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A review of existing pension services in developed and developing countries

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Abstract. This paper examines the experience of organizing the pension system in developing and developed countries and develops recommendations for further improving the national pension system considering the specifics of the global economy. Besides that this paper aims at briefly comparing the indicators of average pensions in the world.

1 Introduction

In the last few decades, both developed and developing countries have experienced significant changes in the structure of their populations [1, 5]. The fraction of elderly people at the retirement age in the total population has persistently been rising. This rising process, basically alluded to as population aging, is more advanced in developed countries, however in the past years its effects are akin to being felt by developing countries [2]. Amid the many consequences of population aging, its fiscal effect has been admitted as the most immediate and subverting [2, 3].

As the share of the people close to the retirement age in the total population increases, avowals on public pension systems and the demand for public health care welfare likewise rise, extra pressurizing on government budgets [4]. Such negative developments threaten the long-term sustainability of fiscal systems. International experience has shown that the subverting fiscal impact of population aging is particularly strong in such pension systems. Due to the specific design of pension systems, in which current workers finance pension payments for current pensioners, public pension systems are appraised to be the most vulnerable sections of government budgets [5].

As a result, many developed and developing countries have reformed comprehensively their current pension systems [6]. As was known, countries with developed market economies have accumulated sufficient experience in organizing pensions [7, 8].

In several developed countries, various models of pension systems are used, including various institutions of social protection - state social welfare, compulsory social insurance, personal pension insurance [9]. As observed, purely models built according to the "funded" or "pay-as-you-go (PAYGO)" scheme are considerably rare [10, 11]. Basically, combined models are used, in contrast to that are in the dominance of one particular social institutions [11].

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Practically all developed countries of the world have their own funded pension system. As a rule of the implementation of this pension system, about 40% of the population participate in it. In some countries (i.e. the United States), this figure is even higher and reaches 80% [12, 13]. From this point of view, the study of advanced experience of pension provision in developed and developing countries and its creative implementation (considering the characteristics of the national economy of these countries) contributes to the further improvement of the pension system in the Republic of Uzbekistan.

Uzbekistan's statutory pension system consists of two pillars: PAYGO defined-benefit pension scheme, and a mandatory funded defined-contribution scheme [14, 15]. Under the current enforced law, the PAYGO scheme plays a dominant role in old-age income provision, accounting for most pensioner income. The funded pillar, on the other hand, is relatively small, thereby playing a negligible role in the society of Uzbekistan [16, 17]. Besides that the amount of pension is legally estimated according to the type and duration of employment, and monthly salary received in the last five months before retirement [18].

Considering all the above, this paper aims to compare briefly the indicators of average pensions and pension services of Uzbekistan to other developed and developing countries in the world.

2 Main text: Comparative characteristics of indicators of average pensions in the world

2.1 The United Kingdom

The UK pension system is one of the oldest in the world (existed since 1908) and the most complex in terms of organization, regulation and recruitment of opportunities. British retirees can receive both a basic pension from the state and a labor pension from the national insurance system, depending on earnings and seniority. The basic public pension is received by men over 65 and women over 60, and this pension amount depends on the length of service. The level of public pension is limited and indexed by the government in accordance with inflation. The state guarantees this pension in the amount of 20% of the average employee's salary. The labor pension is also formed at the expense of the employee's contributions, but already in half with the employer. This labor pension directly depends on the amount of payments and transactions, and amounts to just over 20% of annual income. In addition, there are many ways to accumulate private pensions from corporate programs at enterprises to a developed system of voluntary pension savings in the accumulative pension fund [19-21].

2.2 Germany

The German pension system is based on the principle of intergenerational solidarity, and employees pay for the maintenance of current pensioners in the public fund, of which they will receive as their pension after retirement. The more contributions employees pay now, the more pension rights they will receive later. The average contribution of a German citizen to the pension fund is about 20% of the monthly salary, with the employer paying half. During a citizen's service in the army or maternity leave for women, the state pays financial contributions. The pension formula itself is calculated in regards to individual coefficients accumulated over the entire working life. These coefficients mainly depend on the retirement age (in Germany - 67 years), length of service and employment, salary, and the type of pension. Aligning with the public pension, there is a production pension from enterprises as private pension funds in which many employees can participate and have a personal pension plan [22, 23].

In 2015, the average pension in Germany was 1,400 EUR. If the pensioner was unemployed during the working period and the pension calculated for him does not reach the subsistence level, the state pays the difference. The state also assumes the utility costs of pensioners [24].

