## UDC 331.25-047.44(477+100)

#### S. S. Zalubovska,

PhD in Economics,

Associate Professor, Department of Finance,

E-mail: zalyubovskaya@bigmir.net;

V. A. Melnyk,

PhD in Economics,

Associate Professor, Department of Management of Foreign Economic Activity,

E-mail: melnikva 2010@mail.ru;

National Academy of Statistics, Accounting and Audit

# Analysis of the Pension System in Ukraine: Realities and International Experience

Analysis of legal aspects involved in the pension system and studies of demographic indicators measuring this system capacity has been increasingly important due to the critical role of the pension system as part of broader system for social security. The article contains analysis of the pension system in Ukraine and the direction of its reforms, especially the reforms of solidarity system of pensions, prevailing now in Ukraine.

Demographic and economic indicators that have impact on the pension level in Ukraine are studied: pension age and average life expectancy, employed population aged 15–70. It is emphasized that the increasing employment in the Ukrainian economy has no effect for the pension level, because the number of people in the pension age has been increasing by higher rates that the employment number. The indicators of minimal and maximal pensions, cost of living, minimal and maximal wage in Ukraine are studied. A comparative analysis of demographic indicators and pension indicators in Ukraine and selected countries of Europe and other world is made. The analysis shows wide gap between Ukraine and the above countries, including new EU member countries, by pension level. The living standard of pensioners is estimated by net pension income, derived as a percentage of net average earnings. For the individual income, which equals to the average, it is derived as the replacement rate. Results of pension modeling for different levels of individual earnings are presented.

The conclusion is made from the analysis that the central problems of the Ukrainian pension system are low pensions of the majority of the population in the pension age and the imbalanced budget of the Ukrainian Pension Fund.

**Keywords:** pension system, life expectancy, pensioner, minimal pension, maximal pension, minimal wage, maximal wage.

Pensions play the key role in the social protection system. The right of every citizen for social security is fixed in the Constitution of Ukraine. The central objective of the pension system is to ensure decent living conditions of people in the retirement age by providing the guaranteed income after retirement, to eliminate economic and demographic risks of the pension system and reduce poverty. The pension system is a part of the social and fiscal system of a country, as by influencing formation and redistribution of budget funds it determines the stability of the financial system at country level. The need for social security of disabled people occurred in the industrial era and the rapidly increasing employment, which required their social protection through the pension system.

The pension system existing in Ukraine does not provide decent living conditions for the elderly. The budget deficit of the Pension Fund has been growing every year and has already reached enormously high level. The pension system of Ukraine features lack

reliable and transparent accumulation mechanisms that would allow for accumulating funds for old age, social insecurity and injustice, lack of pension culture.

Since pensions are the main income source for pensioners, they should be essentially treated as statutory monthly allowance for disabled people due to the onset of pension cases such as age, disability, loss of provider. The right for financial security in case of old age, sickness, disability or loss of provider, as well as other types of social allowances and benefits are guaranteed by the Constitution of Ukraine. It specifies that citizens have the right to social protection that includes the right for security in cases of complete, partial or temporary disability, widowhood, unemployment due to circumstances beyond their control, and also in old age and in other cases specified by the law.

Pensions are a kind of material support to citizens established by the state in form of pensions and social services, provided with the onset of retirement age, occurrence of employment or due to disability or loss of provider, from the Pension Fund of Ukraine,

© S. S. Zalubovska, V. A. Melnyk, 2016

the Social Insurance Fund and the State Budget [1]. The pension system is composed of a complex set of institutions, relationships and mechanisms, by which the pension funds are formed and appropriate conditions for the pensions for disabled people are created. In many countries it includes several elements: the state pension system, mandatory funded system, and additional occupational pension savings program [2].

The pension system is one of the essential social guarantees for the sustainable development of society, as it covers all the social strata. Important tasks of the pension system include poverty reduction and balancing of incomes, mitigation of economic, political, and demographic risks facing any pension system. The objectives of the pension system are:

- protect against poverty in the retirement age;
- provide guaranteed income after the retirement, which amount is usually proportional to the amount of earnings;
- protect this income against further decline in living standards as a result of inflation.

