

# FOREIGN EXPERIENCE OF PENSION SYSTEM REFORMING AND POSSIBILITY OF ADAPTATION IN UKRAINE

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**Abstract.** The *purpose* of the paper is to analyze foreign experience of reforming pension systems. Reforming pension systems around the world is due to the need to balance the cost of social support for people who are growing, with the financial capabilities of the country. Ukraine, like other European countries is facing the crisis of public pensions. One reason – the rapid aging of the population. The experience of some countries shows that the increase in the rates of deductions has a negative impact on employment, leads to a significant increase in public debt, and therefore is unacceptable. Some economists believe that a full transition to retirement savings scheme – a solution. However, this would create an additional burden on public financial systems and current generation of taxpayers. Therefore, it is necessary to determine the main directions of the crisis of pensions. With the economic downturn global scale of the efficiency of the pension system of Ukraine, its compliance with the standards of the welfare state is becoming more acute. That is why there is an urgent need for adaptation based on international experience to review previously proposed ways to reform the pension system of Ukraine. *Methodology* is actual works of scientists and researchers. *Results* are exploring the features of the international experience of reforming pension systems and proposition of directions of reform of the pension system of Ukraine on the basis of demographic, social, financial, political and cultural characteristics of its development. *Value.* Background research finding is due to government regulation mechanisms of social insurance in Ukraine. The most developed social protection system with the EU. Consideration of these specific programs of effective systems of social insurance is an important basis for the analysis of international experience. Decisive impact on the social security system in the EU provides current demographic trends (falling birth rates below the natural reproduction and aging), strengthening European integration and economic globalization. This raises the need to find a new EU approach to achieve the optimal balance between economic and social components of social development, which would avoid a conflict between the priorities of economic development and social justice. From this point of view is an interesting assessment of the most effective options for upgrading existing systems of social protection in the EU in case of individual programs.

**Key words:** pension system, funded pension system, social protection of citizens.

**JEL Classification:** H55, H75, J32

## 1. Introduction

The first full-fledged pension system became Otto Bismarck introduced in Germany, the mandatory pension system, which was based on the principle of solidarity of generations (1889). Later, similar systems have been introduced in other major European countries: Denmark (1891), Great Britain (1908), France (1910), Sweden (1913), Italy (1919) (Moseyko, n.d.).

Following the positive example of European countries in the first half of the twentieth century, the rest of the world has developed a national pension system based on the principle of solidarity in the pension system.

Each country has gone its own way of constructing pension system based on the demographic and socio-economic features of development. However, the tasks of

any pension system are: protection from poverty; providing income at the end of work, size is usually proportional to the amount of income that was paid just before retirement; protection of income from lower real standard of living over inflation.

It is noted that accumulation and distribution system of pensions inherent positive qualities and shortcomings.

The main advantage of large distributive pension systems based on current funding that it is possible to start immediate payment of pensions. Such systems provide greater protection and a higher rate of substitution (ratio of pensions to wages) for people with low incomes, i.e. income redistribution within a generation.

However, the distribution system there is a direct correlation between the value of pension funds and

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demographic situation, the state of the labour market – employment, unemployment, wages, the ratio of contributors to the pension system and pensioners.

The main principle of funded system is a personal responsibility of each insured person by creating conditions of their lives. The pension system is fully based on a cumulative basis, increases the total savings of the economy and leads to increased investment and economic growth.

Funded pension system is devoid of the influence of demographic factors, gives its participants freedom of choice and provides differentiation of pensions based on wages and efficiency savings.

However, in the very concept of a funded system there are many hidden risks. It is more effective for workers with high wages who are able to save up for their retirement accounts a significant amount of money, but does not provide a mechanism of redistribution and prevent poverty. Yield funded system significantly affected by changes in economic conditions and the quality of management (Barr, 2002).

The most difficult part is the cost of transition to a funded system over the need to redress the loss to pensioners resources diverted to the funded pension system. According to some estimates, the cost of migration is from 120 to 160% of GDP.

Thus, none of the systems today can be considered as uniquely effective to achieve the main goal of pension policy.

## **2. International experience of reforming pension systems in developed countries**

International experience of reforming the pension system shows that the main trend is the transition to a funded pension system, which is the positive side of the opportunity to increase investment in the economy and obtaining investment income for retirees. Yes, the US has a three-tier pension system: the first level is a joint system, but its complement other pension programs that enable citizens to save their money for pensions; second level – a mandatory funded system under which working people transfer part of their earnings on savings accounts; third pillar is a voluntary private funded system, which allows citizens who wish to obtain even greater opportunity to retire and pay large fees in the long term employment, to maintain the desired level of retirement (Popov, 2001). The positive side of the US social security system, the experience which can be used in reforming the pension system in Ukraine is to develop strategic aspects based on forecast changes in demographic and economic conditions.