Fig. 1 displays the new European Supervisory Framework, which composes of a new European Systemic Risk Board and three new ESAs for the financial services sector: the European Banking Authority based in London, the European Insurance and Occupational Pensions Authority in Frankfurt, and a European Securities and Markets Authority in Paris.

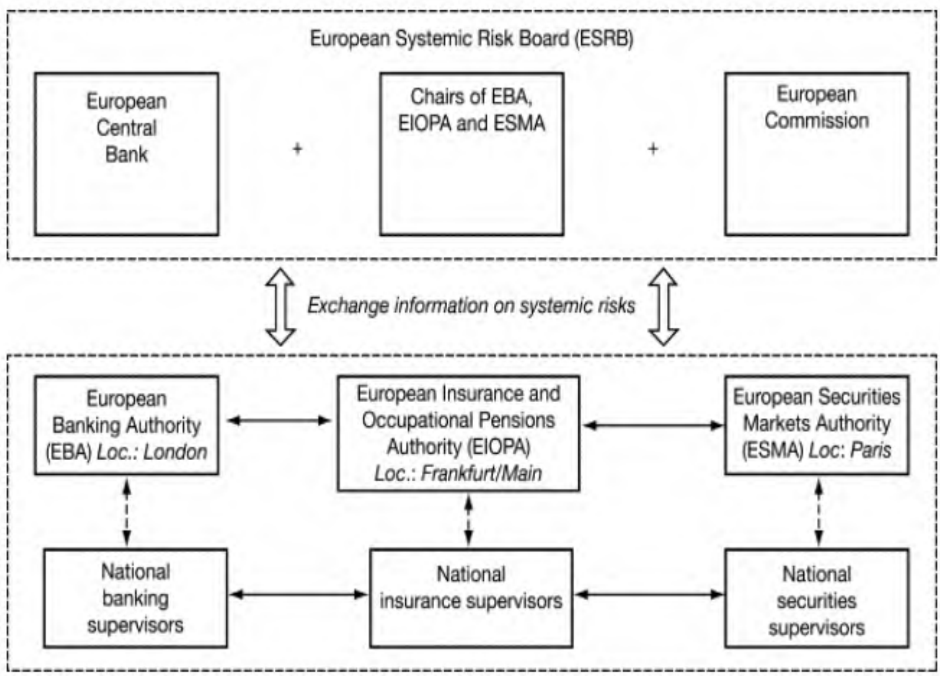

Fig. 1. The new European supervisory framework.

This framework provides the governmental and societal institutions to investigate the risks at the European level which can accumulate by the financial system as being witnessed in the run up to and at the height of the financial crisis.

2.3 France

The French pension system is PAYGO, that is, payments to pensioners are made from income generated from contributions from the active population. On average, a pensioner receives pensions from three fund sources, and in the case of a multidisciplinary career, their number may exceed five [25]. Pension systems are managed on a parity basis by "social partners", that is, representatives of trade unions or associations of both workers and employers, under the control of the government. Participation in basic and supplementary insurance is compulsory and pension provisions are divided between the employee and the employer. For individuals of the liberal professions, artisans and small entrepreneurs, monthly payments to the pension fund are provided at a rate of 16.35%. Most employees pay the same, but the employer deducts half for them. Pension in France is 50% of the average salary calculated for the last 11 working years. But there is such a thing as the minimum and maximum public pension. Today the minimum pension is about 6,000 EUR per year; the maximum is twice as much [26, 27].

The minimum retirement age is 60 years. As long as a French employee has worked for 41 years, then he will receive a full pension. Once the length of service is insufficient, the pension amount is reduced by 1.25% for the missing quarter of working experience or the gap years until 65. On condition that a citizen goes on a well-deserved retirement at 65, a retiree will receive the public pension in full, regardless of when a retiree began to work [2, 28].

In 2013, the French government presented a draft of the next pension reform. This reform will become an asset to cope with the deficiency of the pension system, which in 2011 amounted to 14 billion EUR, and by 2020 this may reach 20 billion EUR [29].

2.4 Scandinavia

Pension in Sweden consists of three parts - conditional funded, funded and guaranteed (mandatory minimum). The first is formed from employee contributions, which make up 16% of monthly wages. This money is converted into liabilities, which are indexed depending on the demographic and economic situation. The funded part also depends on the employee's salary, but this is already real money in employee's account, which can be invested through the accumulative pension fund. Investment activity in Sweden is largely state-limited. One person can receive several pensions at once, when the replacement rate of the previous salary is close to 70%. To receive a full guarantee pension, it is a requirement that a retiree has to be lived in Sweden for at least 40 years as from the year in which a retiree reached the age of 16 up to and including the year in which a retiree reach the age of 64 [30-32].

