

Anatoly Podgorny

Odessa State Economic University

DEMOGRAPHIC ASSUMPTIONS AND IMPLICATIONS OF PENSION REFORM IN UKRAINE

Abstract

The article analyses changes in the population and age-sex composition, average life expectancy of the population of Ukraine and its employment in the economy. The country's pension system is compared with those of other European countries and demographic preconditions for pension reform in the country are disclosed on this basis. A forecast of the working-age population and the number of pensioners there will be by 2025 is approached in two ways. Our calculations have shown that the raising of the retirement age for women up to 60 years will help to avoid the reduction of working-age population by 2020, which proves the economic feasibility and timeliness of pension reform.

Key words: pension, age, employment, life expectancy, the prognosis.

The provision of pensions is one of the main components of state social policy aimed at helping people who have lost their ability to provide for their own existence because they have reached retirement age or for other reasons.

Pensions are a very recent phenomenon, having been introduced by Germany for its workers in the 1880s. This form of social security was adopted by other countries only in the 20th century and then under trade union pressure. The problem of pension provision today plays a crucial role in Europe in the light of the continent's aging population. The Aging Population Index in Europe is currently 18% but threatens to reach 40% by mid century. At 22%, the rate of Aging Population Index in Ukraine is among the highest in Europe.

Among the many social problems addressed by Ukraine in 2011, the pension reform carried out in the country on the recommendation of the International Monetary Fund was considered to be the most pressing, and was a prerequisite to the country receiving the next tranche of its IMF loan.

One of the central provisions of the reform – the raising of the retirement age, especially for women – was vigorously debated and continues to be discussed. As provided by law, the retirement age for women increased gradually from 55 to 60 years of age, and for certain categories of men – from 60 to 62 years.

The goal of our research was to confirm or to refute the appropriateness, objectivity and timeliness of pension reform and to determine the positive and negative consequences it will have. As Table 1 shows, Ukraine has one of the lowest retirement ages for women.

Table 1

Average Life Expectancy and Retirement Age in European Countries, Years

Countries	Retirement age		Life expectancy	
	men	women	men	women
Ukraine	60	55	63.8	74.9
United Kingdom	65	60	74.6	81.5
Germany	67	67	76.1	82.1
Italy	65	60	77.1	83.2
Spain	65	60	76.6	83.5
Poland	65	60	71.4	79.7
Slovakia	65	60	71.2	79.1

Source: <http://www.demoscope.ru>.

The average retirement age in Ukraine is 57.1 years of age, in France it is 59.2, in Germany 60.5, in Britain 62.7, and in Sweden 63.3 years. However, taking this as an argument for raising the retirement age in Ukraine would be incomprehensible to many groups of people. Ukraine has its own history of social protection of citizens which has inculcated its own ideas and traditions. There was no state pension in the Russian Empire. One was first introduced in the USSR in 1932. Then the Law on State Pensions established the retirement age for women at 55 years of age and for men at 60 (Birman 2004, p. 81). In our opinion, this low, especially for women, retirement age and the significant gap in the retirement age for men and women can be explained by two factors, one demographic and the other political. First, the USSR's population in the 1920s had a low life expectancy; and secondly, the authorities sought to show the world that socialism was superior in matters of social welfare.

It is difficult to say which of these factors played the more important role, but this provision existed in our country for 80 years, i.e. for several generations, and became entrenched in the minds of people as being fair. That a large part of Ukrainian society saw the pension reform as an attack on social rights is therefore understandable, and explains the paradox of why most opponents of the reform in 2011 were among pensioners who were themselves not affected by the changes in pension provision.

Apart from the social background, Ukrainian pension reform also has the following demographic and economic preconditions:

1) the extent of basing the rise in the retirement age for women from a demographic point of view;

2) how the increase of the retirement age will affect the formation of the size and structure of the workforce and people of retirement age in the context of the demographic crisis in Ukraine;

3) how it will affect the economically active population.

For the past 30 years Ukraine has had a fragile and negative demographic situation characterised by a significant drop in the birth rate and an increased mortality rate. This has reduced the population by 5.5 million people and changed its age-sex structure.

