

THE FACTORS INFLUENCING PENSION SYSTEM

Davronov Shuhratjon Zuhurovich*

Annotation: The article explores the factors that influence the pension system and draws scientific conclusions on it, and also developed recommendations for improving the national pension system.

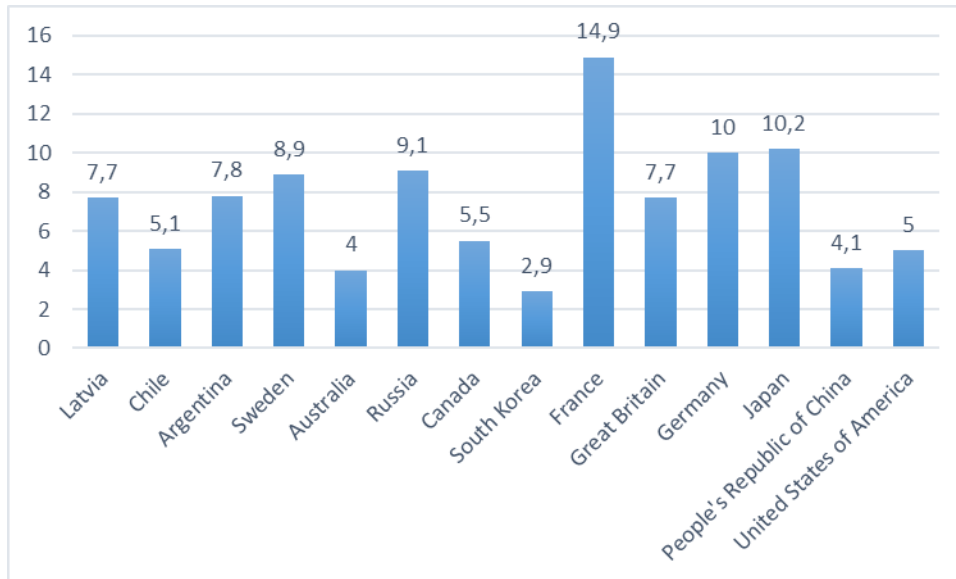
Keywords: pensions, pension provision, pension programs, retirement age, life expectancy, insurance premiums, non-state pension provision, private pension funds, employment, labour market, pension load, wages.

Introduction. It is important to take into consideration the factors influencing the creation of an effective pension system. Because in the modern society the pension system is a very complex form of management of economic objects and depends on a set of factors:

1. Economic factors: Volume, content and growth rates of GDP, inflation rate, risks of pension, quantitative indicators of the labour market, the rate of salary, insurance rate, average pensions, coverage ratio and others.
2. Demographic factors: population, age structure of the population, demographic and pension burden coefficients, birth rate, the number of pensioners, average e life expectancy of the population and others.
3. Social and labor factors: situation in labor market, employment (quality factors), working period and the content of working experience, living standards of the working and incapacitated population and others.
4. Pension factors: normative requirements of the conditions of retirement, pension schemes and pension programs, the historical organizational structure of the pension system.

* **researcher BFA**

Analysis. The rate of GDP is one of the important factor in the economic factors. The economic result achieved by the society determines the size of GDP. GDP is an indicator that describes the general results of economic activity of the country for a certain period of time. Increase in GDP will exert positive impact on the standard of living of the population.



Picture 1. Share of pension expenditures in GDP in some countries in 2017, percentage calculation¹

It can be seen from the picture that share of pension expenditures in GDP is 14.9% in France, 10.2% in Japan, 10% in Germany, 9.1% in Russia, 8.9% in Sweden, 5% in the USA in 2017. Certainly, this should also mean the amount of GDP produced in the country. In turn, the GDP size directly influences a share of expenses of the state budget on pension payments in GDP, that is, the greater the amount of GDP, the smaller the share of government spending on GDP, and vice versa.

Pension risk factor occurs in the result of unreliability of the population to the pension system, unavailability incentive mechanisms of the payment of pension insurance, the mechanism and markets of placement of accumulated pension funds and this affects to the financial sustainability of pension system.

¹ <http://investorschool.ru/rejting-stran-po-vvp-2017>

Quantitative indicators of the labour market, that is the total number of working capacity of the population, and the working hours actively influence on the pension system. This is because in the period of employment able-bodied population considered as a payer of insurance contribution. That is, the abundance of able-bodied population and their employment get into increasing of insurance contributions and this exerts positive impact in financial position of pension system. As well as the volume of wage fund also directly influence on pension system. Because, the quantity of insurance contributions of pension fund depends on the volume of wage. In 2014 in private sector mandatory social insurance premiums for employers and employees determined 24 percent of average monthly wage in 13 countries of Organization for Economic Cooperation and Development (OECD). For other 21 members of OECD it consisted medium 18 percent².

