according to all-European tendencies, increased pension age both for men and women to 67 years, then, with the advent to power of the President A. Duda one of the priorities of his government was defined return to previous parameters of pension age (60 years – for women, 65 years – for men). The majority of economists of the country define populist nature of these intentions and point to their negative influence on stability of pension system and economy of Poland in future which can face problems of decrease of rate of economic growth and uncontrolled growth of budget deficit (Emerytura.gov.pl., 2014).

German pension system is based on “Bismarck” model of social protection of population which provides for insurance principles of social coverage. The system of compulsory medical insurance that encompasses all employees and self-employed stipulates payment of ten kinds of pension. It is interesting that there is no so called minimal sum of pension in Germany, but there are several kinds of guaranteed pensions. The sum of pension payment directly depends on amount of deductions to an employee made during labor activity. The amounts of deductions are unified for all regions of the county and are 19.9% of payroll budget.

In Germany, the persons retire at the age of 65, although there exist a series of kinds of pensions where pension age decreases to 63 or 60. But together with general age qualification the appointment of different kinds of pensions provides for many other conditions which concern the retired, in particular, the presence of some employment history. With this, within the scope of reforming the pension legislation from 2014 for persons with significant pension insurance record (more than 45 years) and tough working conditions pension age was decreased from 65 to 63 years. However, taking into account demographic tendencies (decrease to 2060 of the ratio of persons who work to the retired 1.5:1 (from current 3.0:1); increase of expected duration of life at pension approximately to five years to 22.3 years – for men and to 25.5 years – for women), the plan of reforming of pension system provides for increase of pension age to one month every year until 2024, and to two months every year until 2029 until reaching an indicator of 67 years (German Federal Ministry of Justice and Consumer Protection, 2013).

Apart from compulsory component, German pension system includes also production pension insurance. It provides for re-calculation from the person working of specified part of the income in favor of authorized structures (banks, insurance funds) with the aim of their saving and investment. Thus, on the basis of voluntary pension contributions the right for lifelong state pension in Germany can be given to almost every person (including non-residents) who constantly resides on the territory of the country. The peculiarity of getting the right to such “corporate” pension is a requirement concerning minimal time of employment of the worker at the enterprise.

The third component of the pension system of Germany is private pension insurance performed by non-state pension funds. The participant of this subsystem can choose between different savings schemes with long- or short-range investments which provide for payment of additional pension after completion of labor activity. The Government of Germany also pays significant attention to support of private pension insurance. The Law of Germany “Altervermögengesetz” (2001) provides for two types of such support:

- ◆ direct extra payments to personal agreements of pension coverage;
- ◆ tax deductions of expenses for non-state pension insurance from the taxable surplus.

Modern pension system of Germany guarantees quite a high level of material provision of citizens after completion of labor activity. According to index of reliability, sustainability and integrality of pension system Melbourne Mercer Global Pension Index (2016) Germany belongs to countries the pension system of which is well organized, but not without risks which threaten its effectiveness and sustainability in a long-term period. Notwithstanding that, in 2016, the improvement of economic situation and increase of employability gave the possibility for government of the country to perform the biggest, in the last decades, increase of pensions, in future, possibilities for it will sharply decrease. According to assessments of experts, because of deterioration of demographic dynamics every second resident who will retire after 2030 will be able to get pension in the amount of not more than living wage. It forces the Government to take measures to provide financial sustainability of pension system of Germany in the next years. Among the alternative steps is the increase of rate of deductions to pension insurance, increase of transfers from state budget to pension funds, and also further gradual increase of pension age. With this, the Government of Germany considers a possibility of implementing the concept

of nuanced retirement which will stimulate persons who work for more late completion of labor activity. The nuanced retirement will provide for possibility of early execution of pension in partial amount, and also their return to work after completion of labor activity.

Pension system of Great Britain is being developed on the basis beverage model of social protection of citizens who became disabled with age. It provides for necessity of payment of premiums by all persons who work beginning from 16 and guarantees to every citizen after reaching the pension age the pension in the amount of 20% of average salary in the state. According to pension legislation, until 2016, British pension system united such components (UK Legislation, 2016):

1. Basic State Scheme (BSS), united component of pension system the participation in which is compulsory for all employees. The basic state pension was paid in a fixed amount for money of BSS.
2. State Earnings-Related Pension Scheme (SERPS), which guaranteed the participants the additional state pension as a per cent from their income and did not provide for creation of separate pension fund. The level of this pension depended on sum of accumulated pension contributions and could reach up to 50% of the amount of the salary before completion of labor activity. The source of financing of additional state pension – contributions paid by employers in the amount of 8% of the salary of employees to private pension funds or national pension fund. The employees were included in the number of participants of savings scheme automatically. But if the worker wished to leave the state savings scheme, he could have done it provided the registration in any other scheme of additional pension insurance.
3. Occupational Personal Pension Scheme (OPPS). Payers of contributions to such schemes have some tax relief which provides for creation of the certain private pension fund to which contributions are paid during all labor period. By now, the Government of Great Britain actively stimulates the development of system of voluntary pension savings of citizens by way of giving relief from taxation (release from taxation of pension contributions and incomes from their investment by personal income tax). The tax is taken only in case of payment of pension. But the employees can take part in the third level of pension system in certain conditions (defined level of incomes, non-participation in state pension program).