Table 2

The Dynamics of Population Size and Structure, 1989–2010, Millions of People

Specification	1989		2000		2010	
	men	women	men	women	men	women
Population size, total	23.7	27.7	22.9	26.4	21.2	24.7
including:						
under working age	6.0	5.8	4.8	4.6	3.6	3.4
working age	14.7	14.0	14.4	13.9	14.3	13.5
over working age	3.0	7.9	3.7	7.9	3.3	7.8

Source: (*Naseennja...* 2010).

As can be seen, as a result of the sharp and significant drop in fertility rates in the 1990s, there was an attendant reduction in the population, which has affected not only the younger age groups, but also the working-age population, which has declined by 1 million people since 1989.

The comparison of the age-sex composition pyramids of the population for 1989 and 2010 (Fig. 1) shows that the population in 1989 had a sufficient capacity to replenish the working-age population.

However, moving up the age-axis, it can be seen that this potential is now exhausted, as in the next 15 years a smaller contingent of people born in the 1990s – a period marked by a sharp decline in fertility – will be joining the active working age. Contingents born in the 1950s and 60s, when the birth rate was 1.5–2 times higher, will be retiring from the working age. The significant imbalance between the sexes in a preponderance of women over men, aged 40 years or older, has also garnered attention.

This is a serious signal to take action to increase or at least maintain the working-age population. Against the background of depopulation processes in the country, the only way to achieve this may be to preserve the working contingent of older persons, which is to say by raising the retirement age. This is especially true for women.

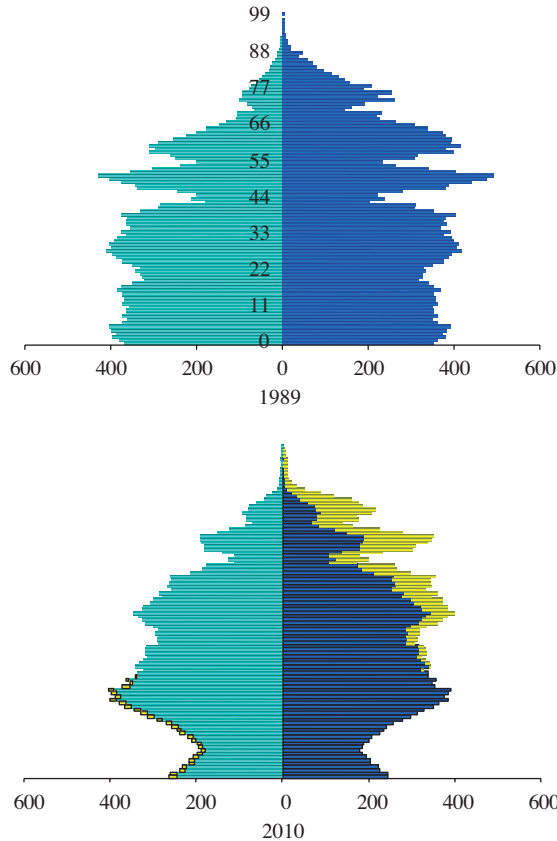


Fig. 1 Pyramid of the Age-sex Composition of the Population of Ukraine in 1989 and 2010

Source: (*Naselenija...* 2010, p. 20–28; *Naselenie...* 1990).

There are two reasons for doing so: First, women have a significantly higher average life expectancy yet have a lower retirement age. Second, compared to men, women have a relatively high level of employment at the retirement age.

To illustrate the first fact, we have used data from the Ukrainian population mortality tables for 2008–2009 (Table 3).

Table 3

Ratio of Life Expectancy and Retirement Age for Men and Women

Specification	Men	Women	Gap
The average life expectancy for infants, years	63.8	74.9	-11.1
Retirement age, years	60	55	-5
Percentage of infants surviving to retirement age	63.6	92.2	-28.3
Expectation of life expectancy after the age of retirement, years	14.9	29.4	-13.5
Percentage of infants of women surviving to age 60 years, %	X	85.7	-22.1
Expectation of women's life expectancy after the age of 60, years	X	19.4	-4.5

Source: (Naselejnja... 2010).