In Finland, the PAYGO pension system plays a major role. The pension distribution is divided into base and insurance parts. The basic part guarantees the minimum amount of the national (public) pension. The insurance part of the labor pension is decentralized and is formed by contributions to one of the selected schemes in an insurance company or a pension fund. The selected schemes can be industry-specific, individual enterprises, and social groups, and these schemes are partially funded. The average pension in the country is 58% of monthly wages and on average, current pension amount is about 1800 EUR. The public pension fund does not set a maximum saving, how much a citizen earned, but every saving is taken into account. Pensions are high, which allows Finnish retirees to buy real estate in the near neighborhood [33-35].

Pension in Norway consists of the minimum that the state pays to each citizen and allowances depending on the length of employment and salary. In addition, there is such pension fund in the country, where oil surplus profits have been invested. The state invests this money in real estate and the stock market around the world. The retirement age in Scandinavian countries is 65-67 years for men and women, but now governments are thinking about increasing it to 70 years in 2030 [34, 35].

2.5 The United States

There are both public and private pension systems in the United States. Thanks to this, Americans can provide themselves with not one, but three pensions: public, private collective at the place of work, and private individual by opening a personal retirement account. In the PAYGO (public) system, pensioners receive money from those who are currently employed and pay contributions to the respective pension funds of citizens [36].

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The largest public pension system in the United States is a general federal program that covers almost everyone employed in the private sector of the economy, built on a PAYGO basis [37]. The program operates under the Social Security Act declared in 1935 and provides a minimum pension. Accumulation systems include both public and private pension programs. Public funded programs are designed to provide for citizens working for the government and local authorities. Employees at the private sector of the economy have the opportunity to participate in supplementary public pension systems organized at the place of work [38]. The defined benefit program is formed by deductions from employers, and employees themselves do not participate in such financing. Defined contribution plans are usually funded equally by entrepreneurs and employees. Moreover, each participant has his own personal account in the pension fund and has the right to choose between various investment programs offered by management companies. An employee is responsible for the results and, to a certain extent, determines the amount of subsequent pension payments [39]. Any employee of the company can become a member of the private pension program. The right to retirement can be earned with about five to ten years of experience in this company. Every American can also open own personal retirement account in commercial banks, mutual funds, and insurance companies [4]. Annual contributions to personal retirement accounts are capped at 2,000 USD. Funds cannot be withdrawn from the account until the age of 59 and half years, and after reaching 79 and half years, the account is automatically closed. For the entire period of accumulation of funds on the account, these funds are not subject to taxation, however, at the time of their withdrawal and closing of the account, income tax is deducted from the accumulated amount [40].

The full retirement age is 65 for those born before 1938. With reference to the increase in life expectancy, amendments were made to the social security law on the stepwise transition to the age threshold of 67 years. The average American pension is around 1,200 USD. This is outnumbered as 50% of the average monthly salary. Employees transfer 7.5% of their income to the pension fund, and the employer pays extra 7.5%. Non-governmental employees (businessmen, lawyers) pay all 15% on their own. The living standard of ordinary American retirees may seem low [36, 38]. But everything is offset by low prices in the consumer market. The United States pension model operates in some Latin American countries, as well as in Portugal [41].

2.6 Ecuador

Ecuador was voted the first place to live after retirement in 2013 by the International Living site, based on user votes [11]. This country attracts retirees with its low cost of living, favorable climate, and affordable healthcare. The local government provides 40% of pension payments in Ecuador by the Institute of Social Security of Ecuador (ISSE) [42]. Currently, in Ecuador, there are four options for retirement for those who expect to receive a monthly pension: no age limit (480 monthly payments to the social security or more than 40 years of working experience), 60 years (360 monthly payments or more than 30 years working experience), 65 years (180 monthly payments or more than 15 years working experience), 70 years (120 monthly payments or more than 10 years working experience). The retirement age of Ecuador, as of May 2013, is 60 years [43].

The ISSE pension fund is based on a PAYGO system. Currently, 170,000 employees contribute their monthly salary to additional pension funds. Most of them belong to the public sector (prosecutors, judiciary, Petroecuador fund, and municipal funds). There are also private pension funds, such as the Ecuacobre FV fund or the Ecuadorian Episcopal Catholic University [42, 44].

Ecuador has a massive discount program for people over 65. Taxes have been cut for pensioners, discounts of about 50% are provided on public and private transportation within the country, on tickets for cultural and sports events, and on payments for electricity and water (below a certain level of consumption) [45].