In accordance of the British Law “Act on pension system” (20, accepted in 2014), from April 2016, in the country, there was implemented new state pension system and changes were made in the schedule of increase of pension age. The main aim of the reform is to solve the problem of low level of additional state pension (as a result of this, 40% of retired have a right to additional payment to pension according to the results of assessment of material state) and simplification of the structure of the system itself. Instead of two state pension payments (basic and additional), from 2016, for new retired there is one pension in the fixed amount (STP), which will be indexed annually according to growth of average salary, but not less than to 2.5%. So, the amount of STP pension in no way depends on the amount of premiums by persons who work, and the main reason of its appointment will be the presence of pension insurance record not less than 35 years.

With actual liquidation of second level of state pension scheme the restructuring of social insurance funds will be performed which accumulate pension premiums, and also rights of citizens in management of personal pension savings are extended. The legislation provides for possibility of single withdrawal of all the amount of pension savings. It requires from the retired high level of financial literacy.

The important aspect of pension reform in Great Britain is the increase of pension age caused by increase of average duration of life of citizens and deterioration of demographic ratio between persons who work and the retired. In 2026-2028, the pension age in Great Britain will increase from 66 to 67, i.e., eight years earlier that it was provided for by previous legal norms. From 2017, the Government of the country also will be obliged to revise pension age in state pension system every 6 years.

Together with united pension systems in world practice, there exist also pension systems which are fully based on saving of money at individual accounts of workers and capitalization of contributions. The example of this is the system of pension insurance of Chile.

The pension reform in Chile was performed within general economic reform. The main idea of the reform was to call up investment resources for development of economy and elimination of disadvantages of old pension system which was incapable of providing full execution of social responsibilities of Government of Chile. From 1983, new capitalized pension system became compulsory for all workers who begin labor activity and voluntary for self-employed citizens. To provide management of contributions to private pension funds, it was allowed to create companies in

management of pension assets (AFPs) (The Chilean AFP Association, 2004).

The essence of pension reform was in implementation of individual saving accounts (ISA) instead of old united system which was fully liquidated. Thus, there took place transition from state pension system to private one. By now, the system of individual pension accounts consists of six private companies-administrators of pension funds (AFP), under the control of which, in 2014, there were assets on sum of 16.2 billion US Dollars.

Every employee during labor life deducts 10% from salary which the employer deposits to his personal saving account on behalf of him. The pension legislation provides for possibility for employee to annually deposit additionally 10% from salary, with this, such contribution is relieved from taxation and is a motivation for earlier retirement or increase of the amount of pension. Besides, the owner of pension account has to pay the remuneration to his AFP for management of his assets which is from 0.47 to 1.54% from the salary of the participant.

After performing the pension reform, the notion of pension age in Chile became conditional, as only the sum is important saved by the employee during labor activity, but not the age at the time of retirement. The pension legislation provides for that the pension age for men is 65 and for women is 60. With this, the employees can work also after the officially defined pension age came. Moreover, they are able not to pay premiums, and the amount of their pension depends of the saved capital. On the other hand, if at the personal saving account there are sufficient money for decent pension (50% from salary for previous 10 years and more for amount of minimal pension), then, the worker can leave the job earlier.

The implementation of savings model of pension system had positive consequences for economy of the country, as it favored the development of residential construction and insurance, realization of high-cost projects in the sphere of infrastructure. But the reformed pension system could not do the main task – to provide due level of material provision of persons who work at old age. The negative features of the pension system of Chile are high level of expenses on administering of contributions, insufficient income of non-state pension funds, and the level of pension payments significantly lower than it was expected. In the country, the income of the third of the participants of pension funds are lower than poverty line, and the level of change of salary to pension is only 39% for men and 14% for women in anticipated 70%. Taking this into account, from 2008, Chile was forced to partially return to united principled of pension coverage by implementing the system of state united pensions for persons who have no right for any other pension.