The model of the pension system should be integral, structured, dynamic and multidimensional.

The world practices show that there are no universal rules for the formation and operation of the pension system. The pension system plays an important role in the social and political life of a country, its financial and budgetary, having significant effects for formation and redistribution of financial resources in the regional and sectoral aspects, and for the stability of the national financial system [3].

We are going to analyze retirement age and life expectancy in foreign countries by the data of the National Institute for Strategic Studies [4].

Figure 1 shows that in Belgium, England and Germany average life expectancy of pensioners is 15 years, in Spain it is 16.6 years, and 17 years in Italy. The average pension in the United States is about 50% of the salary. With life expectancy in the US being 78.7 years, the life expectancy of American pensioners is nearly 14 years. In France where the life expectancy is longer, for pensioners it is nearly 22 years. Japan has the highest life expectancy in the world, 83.6 years, and the life expectancy for pensioners is 18.6 years. In Ukraine, the average life expectancy is 71.4 years, with the life expectancy for pensioners being only years [5].

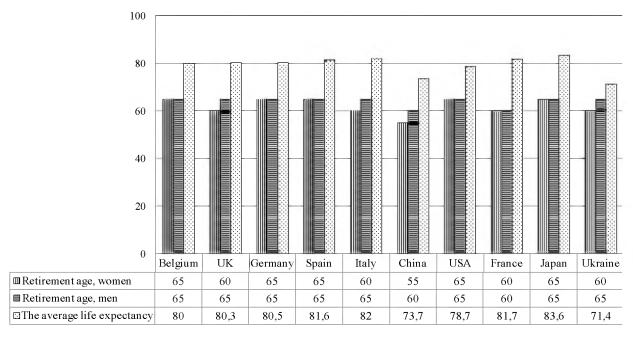


Figure 1. The Retirement Age and the Life Expectancy, years

In addition, pensioners overseas have also housing and utilities paid by the budget. In France, the minimum monthly pension is 500 euro, in the UK – 480 euro, and in Italy – about 500 euro [6].

Let's analyze the average pension level in the new EU member countries [7]. The average monthly pension in these countries is supposed to be much higher than in Ukraine, especially when one considers that the average monthly pension in Ukrainian in 2015 amounted to 1573 UAH, which is equal to nearly 56 euro (see Figure 2).

Using data from the State Statistics Service of Ukraine let's compare the number of pensioners and the employed population aged 15–70 in Ukraine [8] (see Table 1). As shown, in 2011 the number of people in retirement age began to grow, and in 2013 it slightly reduced. According to the Ukrainian Pension Fund, the total number of pensioners in Ukraine as for 01.01.2015 amounted to 12,147,189 people. According to our estimations, the number of pensioners per 1000 inhabitants is 299 in 2010, 300 in 2011, 303 in 2012, 299 in 2013, 298 in 2014, and 283 as of 01.01.2015.

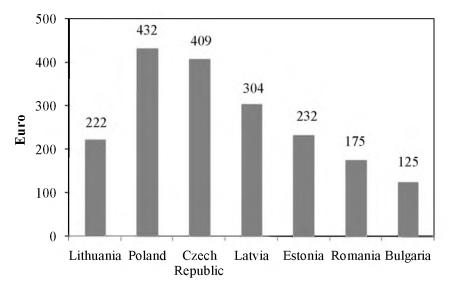


Figure 2. Average Pension in New EU Member Countries, Euro

Employees and Pensioners in 2010–2015 in Ukraine

(thousand people)

Table 1

			(omo asama pospro)
Year	Population	Employed population aged 15–70	Pensioners
2010	45962.9	20266.0	13721.1
2011	45778.5	20324.2	13738.0
2012	45633.6	20354.3	13820.5
2013	45553.0	20404.1	13639.7
2014	45426.2	18073.3	13533.3
2015	42928.9	18073.3	12147.2

The pension amount in Ukraine has been stable in spite of the increasing employment, mainly because the number of pensioners has been growing faster than the employment. Given this trend, the ratio of pensioners to working age population can be predicted as 50% by 2025, and 76% by 2050. This prediction

indicates that Ukraine won't be capable to keep up simple reproduction of the population. This situation underscores the urgent need for pension reform.