In most cases, the average volume of pension is the result of level of development of country's economy. This figure composes of 1982 USD in Finland, 1000-1500 USD in Japan, 1400 USD in Germany, 1200 USD in the USA, 573 USD in Greece, 255 USD in Estonia, 245-335 USD in Latvia and Lithuania, 250 USD in Kazakhstan, 175 USD in Belarus, 100 USD in Armenia, 140 USD in Bulgaria, 60 USD in Georgia and 52 USD in Ukraine³.

One of the main indicators of the level of pensions in the country and its effectiveness is wage replacement rate⁴. This indicator expresses the ratio ($K=Db/Da*100$) of average pension (Db) to average wage (DA). According to the recommendation of International Labor Organization, this figure should not be less than 40 percent⁵. In European countries this indicator fluctuates about 60 percent. In OECD countries⁶ this figure consists of 54.5 percent. In Russia wage replacement rate composes 35.5 percent in 2016. It should be noted that this indicator is influenced by factors

² OECD (various years), Taxing Wages; OECD (2013), Revenue Statistics; Social Security Administration, United States (various years), Social Security Programs throughout the World; OECD pension and tax models.<http://dx.doi.org>.

³ <http://pensia-expert.ru/trudovye-pensii/pensiya-v-2015-godu/srednyaya-pensiya>.

⁴ The first legal interpretation of this concept is based on the International Labor Organization Convention (Minimum Standards in Social Welfare) (1952).

⁵ www.ilo.org (the site of International Labor Organization)

⁶ Australia, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Slovakia, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, United States, Chile, Estonia, Israel, Slovenia

such as the duration of the length of service, the amount of wages, the amount of insurance contributions to the Pension Fund, the retirement age.

Among the demographic factors total population size, age structure of the population, that is up to 0-15 years, 16-64 years and the population over 65 actively impact on the pension system (Table 1).

Table 1

In 2017 the population in some countries and age structure of the population⁷

Countries	Total population, mln. people	Aged people up to 15 years, mln. people	Number of able-bodied population, mln. people (aged 16-64 years old)	The population over 65, mln. people	Share of population aged 65 in the total number of the population, in percent	Share of able-bodied population in the total number of the population, in percent	Share of population aged 65 in the able-bodied population, in percent
People's Republic of China	1 394,1	245,0	1 025,1	123,0	8,8	73,5	12,0
United States of America	327,9	65,8	219,0	43,1	13,1	66,8	19,7
Russia	146,5	26,8	85,2	34,5	23,5	58,2	40,5
Japan	126,2	16,5	80,9	28,8	22,8	64,1	35,6
Germany	81,3	10,8	53,7	16,8	20,7	66,1	31,3

⁷ <http://www.un.org/ru/index.html>.

France	65,1	12,0	42,2	10,9	16,7	64,8	25,8
Great Britain	65,7	11,4	43,5	10,8	16,4	66,2	24,8
South Korea	51,4	7,0	37,3	7,1	13,8	72,6	19,0
Argentina	44,5	11,3	28,3	4,9	11,0	63,6	17,3
Canada	36,8	5,8	25,2	5,8	15,8	68,5	23,0
Uzbekistan	31,0	8,2	21,3	1,5	4,8	68,7	7,0
Australia	24,9	4,5	16,9	3,5	14,1	67,9	20,7
Chile	18,4	4,1	12,6	1,7	9,2	68,5	13,5
Kazakhstan	18,3	3,9	13,0	1,4	7,7	71,0	10,8
Sweden	9,9	1,5	6,5	1,9	19,2	65,7	29,2
Belarus	9,5	1,4	6,8	1,3	13,7	71,6	19,1
Kyrgyzstan	6,2	1,8	4,0	0,3	5,3	64,5	8,2
Georgia	3,9	0,7	2,6	0,6	15,4	66,7	23,1
Latvia	1,9	0,2	1,3	0,4	21,1	68,4	30,8

It is clear from the table that the share of population aged 65 in the total number of the population is more than 20 percent in Germany, Japan, Russia, and Latvia. Considering that in the world, average pension age for men and women is 62 years so these countries considered “old” countries and it means that it is important to increase pension reforms. According to UNO criteria, the share of population aged 65 in the total number of the population is more than 7 percent, the population of the country is old⁸. According to the table, except Uzbekistan (4.8%) and Kyrgyzstan (5.3%) other all countries’ population is considered old. Demographic burden coefficient is the ratio of incapable population to able-bodied population. The result of this indicator describes the number of people who are incapable of working per 1,000 able-bodied population⁹.

⁸ <https://ria.ru/society/20130925/965712660.html>.

⁹ <http://www.grandars.ru/student/statistika/koefficienty-demograficheskoy-nagruzki.html>.

