



## The Model of Pension System in Chile: Transformation in Kazakhstan

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### Abstract

In the mid-1990s, Kazakhstan faced the need to provide reform of the pension system. The basis was the Chilean cumulative pension system. According to the Chilean model, the burden of financial support for pensioners could be removed from the state. Considering that in the state there were 2.7 million pensioners out of a population of 17 million, the introduction of private liability for pensions significantly reduced budgetary government spending. After 20 years of functioning of cumulative pension system in Kazakhstan, it has been fundamentally transformed. From the original Chilean model, only the basic principles have remained: the obligatory participation in the system; accumulation of a pension in one cumulative pension fund. The National Bank of the Republic of Kazakhstan manages implementing investment management of pension assets of the pension fund; establishing requirements for diversification and risk reduction when placing pension assets. In the article, the authors demonstrate that the original Chilean model has been modified to the national conditions of Kazakhstan taking into account the constitutional proclamation of each for a pension regardless of participation in cumulative system and under the influence of the best experience of the Organisation for Economic Co-operation and Development states.

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### Introduction

The Chilean program of pension reforms has become a founding model in the world. The system has continued to develop, providing new lessons for the future (Bravo & Ruiz, 2015; García & Otero, 2017; Verdugo-Perona, Solaz-Portolés, & Sanjosé, 2018). In 1981 fiscal pressure caused by changing demographic tendencies, which quickly increased the proportion of pensioners in the population, forced Chile to dismantle the pay-as-you-go pension system with defined benefits (PAYG). Chile decided to adopt the system in which

old-age pension is financed mainly by the public, but privately managed individual pension accounts. The reform has reduced a tax rate on a salary and cut the element of net tax of mandatory contributions out of a salary, tightening the link between contributions and pension benefits.

The forming of Chilean pension system was in transit from the distribution system with stipulated payments to accumulative system with stipulated contributions. The ground of the new system in Chile was personal capitalised accounts of Chilean citizens united in pension funds. After complete replacement of the state system of social security with pay-as-you-go on the state system of private retirement accounts, based on investments, Chile has managed to defuse a fiscal time-bomb. But this bomb is still a threat for countries where there is a system of social security with pay-as-you-go, because fewer and fewer workers are forced to pay for

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retirement to an increasing number of pensioners. What is more important is the fact that Chile has created the pension system providing to employers' accurate ownership of their pension contributions, proper employment and investment incentives; it acts as moving power, but is not obstacle to the economic development; and enhances personal freedom and dignity (Junusbekova, 2016). Chilean private pension reform inspired many other countries to reform and is considered by some as possible prototype of USA reform etc. (Behrman, Calderon, Mitchell, Vasquez, & Bravo, 2011). This pension concept is one of the rare introductions exported from Chile to the world including Latin America, Central and West Europe, Africa, Asia and some developed countries such as Sweden (Kaldybayeva et al., 2018).

## Methodology

The research studied the main act of the OECD in the field of standard of a pension – Recommendations of the Council on aging policy and employment (December 14, 2015). The OECD bodies assume that state-members will implement the whole necessary complex of measures to implement the provisions of Recommendations. It is recommended that participants and non-participants of the OECD joined the Recommendation, strengthen incentives for employees to grow longer careers and to continue working in older age. With this purpose, supporters should increase incentives to continue working at an older age: by providing that pension system encourages later retirements according to the increase in life expectancy while ensuring adequacy and sustainability of pension benefits; by encouraging a longer career through greater flexibility in transition from work to retirement, including by facilitating gradual retirement, a better balance between work and the permission to combine retirement benefits with income from work; to restrict usage of a scheme of early retirement with state financing, which induce employees to leave work.

## Results and Discussion

### *Pension Reform in Kazakhstan*

In carrying out reforms in Kazakhstan, it was assumed that Kazakhstan and Chile have much in common. These countries with almost the same population have rich reserves of natural resources, especially non-ferrous metal ores. The basis of the economy of these countries is the mining industry, which is mainly focused on exports. By analogy with Chile, in Kazakhstan since 1998, all employed persons are obliged to pay pension contributions to the pension fund. The rate of contributions to personalised accounts is 10 percent of a salary. Until retirement age, it is impossible to refund contributions in full or to borrow (Edwards & Marin, 2015).