2.7 Chile

The Chilean pension system is considered one of the most innovative pension systems in the world, the experience of which has been used by various countries, including Russia. Based on this pension scheme, responsibility for the formation of pension savings is transferred to working citizens. Each of them has their own retirement account, which is replenished monthly with contributions in the amount of 10% of monthly wages. In the future, the transferred funds are capitalized by a private management company at the choice of the citizen. The retirement age in Chile is 60 for women and 65 for men [6, 18, 22].

2.8 Japan

The pension model is dominated by publicly funded state social security. The Japanese pension system has two main tiers. The first tier is basic pensions, to which all residents of the country are entitled, regardless of income level, nationality and type of activity. Basic pensions are divided into old-age pension (subject to 65 years of age and insurance coverage), disability, and loss of breadwinner. The second tier is public and professional pensions, which are received by employees in addition to the basic one. The retirement age in Japan is 65. As to be continued to work, the pension increases annually [9, 46].

2.9 China

Initially, only officials and employees of state-owned companies received pensions in China, but as market reforms progressed, the system covered urban residents working in the private sector. In 2007, only 30% of Chinese could count on pension payments (the rest were traditionally fed by breadwinner). In 2009, the Chinese authorities forced the introduction of pensions for rural residents. As of October 2012, the pension system covers 55% of the population. Accrual systems differ in China depending on whether a person lives in a city or a rural area, and whether they work for a government or a private company. The public pension is 20% of the average monthly salary in the region of residence. Pension in rural areas is 10% of the average monthly income of Chinese people. In the private sector, employees transfer 8% of their salaries to pension funds, another 3% is added by the employer, and indexation is limited by the level of price increases [11, 25]. Men retire at 60, women in administrative work at 55, and women in manual labor at 50. The minimum required work experience to receive a pension is 15 years [47].

2.10 Russia

Pensions in Russia are accrued to the following categories of the population [48]:

- men who have reached the age of 60, women - 55;
- disabled people;
- people who have lost a breadwinner as a result of various reasons;
- by length of employment and service (applies to the military, doctors, police officers, prosecutors, tax inspectorates);
- for special services to the state.

Today in Russia there are three main types of pensions: insurance (labor), funded and public social security pension. An insurance pension can be awarded for old age, as a result of the loss of a breadwinner and disability. The funded pension is determined depending on the amount of pension savings, which are taken into account at the request of the pensioner on an individual personal account. Russians born in 1967 and later have the right to receive a funded pension. The public social security pension is a cash payment, compensation to citizens of wages lost as a result of the termination of the federal military program or seniority. This type of pension is also subdivided into: social; loss of a breadwinner; old age; on disability; and for the length of service. The size of the pension is influenced by the length of employment and service, salary, and pension contributions of citizens [49, 50].

To calculate the average pension, the indicator of actually paid pension payments in the country is considered. It is determined for each type of pension separately. As of April 1, 2015, the Russian pension fund has established the following average pension indicators [51, 52]:

1. Old age retirement pension - 13,900 RUB.
2. Disability pension – 7,994 RUB.
3. Pension for the loss of the breadwinner – 8,040 RUB.
4. Pension for military invalids – 28,490 RUB.
5. Social pension – 8,300 RUB.
6. The average pension received by veterans of the Second World War is 30,257 RUB per month.
7. In Moscow, the average pension is 14,000 RUB.

2.11 Uzbekistan

In accordance with the Citizens’ Law of Uzbekistan, all citizens of the Republic of Uzbekistan have the right to have public pensions. Pension provision for citizens of the Republic of Uzbekistan living abroad is carried out on the basis of international treaties. International and stateless citizens permanently residing in the Republic of Uzbekistan also have the right to a pension on an equal basis with citizens of the Republic of Uzbekistan. Citizens who have no prior work experience and their families are not entitled to public pensions, the order of social security for which is determined by the government of the republic by separate legal acts [53].

In Uzbekistan, there are such types of pensions as old-age, disability, and survivor pensions. As far as, according to the law, a citizen is entitled to various types of public pensions, then a citizen is assigned one pension of his choice [54-56].

The following people have the right to an old-age pension: men - upon reaching 60 years of retirement age and with a work experience of at least 25 years; women - upon reaching 55 years of retirement age and with a work experience of at least 20 years. Also, to people who do not have sufficient work experience for the appointment of a pension, old-age pensions are assigned in an amount proportional to the existing work experience, if they have at least seven years of work experience.

National laws provide conditions for retirement on preferential terms. So, workers in the leading professions of the mining industry, workers employed in underground and open pit mining for the extraction of coal, ore and other minerals, in the construction of mines and mines, workers of flight and flight test personnel, and certain categories of theater and entertainment enterprises are entitled to a preferential pension regardless of age. But simultaneously, these employees must accumulate a certain length of service in these jobs. Also, some categories of employees of particularly harmful and difficult jobs have the right to retire with a decrease in the generally established age by five and ten years.