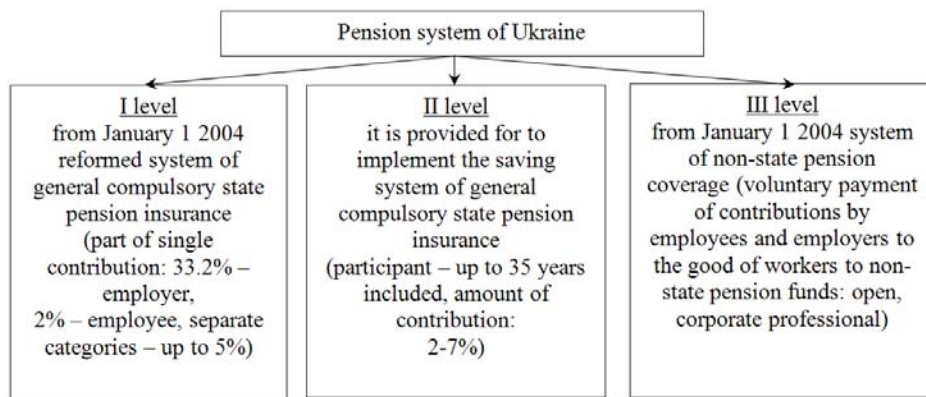
The negative features characteristic for savings model of pension insurance appear also in other states. So, from 2013, with the aim to more effectively manage and save administrative expenses, the assets of compulsory savings pension system of Kazakhstan were united in State centralized savings fund (To pension coverage in the Republic of Kazakhstan, 2013). As of Chile, the important problem of savings pension system of Kazakhstan became insufficient income of invested pension contributions which appeared to be a lot lower than the level of inflation. This has led to increase of expenses of the budget for compensation (guarantee) of keeping the retirement savings. The models of pension coverage according to strategies of development are presented in Table 1.

Table 1. Models of pension coverage according to strategies of development

Model	Countries	Strategy		Features	Levels of pension system
Soviet	Ukraine	United		Provides for united relationship between generation of workers – i.e., those who still work and support the retired, on the one hand, and the retired – on the other hand.	I. State pension (united), 99.97% II. NSPC (0.03%)
Russian and Polish	Russia, Poland	United and saving	Mixed	Provides for complex of use in pension model of elements of united and saving strategies, as well as system of pension insurance.	I. State pension (united). II. Compulsory insurance III. Saving (corporate, personal)
American	The USA, some countries of Latin America, Portugal	Saving and united			I. State pension (united). II. Labor (corporate) III. Saving (personal)
German	Austria, Belgium, France, Greece, Sweden et al.				I. Basic pension II. Additional state and corporate
Japan	Japan, Great Britain, Australia, come countries of Northern Europe	Conditionally saving			I. Basic pension II. Additional state and corporate
Chilean	Argentina, Peru, Columbia, Chile	Saving		The presence of state, corporate and personal saving pension programs with the help of which future pension of the citizen is formed. It is private property of the retired who has a right to use it as he wishes.	I. Compulsory saving pension II. Compulsory insurance
Kazakh	Kazakhstan				I. Compulsory saving pension in the State Pension Fund II. Voluntary saving pension

In Ukraine, pension coverage is a state system which is a basic component of system of social protection of the population. According to Law of

Ukraine “To general compulsory state pension insurance”, the system of pension coverage in Ukraine consists of three levels (Figure 1).



Source: Law of Ukraine “To general compulsory state pension insurance”, 2003.

Fig. 1. Pension system of Ukraine

The first level contains united system of general compulsory state pension insurance the main grounds of it are sponsoring and performing payment of pensions and giving social services at the account of money of Pension fund.

The second level is saving system of general compulsory state pension insurance which is based on grounds of saving of money of persons insured in the Savings fund and performance of financing the expenses for payment of agreements of insurance of lifelong pensions and singlet payments.

The third level includes the system of non-state pension coverage which is based on grounds of voluntary participation of citizens, employers and their unions in formation of pension savings with the aim of getting the pension payments by citizens in conditions and in order which are provided for by legislation to non-state pension coverage. The aim

of this mechanism is getting additional pension payments to general compulsory pension insurance by citizens at the account of contributions to non-state pension coverage, as well as investment income received from their use.

The modern pension system has two main problems: low level of pensions which makes impossible to provide decent living conditions for citizens who lost workability, and unsatisfactory financial state of Pension fund of Ukraine. Both disadvantages are threats to social security of the state. The analysis of the dynamics of average amounts of pensions and their differentiation enables to come to conclusion that, in Ukraine for the period of 2011-2015, there is gradual increase of pension payments, and also there exists clear tendency towards the excess of pension of the majority of the retired of the living wage and minimal salary (Fig. 2).

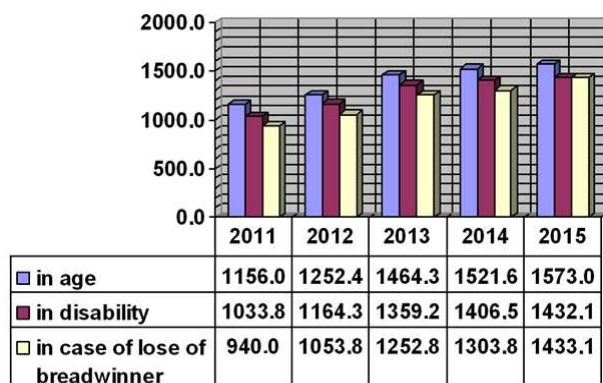


Fig. 2.1. Dynamics of increase of pension payments according to their types in Ukraine in the period of 2011-2015, hrn.