In the UK distributive pension system operates with low pensions, the reform envisaged indexation of pensions according to the rise in prices, not wages. If the size of the state pension is below the poverty line, those receiving only the basic state pension are entitled to social assistance provided on the basis of their income. Mandatory pension system second level entitles workers to become members

or state pension system, which depends on earnings or vocational system of pre-established payments or personal pension system established with contributions.

Basic state pension system and distribution in Sweden is financed through insurance premiums, constituting 18.5% of earnings, 16% of which comes into the state system. The majority of current contributions used to pay current pensions but the social insurance institution opens contingent individual accounts for insured, which affects this part of the contributions. The pension is calculated based on the amount of accumulated funds given the current life expectancy of persons who cease employment, and increase production over the expected period of pension payment. Guarantee of minimum income in old age is carried out using the pension insurance nets for people who have low incomes during their working life. Some contributions are capitalized in the system, and the employee has the option of placing them on individual accounts in private structures or public accumulation fund. Thus, Sweden has a system of defined contribution, which is the insurance net, giving the public a choice and offers them effective incentives – the right choice regarding the retirement age: a long stay in a pension or a higher standard of living in retirement period; a significant correlation between contributions and pensions improves labour market efficiency. The Swedish system is not at risk, as the distribution system, it does not have the costs associated with the transition to a funded system, which confirms the flexibility of distribution systems. Most Latin American countries have developed a PAYG pension system with large public expenditure on pensions. Implementation of large pension programs requires funding problems similar to the problems of Central and Eastern Europe, which is mainly the result of the adoption of unjustified decisions that do not include the possibility of the budget. This situation has forced a number of Latin American countries to seek better mechanisms of financing pensions and in particular to encourage the introduction of private pension systems, as state-funded programs in Latin America were insufficiently effective.

In Switzerland there are three levels of the pension system. Level I – a national solidarity system. Level II – a national mandatory system, funded by contributions from employers and employees to corporate pension funds or pension funds open. Level III – a voluntary pension system whose members contributing to public pension funds. June 21, 2013 the Swiss Federal Council published a package of measures to reform the pension system (called "Retirement - 2020") to counter the increase in fiscal pressure on public pension systems in connection with further aging. According to preliminary government estimates, the financial gap in the budget of the state pension system will grow from 1.3 billion dollars of the United States in 2020 to 9.1 billion dollars of the United States in 2030. Since 1990, life expectancy in Switzerland has increased by 3 years, and by 2050 the number of pensioners makes up a third of the population.

By the end of this year will complete the discussion and preparation of legislative initiatives to reform the pension system, and next year will be submitted to Parliament a bill. If it is passed by MPs, the implementation of this law in practice, scheduled for 2020, planned to be held on this issue a national referendum (since these reforms, inter alia, amendments to the Constitution). Government proposed a comprehensive reform of national solidarity pension system (Pillar I) and the mandatory occupational pension system (Pillar II), including:

1. *The retirement age.* The retirement age of women (now 64 years) at first and second rise for 1 year (by 2 months per year) equals retirement age of men (65 years). Early retirement age for men and women (58 years under current law) will be increased by 4 years to 62 years, but under certain conditions this age will not change for workers with wages lower than the average for a year if they paid pension contributions from 18-21 years. Although the official retirement age remains 65 years (even now people can delay their retirement before reaching 70 years), but there will be more options for a person in deciding retirement at age 62-70 years; For example, since 62 years, working can continue to work part-time while receiving partial pension.

2. *Pension Pillar I.* To cover most of the deficit solidarity system is offered in two phases to increase the rate of value added tax (VAT) from 8% to 10%, namely by 1% in 2020 and by 1% in 2030, based on actuarial estimates and financial needs solidarity system.

3. *Pension Pillar II.* The contributions, that is, the share of individual pension contributions paid as an annual annuity payments will be gradually reduced to 0.2% per year – from 6.8% to 6.0% over 4 years. In order to prevent the reduction in pension benefits compared to its current level (according to official calculations, the lower the contribution would reduce pension Pillar II 12%), the government offers a number of countervailing measures, including subsidies for working people a ripe old age and strategies to encourage participants Pillar II to start saving money for future retirement earlier with young children.