There are mechanisms for investing contributions to assets determined by the state. In general, the state plays an important role in the functioning of the private system. Strict regulation,

supervision and audit are implemented. Asset management companies must provide a certain investment income. Further, the pension systems of Chile and Kazakhstan have been developed with some synchronicity: in 2005–2010 basic non-contributory pensions, voluntary and professional pension contributions, state contribution for women at time of childbirth were introduced. Therein it was taken into account that raising children and caring for the elderly significantly violates women's participation in the labour market, negatively affecting their pensions (Rojas & de la Paz, 2015). Kazakh cumulative pension system faced a number of challenges: high level of self-employment population (about 30% of active population); latency of real wages; low level of a pension from funds; little benefit of cumulative of pension funds;

As a result of reforms from 2016–2018 in Kazakhstan, the non-contributory pension system in the form of the basic pension contribution was factually renewed. Its size depends on experience of participation in cumulative system. Cumulative system is the supplement to the non-contributory without being the only source of a pension. The government introduced the unified combined contribution for self-employed in order to legalise it in cumulative pension system. Employers are obliged to make contributions in funds.

The transformation of pension system is relevant for Kazakhstan. At present in connection with new stage of development of the non-contributory pension system and low efficiency of cumulative pension system, there is a tendency to reduce the pension replacement rate of previously received incomes, below 40 percent. In the Organisation for Economic Co-operation and Development (OECD) states in average percent of a pension, replacement is about 60 percent. In the transformation of the pension system, the experience of the development of pension systems of OECD countries is used in terms of introducing standards for the size of pensions, increasing the retirement age, and encouraging older workers to postpone retirement (Mukhamadiyeva et al., 2017).

### *Results of Pension Reform in Kazakhstan*

The main disadvantages of Chilean pension system, which led to its transformation in Kazakhstan, were: the absence of pay-as-you-go and distribution pension; low coefficient of pension replacement regarding previous income; bigger number of self-employed population, high rotation of jobs. These issues are inherent in Kazakh, and they needed a specific national solution. The modern pension system of Kazakhstan is a combination of pay-as-you-go and accumulative system. They differ in order of formation and finance of pension right, conditions of right to pension, subjective make up of participants. A combination of two different by principles of construction pension systems in Kazakhstan is the strategic line of development of a pension wherein the state guarantees according to the Constitution minimal level of a pension regardless of the system providing it (Khamzin et al., 2016).

Introduction of cumulative pension system was conditioned by objective reasons, first of all, of economic nature. The main such prerequisites are, firstly, the necessity of correlation of the level of a pension with incomes of citizens, though this main purpose has not been reached because maximal annual amount of pension from Unified Accumulative Pension Fund is fixed sum for everyone, which cannot exceed a certain indicator. On the contrary, proceeding from the citizens' distrust of the accumulative pension funds of the system as a whole, citizens consciously reduce the amounts of their earnings. Besides, a very important purpose of introduction of the accumulative system has not been reached – management of pension accumulations to activate the financial market of the country, to finance long-term financial projects. However, financial resources accumulated in funds were used ineffectively, funds faced the problem of investment of the resources in proper financial instruments, at least covering inflation with investment income. In addition, the main problems of accumulative pension funds are the issues of distrust of citizens to the activity of funds, disbelief in a decent future pension, which are based on the lack of effective legislative state guarantees of the safety of pension savings.

Current pay-as-you-go system in Kazakhstan is characterised by a high level of the state participation. The pay-as-you-go system takes into account the labour contribution of a citizen. It is impossible to say that a pension of this system is a “burden” for the state, its budget, employed citizens or it is provided undeservedly. Today's pensioners in the period of their labour activity through a certain labour contribution participate in the creation of state values, formation of the state budget, which has financed pension and social security, that is, by feasible contribution participation in the state system of formation and use of the community funds. In such way, today's pensioners of pay-as-you-go system are receivers of values created by them, which is why the opinion that such type of pension is assigned exclusively at the expense of the state, is not true.

A pension of pay-as-you-go system is assigned when retirement age comes, in proportion to the available labour experience and the number of wages, although the last differentiating amount is not, in fact, since there are limitations on the maximum amount of the payable (as a rule) or its minimum value. Factually the number of pensions is not differentiated by sectors of economic activity, so the same number of pensions will be assigned to a teacher, doctor, driver, auditor, judge, minister in maximal amount if there is needed labour experience. The next differentiating indicator – the total labour experience is conditional, since, although it is legally determined that the maximum amount of a pension is established due to work experience, its increase by one percent over the required amount is not, in our opinion, a differentiating factor, which is aggravated also by the maximum value of the pension and the limitation of the amount of income to determine its size.

### *Consequences of Introduction Chilean Reform in Kazakhstan*

Kazakhstan was the first of the post-Soviet states to transform its pension system: the pensionable age was increased, benefit grounds (conditions) for earlier retirement were excluded, social pensions for disability, in case of loss of the breadwinner were cancelled and replaced by appropriate types of benefits, which unlike pensions, are not connected with living wage; accumulative pension system along with pay-as-you-go system was introduced (Khamzina, Buribayev, Oryntayev, & Kuttygalieva, 2015). After 20 years of functioning of pension system modelled on the experience of Chile, in Kazakhstan the general problems in accumulated systems may be stated.