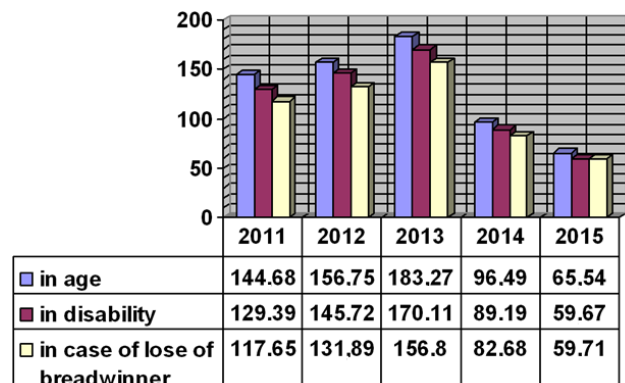


Fig. 2.2. Dynamics of increase of pension payments according to their types in Ukraine in the period of 2011-2015, USD

Source: Report on the execution of budget of Pension fund of Ukraine, 2015.

Note: data are given according to rate of NBU as of December 31 of the target year: 2011 – 7.99 hrn. for USD; 2012 – 7.99 hrn. for USD; 2013 – 7.99 hrn. for USD; 2014 – 15.77 hrn. for USD; 2015 – 24 hrn. for USD.

According to data of State Service of Statistics, in 2015, the number of workers who got minimal salary of 1318 hrn. (54.9 USD) has decreased twice up to 700 thousands of people. The tendency towards decrease of number of people who got minimal salary in 2015, primarily happened at the account of increase of minimal salaries in the period from 1218 hrn. in January (75.37 USD – 16.17 hrn. for USD) to 1378

hrn. (57.42 USD) in December. Analysis of average amount of salaries of population of Ukraine for 2013 – 2015 which increased from 3619 hrn. (452.94 USD) in 2013 to 5230 hrn. (217.9 USD) y 2015, i.e., makes impossible the participation of the middle class in payment of money to non-state pension funds and getting sufficient pension coverage in case of retirement.

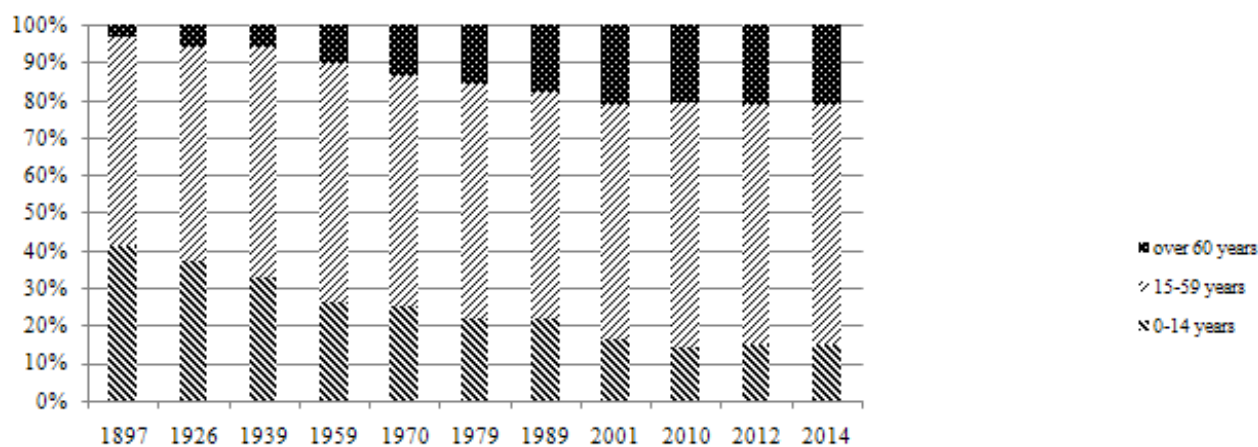
Table 2. Average amount of pension in Ukraine and some European countries in 2015

Country	Average amount of pension	Average amount of pension in per cent of amount of average salary
Ukraine	65.54	20.5
Poland	390.03	24.6
Spain	954.21	40.57
France	1127.59	58.8
Germany	1291.67	47.49
Sweden	1339.09	32.24

Source: compiled from author's own research based on OECD, 2016.