A very similar demographic trend can be seen in European countries (see Table 2).

Table 2

# **Demographic Trend in European Countries**

(%)

	Natural increase of population		Annual population growth		Share of people older than 60					
Country 20	2000	9095	2000	2025	2000		2025			
	2000	2025	2000		All	Male	Female	All	Male	Female
UK	0.1	0.0	0.4	0.2	20.4	8.8	11.6	27.4	12.5	14.9
France	0.4	0.0	0.5	0.1	20.5	8.6	11.9	28.4	12.4	16.0
Germany	-0.1	-0.5	0.1	-0.2	23.2	9.5	12.7	32.9	14.8	18.1
Italy	0.0	-0.5	0.3	-0.3	23.8	10.1	13.7	32.5	14.4	18.1

Data from the State Statistics Services of Ukraine [8] are used for further analysis of the main indicators of financial security of the Ukrainian population:

minimal and maximal pension benefits, cost of living, minimal and maximal wage (see Table 3).

# Financial Security and Pensions in Ukraine

(UAH)

Year	Minimal pension	Maximal pension	Cost of living	Minimal wage	Maximal wage
2010	695	6950	825	869	13035
2011	750	7500	894	941	14115
2012	822	8220	1017	1073	18241
2013	894	8940	1108	1147	19499
2014	949	9490	1176	1218	20706
2015	1074	10740	1330	1378	23426

As shown by Table 3, from 2010 till 01.01. 2015 both the minimal pension and the minimal wage was consistently higher than the cost of living. The minimal pension in this period is lower than the average cost of living and the minimal wage. Also, the upward trend in maximal wage is recorded.

The living standard of pensioners can be estimated by net pension income, derived as a percentage of net average earnings. For the individual income, which equals to the average, it is derived as the replacement rate. Pension modeling results for different levels of individual earnings are presented in Table 4.

Table 4

#### **Net Pension Income**

(%)

Individual earnings relative to the average	Country				
	UK	France	Germany	Italy	
0.5	43.6	55.5	37.0	49.1	
0.75	44.8	55.5	53.8	69.3	
1.0	47.6	65.0	71.8	88.8	
1.5	55.1	84.3	107.7	125.2	
2.0	56.3	102.6	117.8	159.7	
2.5	56.3	120.1	117.8	192.0	

Because only the mandatory pension system is accounted for, the indicator measures the need for individual pension for employees, which differ by level of income for the life time. Hence, the need for individual retirement pension schemes is the largest in the UK., as the budget provides only 47.6% of the average retirement income. However, in Italy, with its strong mandatory pension system, the citizens' participation in individual pension programs can be quite limited.

It should be also noted, that family support to an isolated elderly is a special, informal component of pension provision in Ukraine. The poverty level by structural criterion is 59.3% in Ukraine, and of the determining factors for risk of poverty increase is presence of at least one person over 75 plus at least one child and plus at least one adult of retirement age in a household.

Ukraine has already made attempts to reform the solidarity pension system:

- limitations imposed on the maximal amount of pensions;
- length of military service increased for military officers;

- single social contribution introduced;
- pensions to working pensioners limited to 85%;
- insurance period taken into account in calculating the pension increased;
  - the retirement age increased.

The last pension system reform in Ukraine was in 2011, with amendments made to the legislations in order to recover the Pension Fund of Ukraine. The decision was taken to increase the retirement age for women from 55 to 60 years in the following ten years. Since October 1, 2011, full pensions have been given for 35 years of service for men (instead of 25 years) and 30 years of service for women (instead of 20 years). Also, while people upbringing several children had needed to pay contributions for a relatively shorter period to be eligible to pension, the Pension Law enforced in 2011 increased the minimal period for paying contributions from 5 to 15 years.