Disability pensions are assigned to people who are recognized as invalids of groups I and II in the manner prescribed by law. The causes and groups of disability, as well as the time of the onset of disability and the period for which disability is established, are determined by local medical and labor expert commissions. Pensions for disability due to work injury or occupational disease are assigned regardless of the length of service, and disability pensions due to a general illness are assigned if there is a certain length of service at the time of disability.

Besides that, survivor pensions are awarded to disabled members of the deceased breadwinner. The amount of this survivor pension depends on the length of service and the amount of wages of the deceased breadwinner. However, if the breadwinner died due to work injury or occupational disease, the pension is awarded regardless of the length of service of the breadwinner.

On December 12, 2004, the adoption of the Law of the Republic of Uzbekistan "On accumulative pension provision of citizens" introduced accumulative pension provision in the country, which is designed to provide citizens with additional funds to the public pension from funds of individual accumulative pension accounts. Citizens of the Republic of Uzbekistan, as well as international and stateless citizens permanently residing in the territory of the Republic of Uzbekistan have the right to accumulative pension provision. The state guarantees the safety and payment of funds accumulated in individual accumulative pension accounts to citizens participating in this pension pension system [57, 58].

Under the funded system, the employer makes mandatory funded pension contributions on a monthly basis by reducing the amount of the accrued personal income tax. The amount of compulsory accumulative pension contributions is calculated from the amount of wages and other income of employees, including working pensioners. This amount is set by the government annually when forming the State budget for the next year. This amount is currently set at 1% of a monthly salary in 2020. The employer has the right, at own expenses, to make additional contributions to the individual accumulative pension accounts of employees. The amount of additional contributions and the timing of their payment are determined by the collective agreement, and if it has not been concluded, by the employer in agreement with the representative body of employees [59, 60].

Citizens have the right to additionally contribute to their individual accumulative pension accounts, which they determine on their own. The authorized bank, namely the People’s Bank of Uzbekistan (Khalk Banki) calculates the interest on funds of individual accumulative pension accounts at rates exceeding the inflation rate [24, 31].

Funds from the accumulative pension system are used to assign public funded pension payments. As to increase and protect against inflation, the funds of the accumulative pension system can be used as investment and credit resources, as well as for placement in financial instruments. The use of funds of the accumulative pension system as investment and credit resources is carried out by the People's Bank in agreement with the Ministry of Finance of the Republic of Uzbekistan [59, 60].

Obligatory accumulative pension contributions, interest, and other income received by citizens and the People's Bank from the use of funds in individual accumulative pension accounts, accumulative pension payments, as well as the turnover of funds of the accumulative pension system are not subject to taxes and other compulsory payments. Citizens participating in the public funded pension system as recipients have the right to receive funded pension payments only when they become eligible for a state pension. However, in the event of the death of a citizen, the funds accumulated in the individual accumulative pension account are inherited and paid to the heir at any time in full [1, 51].

Thus, in accordance with the recommendations of international financial institutions, a public funded pension system has been created and is being improved in Uzbekistan as the basis for the formation of market elements to increase the responsibility of citizens for their material well-being in old age. In addition, the creation of a public funded pension system is a confident step towards the formation of private pension funds as an alternative to public pension provision. The financial stability and social security of a national public funded pension system is committed to the impact of economic and demographic factors.

3 Conclusions

Studies have shown that many developed and developing countries are faced with deficits in their pension systems and the solution to the problems in optimizing pension provision is found in increasing the retirement age and the required length of service. Also, during the study, a number of scientific developments, which contain recommendations for increasing the age and the required retirement experience, are reviewed. However, to implement this recommendation, first of all, it is necessary to create socially secure, safe, socially guaranteed working conditions for citizens, modernized workplaces, and achieve full employment of the able-bodied population.

To reduce the pressure on the public pension system in the country and to increase the responsibility of citizens for their prosperous and secure old age, it is assumed to form private pension funds, ensure their activities on the basis of social partnership with the state, as well as preserve state-guaranteed pension insurance as a guarantor of social stability.

As it is assumed during the review of developed and developing countries' pension systems, one potential solution to the problems requiring concentration of efforts in the implementation of pension reforms is the strengthening of public confidence in the funded pension system, its greatest coverage in this system, an increase in revenues to the savings accounts of voluntary contributions from employees, as well as the effective investment of pension savings and an increase in the financial stability of pension savings.

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