According to data in Table 2, low amount of pension payments in Ukraine in comparison to countries of Europe requires the analysis of the report on execution of the budget of Pension fund of Ukraine. After analyzing this, it was found that overall number of the retired as of end of 2015 was 12275138 persons, the average amount of pension payment – 1691.55 hrn. (70.48 USD). In terms of the categories the biggest are payments of pensions of age which are 1687.15 hrn. (70.30 USD), of

career length – 1762.70 hrn. (73.45 USD), the minor are social payments which are approximately 1045.70 hrn. (43.57 USD). There are factors defined which influence on the effectiveness of the functioning of the pension system of Ukraine. One of the problems remains the difficult demographic situation. Today, in Ukraine, demographic ratio of those workers and the retired is becoming worse, with this, the demographic tendencies point to more pessimistic forecast.



Source: compiled from author's own research based on Ministry of Healthcare of Ukraine.

Fig. 3. Age structure of population of Ukraine for the period 1897-2014

From the Figure 3, we can also see that the level of rate of persons in the age of 0 to 14 is decreasing, as, while analyzing the data by Ministry of protection of health of Ukraine, we can note that more than 20% of young women according to state of health cannot give birth to children. According to calculations of specialists to stabilize the number of population of Ukraine every young woman shall give birth to three children.

The indicators of birth rate in 2015, in comparison to past year decreased to 5.8% – up to 166.102

thousand of persons, this is connected with difficult political situation in the country, economic, ecological and other problems. In the context of pension coverage, it means that the number of employable population which creates public product will decrease and, thus, the level of consumption of future retired will decrease (The indicators of birth rate in Ukraine in 2015, 2016). For the example, let's compare the age of retirement and average duration of life in Ukraine and some other countries of Europe (Table 3).

Table 3. Pension age and average duration of life

Country	Pension age (men/ women)	Average duration of life
Ukraine	60/55-60 (depending from date of birth)	71.4
Spain	65	84.9
Germany	67	82.8
Poland	65/60	80
France	65	84.5
Sweden	65	83.4

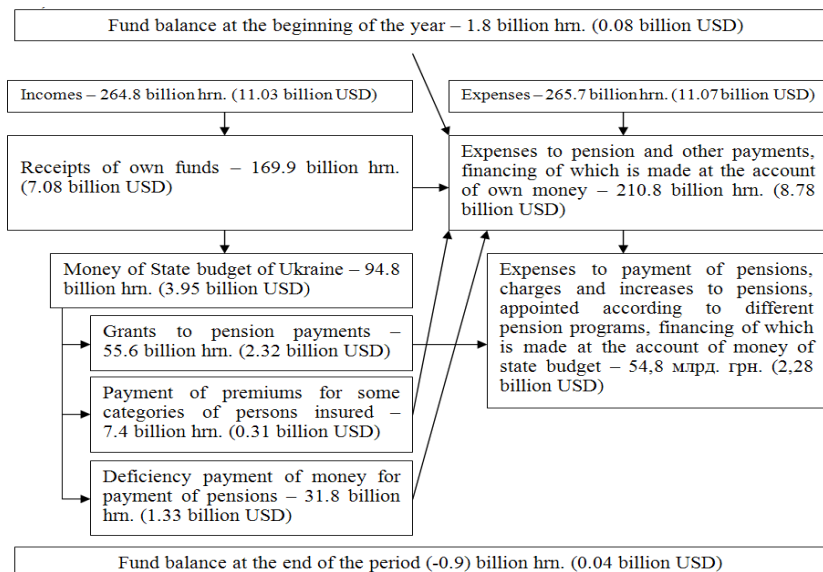
Source: compiled from author's own research based on World Bank, 2016.

From Table 3, we can conclude that although the age of retirement in Ukraine is lower than European, and the average duration of life in our country is significantly lower.

The generalization of modern factors of decrease of birth rate gives grounds to define such groups: economic, social, psychological, biological. There exists, even, inverse relationship between birth rate and level of welfare of population. So, the satisfaction of need in children, in fatherhood as opposed to series of other needs which the lower are the living standards, the more simple they are. If the rich strata of population compare the satisfaction of own needs in spare time with consumption of time and money to provide future children with necessary development and professional training, the poor ones take into account elementary needs in food, clothes and housing. The next threat which influences the effectiveness of functioning of pension system of Ukraine is the low level of salary. The analysis of data of State Service of Statistics of Ukraine revealed that the average salary in a month in Ukraine during August – December 2015 gradually increases from 4205 hrn. (198.44 USD) up to 5230 hrn. (217.92 USD), or to 24.4%. In the regions, we observe significant differentiation of the indicator. So, in city of