Some important changes in the pension system, which were not a part of the whole strategy, concerned the calculation and indexing of pensions, including:

- 1) change of the minimal pension;
- 2) calculation of the reference wage to calculate the pension;

# СОЦІАЛЬНА СТАТИСТИКА

3) calculation of the effective annual increases in pensions.

In March 2014, a number of small changes were taken in order to save money, including increase of the retirement age for preferential pensions and abrogation of "special" pensions to high rank employees staying on their positions—after the pension retirement age. Furthermore, if there's no additional change to the legislation, new "special" pensions will not be administered in the future, whereas pensions will be given on general basis within the solidarity system.

For the pensioners who do not receive "special" pensions but continue to work, the amount of pensions exceeding three minimal wages (3654 UAH) was reduced by 15% in 1st of January 2015. Pensions

exceeding tenfold the minimal wage (much higher than the average pension) are taxed at 20%. As very few retirees a subject to this provision, its economic effect is small.

In view of the above, the main problems of the existing pension system in Ukraine are low level of pensions of most people who have reached retirement age, and the imbalance of the Pension Fund. As international practices show, the development of private pension system is an essential component of an effective market economy, because the funds invested in private pension funds, apart from providing the steady future income to a pensioner, work for the benefit of the national economy, being invested in national business enterprises.

## References

- 1. Didkovska, T. O. (2012). Poniattia ta sutnist pensiinoho zabezpechennia v Ukraini: suchasni realii ta perspektyvy rozvytku [The concepts and the nature of pension providing in Ukraine: realities and development prospects]. Forum prava Forum of Law, 1, 253–257. Retrieved from http://nbuv.gov.ua/jpdf/FP\_index. htm 2012 1 39.pdf [in Ukrainian].
  - 2. Volhyn, N. A. (2004). Sotsialnaia politika [Social politics]. Moscow: Ekzamen [in Russian].
- 3. Lyndyuk, O. A. (2009). Sutnist pensiinoi systemy ta yii mistse v zabezpechenni sotsialnoi bezpeky suspilstva [The essence of the pension system and its role in ensuring social security of society]. Visnyk Natsionalnoi akademii derzhvnoho upravlinnya pry Prezydentovi Ukrainy Bulletin of the National Academy for Public Administration under the President of Ukraine, 4, 290–298 [in Ukrainian].
- 4. Koval, O. P. (2013). Pensiinyi vik: inozemnyi dosvid ta vitchyznyani realii. Analitychna dopovid [Retirement age: international experience and domestic realities. Analytical report]. Kyiv: NISS [in Ukrainian].
- 5. Naselennia. Ofitsiinyi sait Derzhavnoi sluzhby statystyky Ukrainy. [Population]. www.ukrstat.gov.ua Retrieved from http://www.ukrstat.gov.ua/operativ/operativ2007/ds/nas\_rik/nas\_u/nas\_rik\_u.html [in Ukrainiain].
- 6. Ukraina i Yevropa: sravnivaem zarplaty i pensii [Ukraine and Europe: let's compare wages and pensions]. context.crimea.ua Retrieved from http://context.crimea.ua/digest/ykraina\_i\_evropa\_sravnivaem\_zarplati\_i\_pensii.html [in Russian].
- 7. The 2015 Pension Adequacy Report: current and future income adequacy in old age in the EU. Country Profiles. (Vol. II). web.vu.lt. Retrieved from http://web.vu.lt/ef/t.medaiskis/files/2012/09/SPC-report-on-Pensions-Adequacy-Volume-II Country-profiles.pdf [in English]
- 8. Statystychnyi zbirnyk "Ukraina". 2006–2013 [Ukraine. 2006–2013. Statistical Yearbook]. Derzhavna sluzhba statystyky Ukrainy. Retrieved from http://ukrstat.org/uk/druk/publicat/arhiv\_u/01/arch\_ukr\_. htm [in Ukrainian].