4. *Guaranteed percent increase in the value of assets in occupational pension credit members.* It is proposed to change the method of calculation of the minimum increase in asset value in percentage on the accounts of Pillar II. Instead of the current system where this percentage is set in advance for the next year based on assumptions about future investment returns, this percentage will be calculated at the end of the year, depending on the actual yield levels achieved during the year.

In Australia, the second level of pensions is in the form of mandatory participation in the system of individual capitalized accounts and have clearly defined the first level of retirement (old age pension), the hallmark of which is the fact that it is financed by taxes and pensions are not determined on the basis of income, and given the level of welfare. As the state pension financed by taxes and is higher for the poorest population groups, the first

level has a strong redistributive character. The second level puts pensioners at risk of inefficient management of pension assets and has the essential elements of redistribution.

In New Zealand has a relatively universal system of pensions in precise amounts, supplemented voluntary capitalized pension system with a defined contribution. Universal distribution system is funded by taxes. Retirement age increases from 60 to 65 years. It is planned to create a managed fund government within which should be partial capitalization of funds for future pension costs. The proposal to switch from pensions' firm size, financed by taxes, the system of mandatory participation in private funds from individual accounts in the country was not accepted.

### 3. International experience of reforming pension systems in Latin countries

Interesting is the experience of Chile, where pensions were privatized in the early 1980s. Were set up private savings funds with pre-established contributions that employees pay 10% of earnings, employer contributions or the government was not provided. Workers have the right to choose and change the Fund, at the termination of employment workers can gradually choose some of their savings to the fund. There is a minimum pension guarantee that is provided to protect workers with low earnings, and to protect investors from poor performance of their chosen fund: in cases where a worker with 20 years of pensionable service receives a pension below a certain level, the government increased it to the guaranteed level. There transient conditions for workers moving from the old to the new distribution system. That is, the second pillar is mandatory, guided by the private sector and based on individual accounts. There is also first (residual) level in the form of guarantee pension recipients' second level.

The reform of the pension system in Chile has both positive and negative consequences. The reformed system strengthened financial discipline contributed to the accumulation and expanded and deepened the financial markets and thus contributed to the growth of the Chilean economy in 1980. However, firstly because it is based on the principle established in advance fees, risk on amounts exceeding the minimum pension, it falls on the same worker. Secondly, it is individualistic, in the absence of redistribution both within one generation and between different generations. Thirdly, there are deficiencies in the coverage of contributors arising from non-payment of contributions. The positive is the guarantee of state spending on pensions for older citizens who have not adopted the new system, the cost of temporary contributions for workers who have just moved to a new system of costs to issue index-linked bonds and guarantee minimum pension, which helps protect the investors from the consequences of poor performance chosen they fund

and pensioners – from the bankruptcy of the insurance company.

However, the negative features of the Chilean pension reform are: the high cost of services administration of pension funds; significant level of poverty (in Chile more than a third pension fund clients have incomes below the poverty line). Promised one of providing retirement has not been reached. Instead, the stated 70% of earnings over the past 10 years of service the employee average pay was 39%, while for women the figure was 14%.

So from July 1, 2008 in Chile, along with the accumulative pension system introduced civil solidarity pensions to persons who are not entitled to any other pension, including accumulation. In order to encourage competition in the pension of 2009 was introduced auction system between non-state funds and insurance companies for the right to service new customers. This permitted bid foreign entities.

Chilean experience was taken into account in the implementation of the reform of the pension system in other countries of the continent (Argentina, Colombia, Peru, Uruguay, Mexico, Bolivia, El Salvador).

Pension reforms in Latin American continent were successful in terms of reducing the retirement of debt and create a more stable financial system. The volume of pension funds in Chile, where the new system has been operating for over 20 years is 54% of GDP in Colombia – 14 Argentina – 6% of GDP. The common features of the reform of pension systems in Latin America was: full recognition by the government pension liabilities of the old distribution system; state minimum pension guarantee in the event of bankruptcy of the private pension funds; different forms of employee compensation to mitigate the difficulties of the transition and promotion of adherence to the new system; strengthen state regulation of the use of pension funds.

But were serious problems persists despite the reforms. Coverage of workers' pensions remained at the pre-reform level (only 50-60% of the working population). This situation has the potential to cause serious social risks for the whole system. None of the continent failed to solve the problem of high cost of decentralized management of the pension system.

#### **4. International experience of reforming pension systems in Central and Eastern Europe countries**

Hard financial crisis experienced public pension systems in most transition countries of Central and Eastern Europe (Pyrozshkov, 1999), which is the result of political decisions that reflect the transition from central planning to a market economy and does not take into account the role of individual incentives. Mostly imbalance pension system also caused great demographic load – unfavourable ratio of pensioners to the number of payers of insurance premiums resulting from the low retirement age and aging

population. With the reduction in state revenues and the need for macroeconomic stabilization comprehensive pension reform is an integral part of the overall economic reform in these countries is crucial to ensuring high and sustainable rates of economic growth.