These data show that survival to the retirement age is higher for women than for men by 28 percentage points, while life expectancy at retirement age of women is greater than that at retirement age for men by 13.5 years. Moreover, if the retirement age for women is increased to 60, the retirement age for men, the difference will be respectively 22 percentage points and 4.5 years in favour of women. As a result of the disparity by sex in Ukraine the number of women of pension age outnumbers that of men by 2.4 times, and in the age group 55–60 years by 1.3 times. Only by raising the retirement age for women up to 60 years of age is it possible to increase the working-age population by 2 million people.

This is a very strong argument in favour of raising the retirement age of women to be on a par with that of men. Another argument in favour of doing so is the difference in employment rates between men and women, especially of retirement age. Table 4 presents data on employment for men and women of working and retirement age.

Table 4

Employment of Men and Women, 2010

Specification	Men		Women	
	thousands	%	thousands	%
The economically active population	11389.2	100.0	10761.1	100.0
Employed, the total number, including:	10217.2	89.7	9974.3	92.7
of working age	9707.3	85.2	8657.7	80.5
of retirement age	509.9	4.5	1316.6	12.2

Source:

As can be seen, the employment of the economically active population was higher among women than men, especially of retirement age. In comparison with 2000, the number of women of retirement age employed in the economy increased by 30% (the part in the economically active population increased from 5.4 to 12.2%), and the number of men in this category decreased by 15%. In other words, the labour activity of women of retirement age has grown.

These results have led us to conclude that there were objective reasons and conditions for raising the retirement age for women up to 60 years.

We predicted the size of the labour force and people of retirement age by 2025. The forecast was carried out on the basis of population size in Ukraine at the beginning of 2010 and the population mortality tables for 2008–2009 (*Naselennja...* 2010, p. 67–68). It was based on the hypothesis that the current regime of reproduction will be maintained. We started from the following hypotheses:

1) fertility – a change in the fertility rate, if it happens, will not affect the number of workers in the contingent workforce in the next 15 years;

2) mortality – the continued aging of the population, as well as the socio-economic situation in the country do not allow us to count on a significant reduction in mortality, particularly in older age groups;

3) migration – given that at present there is no state policy aimed at involving migrants in Ukraine, this potential means of increasing the workforce was not considered in our calculations.

The forecast was carried out in two versions – for the old and for the new system of pension provision. The results are shown in Table 5.

Table 5

The Population of Ukraine in the Working Age and in the Retirement Age, Millions

Specification	The population of working age				The population of retirement age			
	2010	2015	2020	2025	2010	2015	2020	2025
The old pension system								
Men	14.2	13.5	12.5	11.8	3.3	3.1	3.2	3.3
Women	13.3	12.5	11.5	11.0	7.9	7.2	7.3	7.1
In total	27.5	26.0	24.0	22.8	11.2	10.3	10.5	10.4
The new pension system								
Men	14.2	13.5	12.5	11.8	3.3	3.1	3.2	3.3
Women	13.3	13.3	13.0	12.4	7.9	6.5	5.6	5.6
In total	27.5	26.8	25.5	24.2	11.2	9.6	8.8	8.9

Source:

As can be seen, pension reform will lower the rate of reduction of the working-age population and will significantly cut the number of women of retirement age. The data show that regardless of both the old and the new retirement system, the working population in the country will be reduced due to the general trend of population decline in the country. However, raising the retirement age for women up to 60 years will provide a reduction from 17.1% to 12% by 2021, which is equivalent to increasing the labour force by 1.4 million people. This amounts to 6.1% of the total working population while the number of people of retirement age will be reduced by 2020 by 1.7 million, and by 2025 by another 1.5 million people. Thus, the gradual increase of the retirement age for women will provide an increase in working-age population, even with the reductions in the total population, and will help reduce the burden on the economically active population.

As for the age structure, the process of aging will inevitably continue given the present structure and reproduction rate.

There are concerns that raising the retirement age may lead to an increase in unemployment in the country, especially among young people. These assumptions are based on the notion that there will be no room for young professionals – a concern we believe to be unfounded. As already mentioned, the numerically smaller contingent born in the 1990s will come into the working age over the next 10 years. Data characterising this process are presented in Table 6.