The ratio of able-bodied or employed population to pensioners is an important indicator, according to the International Labor Organization requirements, in order to provide the normal situation of pension system there should be 3 insurance payer, that is employee per one pensioner¹⁰. For example, this figure is 1=2.4 in Russia, 1=2.2 in Finland, 1=2.3 in Japan, 1=2.5 in Greece, 1=4.4 in the USA and 1=3.5 in China¹¹. In this situation, it is important to consider that not all workers pay insurance premiums and most of them work in the “secret” economy. If we pay attention to the pensioners who only connected with insurance premiums payers, these figures will be considerably low. In these cases, in providing pensioners with uninterrupted pensions “pension burden” will be so weighty for workers and in old population countries with increasing the number of older people, pension provision will be financially difficult. There are supposed to occurring instability between pensioners and employees and the number of real citizens paying insurance premiums in these countries.

In social and labor factors, situation in labor market and employment actively influence to the pension system. In this case, health of workers, ability of replaying to the activities of able-bodied population, general education and professional qualification level of communicative and able-bodied population is important.

Completely employment of the population, in turn, get into increase in insurance premiums and growth of accumulative pension funds. This situation provide, firstly, being followed of “generational solidarity” principle, secondly, stability of future pension system, as a result stability of coverage of citizens in the field of pension system. In this illegal labor migration and elimination of “secret unemployment” problems required.

In the content of pension factors, retirement age is one of the important factor. Retirement age in different countries is different, this position is connected with economic development of the country, social policy and demographic factors. It is known that average life expectancy in the world in the different countries varies according to the social and economic and demographic

¹⁰ www.ilo.org (the site of International Labor Organization)

¹¹ <https://lenta.ru/articles/2017/02/07/agerussia>.

reasons. In Japan average life expectancy – 83 years, in the United States – 78 years, in Great Britain – 79 years, in Germany – 79.3 years, in France – 81 years, in Italy – 82 years, etc.

Table 2

Legally retirement age in different countries¹²

Countries	Retirement age, year	Countries	Retirement age, year
Armenia	63	Austria	65
Azerbaijan	57/62	Belgium	65
Belarus	55/60	Finland	65
Bulgaria	60/63	France	65
Estonia	60,5/63	Germany	67
Georgia	60/65	Greece	65
Hungary	62	Israel	67
Kazakhstan	58/63	Italy	60/65
Kyrgyzstan	58/63	Japan	65
Latvia	62	Luxembourg	65
Lithuania	60/62,5	Nederland	65
Poland	60/65	Norway	67
Romania	59/64	Portugal	65
Russia	55/60	Spain	65
Slovakia	59,5/62	Sweden	65
Slovenia	56,3/63	Switzerland	64/65
Turkmenistan	57/62	Great Britain	68
Uzbekistan	55/60	Australia	67

Overall the world, the “being old” tendency of the population describes increase in average life expectancy and decrease in rising population size. In turn, increasing life expectancy requires to reform in rising retirement age. By the experts’ opinion, one year increase in retirement age provide economizing 5-7 percent of pension funds.

¹² http://www.beroc.by/publications/policy_papers.

Pension schemes and programs of foreign countries play important role in social protection of citizens. Citizens can participate in different pension programs, and by this they have opportunity to increase future pension benefits.

Attractiveness of accumulative pension provision plays important role in financial stability of pension system. In foreign countries accumulative pension funds are actively invested to different financial instruments. As a result, this, firstly, provide life abundance of accumulator, and secondly, play a role in economic development of investment funds.

Conclusion. Deeply analyzing of all factors, which affects to pension provision, gives an opportunity to produce development directions and to estimate current situation of pension system. For example, changing social and demographic factors, increasing the number of older population in society, development of medicine, increasing average life expectancy and others shows the importance of developing distributed pension system and increasing attractiveness of accumulative pension provision, producing different pension programs, implementing private pension funds.

Follows from the above that in the current period, the state reform of pension system for guaranteeing its financial stability is one of the most important social and economic problems of all countries of the world. However, each country has to work taking into account the demographic, social, and economic features. However, not to repeat errors of others of the country, it is necessary to study, analyze and take as far as possible more profoundly for himself conclusions from experience of foreign countries.

References

1. OECD (various years), Taxing Wages; OECD (2013), Revenue Statistics; Social Security Administration, United States (various years), Social Security Programs throughout the World; OECD pension and tax models.<http://dx.doi.org>.
2. http://www.beroc.by/publications/policy_papers
3. <http://investorschool.ru/rejting-stran-po-vvp-2017>.
4. <http://pensia-expert.ru/trudovye-pensii/pensiya-v-2015-godu/srednyaya-pensiya>

5. www.ilo.org (the site of International Labor Organization).
6. <http://www.un.org/ru/index.html>.
7. <https://ria.ru/society/20130925/965712660.html>.
8. <http://www.grandars.ru/student/statistika/koefficienty-demograficheskoy-nagruzki.html>.
9. <https://lenta.ru/articles/2017/02/07/agerussia>.