#### С. С. Залюбовська,

кандидат економічних наук, доцент кафедри фінансів;

## В. А. Мельник,

кандидат економічних наук,

доцент кафедри менеджменту зовнішньоекономічної діяльності;

Національна академія статистики, обліку та аудиту

# Аналіз пенсійної системи в Україні: реалії та міжнародний досвід

У статті розглянуто систему пенсійного забезпечення в Україні, виявлено її основні недоліки та окреслено напрями її реформування, насамперед у частині солідарного компонента. Проаналізовано демографічні та економічні показники, що впливають на рівень пенсійного забезпечення в Україні, серед яких: пенсійний вік, середня тривалість життя при народженні, чисельність зайнятого населення віком 15—70 років. Підкреслено, що збільшення зайнятості в економіці України не справлятиме ніякого впливу на рівень пенсії, оскільки кількість людей у пенсійному віці зростає більш високими темпами, ніж число робочих місць. Подано показники прожиткового мінімуму, мінімальних та максимальних пен-

# СОЦІАЛЬНА СТАТИСТИКА

сійних виплат і заробітної плати в Україні. Проведено порівняльний аналіз демографічних характеристик і показників пенсійного забезпечення в Україні, деяких країнах Європи та світу. Результати аналізу свідчать про значний розрив між Україною і зазначеними вище країнами, в тому числі новими країнами — членами ЄС, за розміром пенсій. Рівень життя пенсіонерів оцінюється за чистим пенсійним доходом, отриманим як відсоток від середнього заробітку. Представлені результати моделювання пенсій для різних рівнів індивідуального заробітку.

За результатами дослідження зроблено висновок, що центральними проблемами української пенсійної системи на сучасному етапі є низький рівень пенсій більшості осіб, які досягли пенсійного віку, та незбалансованість бюджету Пенсійного фонду країни.

**Ключові слова:** пенсійне забезпечення, пенсійна система, тривалість життя, пенсіонер, мінімальна пенсія, максимальна пенсія, мінімальна зарплата, максимальна зарплата.

#### С. С. Залюбовская,

кандидат экономических наук, доцент кафедры финансов;

# В. А. Мельник,

кандидат экономических наук, доцент кафедры менеджмента внешнеэкономической деятельности; Национальная академия статистики, учета и аудита

# Анализ пенсионной системы в Украине: реалии и международный опыт

Рассмотрена система пенсионного обеспечения в Украине. Исследованы демографические и экономические показатели, влияющие на уровень пенсионного обеспечения в Украине, среди которых: пенсионный возраст, средняя продолжительность жизни при рождении, численность занятого населения в возрасте 15—70 лет. Представлены показатели прожиточного минимума, минимальных и максимальных пенсионных выплат и заработной платы в Украине. Выполнен сравнительный анализ демографических характеристик и показателей пенсионного обеспечения в Украине, некоторых странах Европы и мира. Сделан вывод, что основными проблемами пенсионной системы Украины на современном этапе являются низкий уровень пенсии большинства людей, достигших пенсионного возраста, и несбалансированность бюджета Пенсионного фонда.

**Ключевые слова:** пенсионное обеспечение, пенсионная система, продолжительность жизни, пенсионер, минимальная пенсия, максимальная пенсия, минимальная зарплата, максимальная зарплата.

Bibliographic description for quoting:

Zalubovska, S. S. & Melnyk, V. A. (2016). Analysis of the Pension System in Ukraine: Realities and International Experience. Statystyka Ukrainy – Statistics of Ukraine, 3, 40–45 [in English].

Бібліографічний опис для цитування:

Залюбовська С. С. Аналіз рівня пенсійного забезпечення в Україні: реалії та міжнародний досвід (публікується англійською мовою) / С. С. Залюбовська, В. А. Мельник // Статистика України. – 2016. – № 3. – С. 40–45.