Table 6

Changes in the Working-age Population between 2011 and 2021, Thousands

Periods	Changes in the working-age population due to:		
	entrance to the working age of young contingents	senior contingents exiting the working age	gap
2012–2013	974	1189	–215
2014–2015	906	1158	–252
2016–2017	884	1131	–247
2018–2019	900	1065	–165
2020–2021	953	1024	–71
In total	4617	5567	–950

Source:

Clearly, many more people will be exiting the working age than will be entering it, which may even provide a slight decrease in unemployment. The more so that the main cause of unemployment in Ukraine is not a demographic but economic component – the lack of working positions in enterprises, especially in agriculture.

Thus, our calculations confirm the objective possibility, need for and timeliness of pension reform. However, it should be noted that keeping women older than 55 years in the working population is not the only means of replenishing the labour force in Ukraine. The country endures great losses as a result of its very high mortality rate in general, and especially high mortality of men.

Ukraine has the highest mortality rate among European (and not only European) countries. Moreover, there is a huge gap in mortality between men and women. Fig. 2 shows that at the most productive ages (from 20 to 60 years of age), male mortality exceeds female mortality by 3–3.5 times, which results in the country losing annually more than 100,000 people.

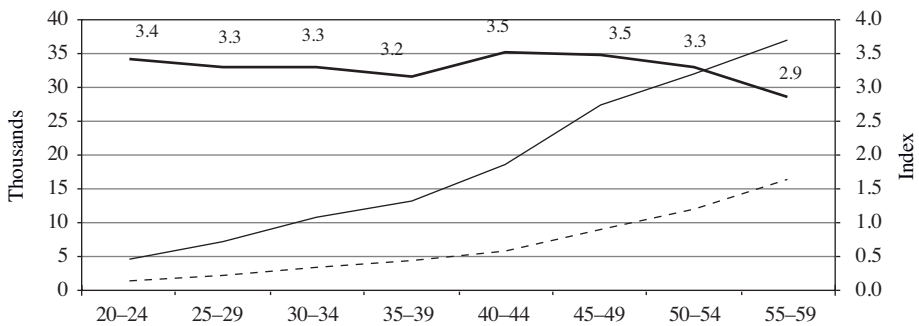


Fig. 2. The Mortality Rate for Men and Women Aged 20–59 Years

Source: (*Naselennja...* 2010).

This is the demographic aspect of pension reform in Ukraine. It shows that there really are prerequisites for raising the retirement age both to increase the number of persons engaged in social production and to increase payments to the Pension Fund. Note also that Ukraine has one of the lowest pensions, amounting to a mere 125 dollars at the current exchange rate.

The state should therefore transition not only to the European retirement age, but also to European standards of living, which offer a high level of health, welfare, etc.

Bibliography

- 1) Birman I. W. (2004), Urowen' ruskvoj žizni (a tak že amerikanskoj), Naučn'uj Mir, Moskwa.
- 2) Населення України за 2009 рік. – К. : Держкомстат України. 2010. – 56 с.
- 3) Население СССР (1990). – М. : Госкомстат. 1991. – 256 с.
- 4) Статистичний щорічник України за 2009 рік. – К. : Держкомстат України. 2010. – 56 с
- 5) Підгорний, А. З. Теорія статистики : навч. посібн. – Одеса, ОДЕУ. 2001. – С. 140
- 6) Підгорний, А. З. Демографічна статистика : навч. посібн. – Одеса, ОДЕУ. 2010. – С. 166
- 7) Підгорний, А. З. , Вітківська, К. В. Статистичне оцінювання і моделювання демографічних процесів на регіональному рівні [Текст] / А. З. Підгорний, К. В. Вітківська // Методологія статистичного забезпечення розвитку регіону: монографія за редакцією проф. А. З. Підгорного. – Одеса : Атлант. 2012. – С.6-42
- 8) Підгорний, А. З. , Вітківська, К. В. Деякі методологічні аспекти оцінки життєвого потенціалу населення на регіональному рівні [Текст] / А. З. Підгорний, К. В. Вітківська // Вісник соціально-економічних досліджень. – Одеса : Пальміра. – 2008. - №30. – С.308-314