Kiev the average salary in a month is the highest and is 8486 hrn. (353.58 USD), the lowest – in Chernigov – 3924 hrn. (163.5 USD). But, taking into account high level of inflation (in 2015, it was 143.3), real salary, i.e., money for which goods and services can be bought, is significantly lower (the average salary in Ukraine, 2015). With this, taking into account the low level of salaries, understandable is the inactivity of the population according to participation in non-state pension insurance. Not the least threatening to social security are shaded incomes of population. According to different sources of information, “shaded” incomes in Ukraine are up to 50 – 60 billion hrn. (2.08-2.5 billion USD) every year (The Ministry of economic development and trade of Ukraine, 2015). Every year, Pension fund receives less than one's due 50 billion hrn. (2.08 billion USD) which approximately is 300 hrn. (12.5 USD) of the owed pension to every retired. I.e., the solution of the problem of legislation of payment of salary is one of ways of exit of pension crisis which happened in our country. Beginning from January 1st 2016 with the aim of withdrawal of shaded salaries tax legislation is reformed, in particular, the charge of unified social tax to salary of working population in the amount of 22% (Changes in payment of UST from 01.01.2016, 2015). We can say that the budget of PFU according to its scale is compared to State budget which now is a single source of deficiency payment of budget of PFU. That's why the increase of the deficiency automatically leads to decrease of state debt. The deficiency payment of the budget of PFU at the account of money of state budget causes decrease of expenses to other vital aspects, as medical coverage, education, defense, etc.

On the basis of the analysis of incomes and expenses of PF, we can see the excess of expenses of Pension fund to its incomes to 5.7 billion hrn. (273.5 billion USD) (Fig. 4).



Source: Report on the execution of budget of Pension fund of Ukraine, 2015.

Fig. 4. Main indicators of execution of the budget of Pension fund in 2015

In the structure of incomes the most significant part is occupied by the revenues of own money – 169.9 billion hrn. (7.08 billion USD) which is 5 billion hrn. more in comparison with 2014. But, in dollars, this value decreased from 10.39 billion USD in 2014 to 3.31 billion USD. From the State budget of Ukraine to financing of pension programs during 2015 was given 98.4 billion hrn. (3.95 billion USD), of which 55.6 billion hrn. (2.32 billion USD) – grant to payment of pensions, charges and increases to pensions appointed according to different pension programs, 31.8 billion hrn. (1.33 billion USD) – money for covering the budget of deficiency of the Pension fund of Ukraine for payment of pensions. In 2015, Pension fund of Ukraine was provided in the full scope with the financial resources for payment of pensions and financial support for the retired. The sum of expenses for pension payments was 210.8 billion hrn. (8.78 billion USD) which was 18.5 billion hrn. more in comparison with 2014. But, in dollars, this value decreased from 12.19 billion USD in 2014 to 3.4 billion USD. Taking into account the abovementioned, the sum of real deficiency of money of the Fund in 2015 was 0.9 billion hrn. (0.04 billion USD), the coverage of which is done at the account of money of the State budget.

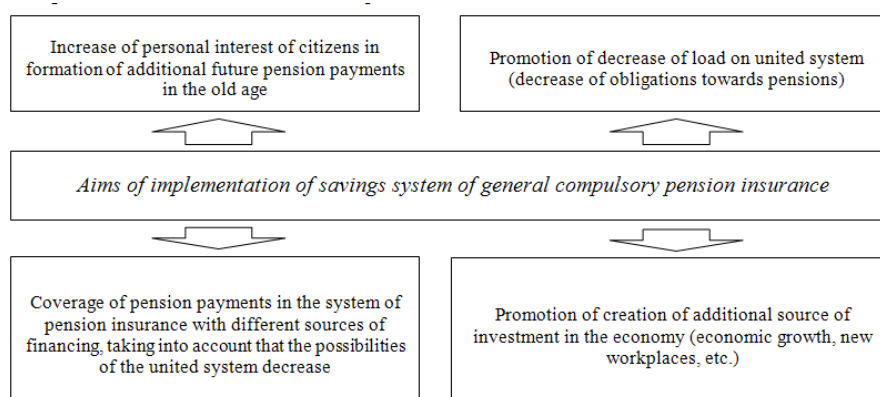
The analysis of dynamics of the main financial indicators of the Pension fund of Ukraine shows that the violation of main economic laws, namely, the Constitution of Ukraine, Law of Ukraine “To general compulsory state pension insurance” while forming the budget of the Pension fund caused the significant amounts of it deficiency and significant

change of the structure of incomes and expenses. It was found that the main problem in the imbalance of income and expenses part of the budget as a result of systemic violation of the principle of economic dependence of expenses of consumption from the received incomes. To improve the state of pension coverage, first of all, effective complex implementation of mixed three-level system and use of the corresponding experience of foreign countries are necessary.

The first step to implementation of mixed three-level system is the development of non-state pension coverage (NPC). As in the market of NPC are formed long-term savings which can be used as investment inflows, then, the effective activity in it can improve the situation in the economy of the country as a whole. The Law of Ukraine “To general compulsory state pension insurance” (2003) contains the grounds of formation and functioning of voluntary of non-state pension coverage.

Namely with the help of equal co-existence of first and third systems it is possible to balance the pension coverage of the citizens. United system is less sensitive to economic changes (inflation, fund and financial crises). By contrast, the savings system is subject to less influence of such a factor as decrease of employability of the population, but it is sensitive economic fluctuations.