The features of the developed countries are, firstly, the presence of mature, comprehensive distribution schemes, supplemented by voluntary system based on commercial insurance. Secondly, the need to make changes so as not to violate the consent of political parties and social partners, not reduce confidence in the long-term capacity of pensions.

That is why most developed countries have chosen the so-called parametric approach to pension reform, i.e. implementation of corrective measures that change, sometimes quite dramatically, the current system characteristics (level of contributions, retirement age or pension indexation formula under the existing financial possibilities).

In the initial stages of reforms in almost all countries, including the USA, Germany, Japan, Italy, attempts were made to increase the income of the pension system by raising the contributions that generated much opposition members. Modernized framework is also collecting contributions. For example, Belgium, Italy, Switzerland and Portugal were cancelled maximum salary when calculating premiums.

A variety of approaches have been to reduce pension costs. Whereas, according to the OECD, raising the retirement age for 1 year reducing pension costs by 5-10%, some states (US, Japan, Italy, Sweden) in order to reduce the number of pensioners increased the statutory retirement age, stretching is increasing for decades. For example, in the US retirement age for men and women increased during the 2000-2027 from 65 to 67, France – 62, Japan – up to 65. In Sweden, the new pension system does not establish a common retirement age. It is flexible, the choice of the pensioner, ranging from 61 to 67 years.

Another method is reducing the value of assistance per capita by modifying mechanism accrual pension for new retirees or indexation formula. In the UK, France, Italy it is moved to the calculation of pension based on the salary for the entire period of employment, rather than chosen by years of highest earnings.

Among European countries, the most ambitious pension reforms have been implemented in the UK and Sweden. These states have rebuilt much of its pension schemes on savings principles.

The solidarity system is quite vulnerable to political risk, the essence of which is manifested in the fact that politicians often promise more than the pension system is able to provide for the implementation of such promises, especially during political battles usually resort to cover the deficit of pension obligations through the state budget, the use of all possible sources for this purpose, frozen pensions. For developed countries worsening demographic situation is characterized, corresponding to the general trend of an

aging population, but the problem is particularly acute for Ukraine. Ukraine has one of the highest among the countries of the former Soviet Union average percentage of pensioners per 1000 of population, accounting for 28.2%, mainly it is the result of its relocation in the war with the North, Siberia and others. In Ukraine, the lowest retirement age (women – 55 years, men – 60 years), the legislative establishment of which was made in 1928, when life expectancy was 47 years: women 49, men - 45 years (Korczak-Chepurkivskyy, 1929). Today, life expectancy in Ukraine already is 67 years: 62 years – for men, 74 years – for women (see table).

Table

**Retirement age population in some foreign countries**

Country	Female		Male	
	Pension age	Life expectancy after retirement	Pension age	Life expectancy after retirement
Ukraine	55	20	60	2,6
Italy	57	27	60	18
Czech Republic (gradual increase)	57-60	19	62	10
Poland	60	19	65	6
UK	60	21	65	11
Hungary	62	15	62	6
France	62	21	62	14
Estonia (gradual increase)	63	14	63	2
Germany	65	17	65	11
Spain	65	18	65	11
USA	65	15	65	10
Canada	65	17	65	5
Norway	67	15	67	10
Japan	70	15	70	8

Source: compiled from statistics

Most countries in Central and Eastern Europe who made pension reform, increased the retirement age people, as reflected in the table, with in some countries the retirement age rose once (Poland, Hungary) and in other countries (Estonia, the Czech Republic) is increasing gradually. In some countries, women and men retire at the same time in the same age. According to studies, after-pension age in Ukraine for men is on average 2 years and for women 20 years, which is the cause of raising the retirement age. Developed countries need to raise the retirement age arising from an aging population and worsening ratio of under 8 contributions payers to the number of pensioners, which could lead to deterioration of the solvency of national pension systems and their bankruptcy. Scientists estimate (Libanova, 2000) if increase the retirement age by five years, then, according to estimates, the number of pensioners will decrease by 40% and pensions can gradually increase by 60-70%, and taking into account the cancellation of pension – twice. It should recognize that the extreme urgency factor is increasing age.