From the review of the works of scientists by the author, the following aims of implementation of the II level of the pension system of Ukraine (Figure 5) were defined.



Source: author's own compilation.

Fig. 5. Aims of implementation of savings system of general compulsory pension insurance (of II level)

While implementing the II level of the pension system, the persons not older than 35 at the day of implementation of the II level will have the possibility to take part. The amount of contribution will be 2% of the salary in the first year of action of the II level with the annual increase of the contribution to 1%, up to 7%. The payment of contributions will be done to the centralized Savings

pension fund (SF), and in two years – the possibility to choose non-state pension fund for payment of compulsory pension contributions or to stay in SF.

But there also obstacles on the way of implementation of the II level:

- ◆ insufficient development of the fund market;
- ◆ lack of reliable financial instruments for

investment of pension assets;

- ♦ possible political influence on compulsory pension savings in case of great deficiency of the state budget;
- ♦ involvement of the majority of employees in shaded economy;
- ♦ conducting warfare (ATO) in the east of the country.

Conclusions and prospects

Thus, the provision of social security must be the main priority of the state police and be supported by the corresponding social institutes on the basis of legislative rules. The functioning of the system of pension coverage must be directed at formation of financially sustainable, convenient as for expenses, socially fair and predictable system which will guarantee to the citizens the due living conditions after retirement, will provide reliable protection of the unemployable people from poverty and will promote for stable economic development.

The main priorities of the improvement of state of pension coverage of Ukraine shall be: increase of rate of salary in GDP; creation of new workplaces which is accompanied by renewal of internal manufacturing; unshadowing of the salary by way of performing tax reforms; revision of expenses made from the Pension fund, as well as implementation of general compulsory savings pension system, and development of non-state pension funds which will allow to provide stable development of the state, activate the development of financial market, labor market and institute of salary.

The existing system of pension coverage of citizens in Ukraine requires the significant changes as it does not comply with the modern requirements. Taking it into account, the high level of pension coverage in economically developed countries can become the ground for deep research and use of the acquired experience while improving the pension system in Ukraine.

References

1. Barr, N. (2004). Economics of the Welfare State. Oxford University Press.
2. Bundesfinanzministeriums. (2001). Altersvermögensgesetz. Available at: <http://schiering.org/arhilfen/allgem/avmg.pdf>.
3. Emerytura.gov.pl. (2014). Wybór OFE/ZUS. Available at: <http://emerytura.gov.pl/wybor-ofezus/reforma-ofe/>.
4. German Federal Ministry of Justice and Consumer Protection. (2013). CERD-Bericht. Available at: http://www.bmjbv.de/SharedDocs/Downloads/EN/19_to_22_Report_submitted_by_the_Federal_Republic_of_Germany_ICERD_English.pdf?__blob=publicationFile&v=3.
5. Gillion C. et al. (2000). Social Security Pensions Development and Reform. Geneva, International Labour Organisation.
6. Holzmann, R. (1999). A World Bank Perspective on Pension Reform. Washington DC: World Bank.
7. Holzmann, R., Stiglitz, J.E. (2001). New Ideas about Old Age Security: towards sustainable pension systems in the 21st Century. Available at: http://www-wds.world-bank.org/external/default/main?pagePK=64193027&piPK=64187937&theSitePK=523679&menuPK=64187510&searchMenuPK=64187283&siteName=WDS&entityID=000094946_01021705482946.
8. Konoplina, Yu., Kozmenko O. (2011). The basic principles of the state social insurance system, Insurance Markets and Companies: Analyses and Actuarial Computations, 2 (2), pp. 86-93.
9. Melbourne Mercer Global Pension Index. (2016). Melbourne Mercer Global Pension Index. Available at: <http://www.globalpensionindex.com/>.
10. Mesa-Lago, C. (2002). Reassessing Pension Reform in Chile and other Countries in Latin America. Asian Development Bank.
11. OECD.org. (2016). OECD. Available at: <http://www.oecd.org/>.
12. Orszag, P.R., Stiglitz, J.E. (1999). Rethinking Pension Reform: Ten Myths about Social Security Systems in New Ideas about Old Age Security. Washington DC: World Bank.
13. The Chilean AFP Association. (2004). The AFP System Myths and Realities. Available at: <http://www.hacer.org/pdf/AFPS.pdf>.
14. UK Legislation. (2016). Pensions Act 2011. Available at: <http://www.legislation.gov.uk/ukpga/2011/19/contents>.
15. World Bank Group. (2016). The World Bank. Available at: <http://www.worldbank.org/>.
16. Viner, M. (2000). Yak stvoryty system nederzhavnogo pensiinogo zabezpechennia yakii doviriatiymut gromadiany / M. Viner // Ukraina: aspekty praci. – №1.
17. Volgin N.A. (2004). Socialnaia politika: uchebnyk / N.A. Volgin. – 2 izd., stereotip. – Moskva: Ekzamen. – 736 p.
18. Zavora, T.M. (2015). Ocynuvannia efektyvnosti systemy pensiinogo zabezpechennia Ukrainy / T.M. Zavora // Ekonomika i region: nauk. vysn. – Poltava: PoltNTU. – № 2. – pp. 88-92.
19. Zaichuk, B.O. (2004). Systema pensiinogo zabezpechennia: siogodni i zavtra: Komentar zastosuvannia Zakonu Ukrainy "Pro zagalnooboviazkove derzhavne pensiine strakhuvannia" / B.O. Zaichuk, V.S. Nukytchenko, V.I. Semendiaeva. – Kyiv: Format. – 352 p.
20. Zakon Ukrainy "Pro zagalnooboviazkove derzhavne pensiine strakhuvannia" (zi zminamy ta dopovnennyamy vid 2 bereznia 2015) vid 09.07.2003 r. № 1058-IV [Electronic resource]. – Mode of access: http://www.pfu.gov.ua/pfu/control/uk/publish/article?art_id=96566&cat_id=3894.

21. Zakon Ukrainy "Pro nederzhavne pensiine zabezpechennia" vid 09.07.03 r. №1057 / Verkhovna Rada Ukrainy – [Electronic resource]. – Mode of access – <http://zakon2.rada.gov.ua/laws/show/1057-15>.
22. Zakon Ukrainy Pro osnovy nacionalnoi bezpeky Ukrainy" vid 19.06.2003 r. № 964-IV» (zi zminamy ta dopovnennyamy vid 07.08.2015 [Electronic resource]. – Mode of access: <http://zakon0.rada.gov.ua/laws/show/>.
23. Zakon Ukrainy "Pro pensiine zabezpechennia" (zi zminamy ta dopovnennyamy vid 1 kvitnia 2015 r.) [Electronic resource]. – Mode of access: http://search.ligazakon.ua/l_doc2.nsf/link1/T178800.html.
24. Zarobitna plata v Ukraini [Electronic resource]. – Mode of access: <http://www.ukrstat.gov.ua/>.
25. Zvit pro vykonannia biudgetu Pensiinogo fondu Ukrainy [Electronic resource]. – Mode of access: <http://www.pfu.gov.ua/pfu/>.
26. Zminy splaty of ESV z 01.01.2016 r. [Electronic resource]. – Mode of access: <http://www.buhoblik.org.ua/nalogi/edinyj-esv-z-01-sichnya-2016.html>. Vydavets Lozovyi, V.M., 2015. – 656 p.
27. Koval, O.P. (2011). Problemy stanovlennia nakopychualnoi skladovoi pensiinogo zabezpechennia v Ukraini: analit. dop. / O.P. Koval. – Kyiv : NISD. – 96 p.
28. Konstituciia Ukrainy [Electronic resource]. – Mode of access: <http://zakon2.rada.gov.ua/laws/show/254%D0%BA/96-%D0%B2%D1%80>.
29. Libanova, E.M. (2010). Ludskii rozvytok v Ukraini: minimizaciia socyalnykh ryzykiv (kolektyvna naukovo-analitychna monografiia) / E.M. Libanova. – Kyiv: I-t demografii ta socyalnykh doslidgen im. M.V. Ptukhy NAN Ukrainy, Derzhkomstat Ukrainy. – 496 p.
30. Ministerstvo ekonomichnogo rozvytku i torgivli Ukrainy "Tendencii tiniovoy ekonomiky v Ukraini za I pivrichiia 2015 roku" [Electronic resource]. – Mode of access: <http://www.me.gov.ua/Documents/List?lang=uk-UA&id=e384c>.
31. O pensionnom obespechenii v Respublike Kazakhstan: Zakon Respubliki Kazakhstan ot 21 iunia 2013 goda № 105-V [Electronic resource]. – Mode of access: <http://grossbuh.kz/information/show/id/415.html>.
32. Onyschenko V.O. (2015). Socialna bezpeka regionu: teoretychni ta prykladni aspekty: monografiia / V.O. Onyschenko, T.M. Zavora, O.V. Chepurnyi. – Poltava: PoltNTU. – 274 p.
33. Pokaznyky narodzhuvanosti v Ukraini u 2015 r. [Electronic resource]. – Mode of access: <http://zik.ua/news/2015/07/20/>.
34. Srednia zarobitna plata v Ukraini [Electronic resource]. – Mode of access: <http://index.minfin.com.ua/index/average/?2015>.
35. Skurativskii, V.A. (2013). Upravliniia socialnym ta humanitarnym rozvytkom: navch. posib. / za red. V.A. Skurativskogo, V.P. Troschinskogo: u 2 ch. – Kyiv: NADU. – Ch. 1. – 456 p.