**5. Conclusions**

In summary, it should be noted that the problem of pensions of the elderly is relevant for all countries. Recently, most countries faced with serious social problems that threaten public finance crisis, one of the most critical elements of the crisis was just the public pension system. Since neither solidarity nor funded system do not solve the pressure from an aging population, financial capabilities do not meet the funding kept growing need for their support. Therefore, it becomes necessary to reform the public pension system, which would increase the retirement age, or age which is entitled to a pension privatization of some parts of pension schemes, enable diversified investment existing trust funds, changing the base for calculating the amount of assistance (such as increasing the number of waste years taken into account when calculating aid). At the same time, governments are taking a number of measures and, in particular, partly offset other social programs (unemployment, etc.). Given the economic, social and demographic situation in Ukraine, there should be carefully studied the experience of countries that are faced with problems of this kind. Analysis of global pension systems confirms that the need to reform the first public pension systems would increase the retirement age, restructuring public pension system towards the introduction of multi-mixed pension system, privatization, if necessary, parts of pension programs, to enable a diversified investment existing trust funds or create new ones, change the base for calculating pensions.

Foreign experience of reforming the pension system allows using many useful lessons. However, mechanical drawing models and mechanisms of social protection that had positive results in other countries without specific socio-economic, political, socio-cultural and socio-psychological characteristics and conditions are undesirable and impossible. Public policy should be as reasonable to ill-advised decisions not to cause disappointment in the ongoing reform of society. It should also be noted that the transition to a system of capitalization of pension contributions will require at least 30-40 years, after which only earn a full pension system. Three-tier pension system will make it possible to distribute among its constituents risks associated with changes in the demographic situation (which is more sensitive to the PAYG) and fluctuations in the economy and the capital market (which felt more than in batch system). Such risk sharing will make the pension system more financially sustainable and balanced that insure workers against reducing the overall level of income in retirement and is essential and beneficial for them. Prospects for further research. Further development should be based on a deep system analysis of international experience of reforming the individual components of the pension system weaknesses and benefits of the current pension system of Ukraine to develop instruments forming effective and socially oriented pension system in Ukraine that would meet the principles of the state welfare and be able to take challenges.

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#### ЗАРУБЕЖНЫЙ ОПЫТ РЕФОРМИРОВАНИЯ ПЕНСИОННОЙ СИСТЕМЫ И ВОЗМОЖНОСТЬ АДАПТАЦИИ В УКРАИНЕ

**Аннотация.** *Целью работы* является анализ зарубежного опыта реформирования пенсионных систем. Реформирование пенсионных систем во всем мире вызвано необходимостью сбалансировать расходы на социальную поддержку людей, растущих с финансовыми возможностями страны. Украина, как и другие страны Европы, стоит перед кризисом системы государственного пенсионного обеспечения. Одна из причин – быстрое старение населения. Опыт ряда стран показывает, что увеличение ставок отчислений негативно влияет на уровень занятости, приводит к значительному увеличению государственного долга, а потому неприемлемо. Ряд экономистов считает, что полный переход на накопительные пенсионные схемы – это решение проблемы. Однако это создаст дополнительную нагрузку на государственные финансовые системы и нынешнее поколение налогоплательщиков. Поэтому существует необходимость определения основных направлений выхода из кризиса систем пенсионного обеспечения. В условиях экономического спада мировых масштабов проблема действенности пенсионной системы Украины, ее соответствия стандартам социального государства приобретает все большую остроту. Именно поэтому существует настоятельная необходимость на основе адаптации зарубежного опыта пересмотреть предложенные ранее пути реформирования системы пенсионного обеспечения Украины. *Методикой* является фактическая работа ученых и исследователей. *Результатами статьи* является исследование особенностей зарубежного опыта реформирования пенсионных систем и предложения направления осуществления реформ системы пенсионного обеспечения Украины исходя из демографических, социальных, финансовых, политических и культурных особенностей ее развития. *Значение.* Актуальность темы исследования обусловлена поиском государственных механизмов регулирования социального страхования в Украине. Наиболее развитые системы социальной защиты имеют страны ЕС. Рассмотрение отдельных программ этих эффективно действующих систем социального страхования является важной базой анализа международного опыта. Определяющее влияние на системы социальной защиты в странах ЕС оказывают современные демографические тенденции (падение рождаемости ниже уровня естественного воспроизводства населения и его старение), усиление европейской интеграции и экономической глобализации. Это вызывает необходимость поиска в странах ЕС новых подходов для достижения оптимального соотношения между экономическими и социальными составляющими общественного развития, которые позволили бы избежать конфликта между приоритетами экономического развития и принципами социальной справедливости. С этой точки зрения интересна оценка наиболее эффективных вариантов модернизации систем социальной защиты в странах ЕС на примере отдельных программ.