Firstly, transmitting payments, which occurred in transmit to full finance, burdened the budget. Some social spending, especially that related to the minimum guaranteed by the state and social pensions, will stay after the transition period. Secondly, recovery of the tendency to extend coverage of population after 1997. This phenomenon is connected with macroeconomic limitation after this year, but also reflects structural problems of a low coverage and adequacy for low-income and temporary workers, as well as women. Thirdly, since the moment of its creation, scheme financing by private sources had high operating costs that was reflected in management fees that fund managers charge employees. Fourthly, norms of incomes investing in fund initially were high and positive, but during the period fluctuated. Those who started contributing during 1990s experienced negative net income. To explain general problems of social security programs, which follow from the existing global models of demographical changes, it is necessary to take into account three elements: increase in life expectancy, fertility decline and developing migration flows. This leads to a number of important questions, answers to which vary depending on country or specific type of program (Bloom & McKinnon, 2010).

The main problem that Kazakhstan could not solve when introducing the Chilean example of funded pensions, is low incentives for self-employed to participate in accumulative pension system. In researches there are sufficient arguments that informal sector is not just residual labour market, but it offers employees a competitive earning potential. As a result, participation in pension program is choice, but not duty (Joubert, 2015). The important negative result of adoption of Chilean system in Kazakhstan was low investment income of pensions assets management, which did not cover inflation. These processes were aggravated during the 2008, 2014–2016 crises.

In order to provide incentives for participation in the funded system, fulfillment of guarantees for the safety of pension savings, the state has reformed this sphere. The Unified Accumulative Pension Fund has been created, the only shareholder of which is the government. All non-state funds have been liquidated and their assets transmitted to the state super-fund. At present, the fund is the country's largest financial instrument, pension accumulations of which were

\$24.5 billion by the end of 2018 (Dynamic of Fund's Indices, 2018). Considering that GDP of Kazakhstan by the end of 2018 was \$162.9 billion, then the sum of the Unified Accumulative Pension is very significant for the country's economy. In modern conditions, the government defines a list of financial instruments in which it is allowed to invest pension accumulations. One of the investment directions is state social programs, social assistance to banks and other events.

The next direction of the transformation of Chilean system in Kazakhstan is introduction of employers' liability for a pension of employees. An employer for each employee depending on his or her income transfers 5 percent to the Unified Accumulative Pension fund. These pension contributions accumulate on pension accounts of every citizen. These sums of pension accumulations are not citizen property and are not inherited. This is a conceptual thing. Such payments from the accumulated fund will be paid for life. Here the principle pay-as-you-go works.

Unemployment in Kazakhstan is 5 percent, which is the normal indicator, so there is no labour shortage. At the same time, there is the process of aging, and this affects the increase in the retirement age. However, the budgetary constraints remain the basic problem. Pension reforming of the late 1990s and early 2000s was also connected with lack of money because the state could not provide a balanced budget – there were big expenses on pensioners. One of the variants was the sharp increase in age and the launch of the pension accumulations mechanism. At present, in the beginning of 2019, unification of pension age for men and women at 63 is one of the methods of expense decrease for a pension from the PAYG and accumulative pension systems.

#### *Tendencies of Development of Pension System in European OECD States*

The further improvement of pension system in Kazakhstan will be carried under the influence and on the basis of OECD standards. During the study the main vectors of pension system development in the OECD states were analysed, and the following conclusions were made.

Provision of conditions for later and more flexible retirement. Later voluntary retirement is encouraged by incentives (for example, for employer lower contributions of social insurance regarding aged employees or benefits for part-time retirement) or by providing flexibility in choosing a retirement date. For example, in Denmark, retirement may be postponed till 75; in Finland, the number of pensions is assigned higher if retirement is later; in Germany, individuals may postpone retirement after reaching pension age of 67; in the United Kingdom, postpone of retirement is stimulated by higher pensions and/or lump sums.

However, despite the measures outlined, few workers now choose a later retirement. In Japan, despite an 8 percent pension rate per year, only 3 percent of people of retirement age use this opportunity; in Poland, only 6 percent of workers

postpone retirement on average for only one year.

Flexible pension age and conditions of a pension. Some OECD countries refused standard pension age. In the United Kingdom, there are no unified age and automatic termination of labour agreements at a certain age. In Norway, pension age is 67, but pensioners are able to continue working.

In Sweden the standard pension age does not exist anymore; people have choices for retirement between the ages of 61 and 70. They get a detailed informational statement, Orange Envelope, where pension incomes between the ages of 61 and 70 are presented. This example demonstrates the importance of providing simple and clear information to support the decision making. Nevertheless, many employees still retire at the age of 65.

Part-time retirement may also be determined as modern tendency of a pension. Some countries, though it has not been widespread, allow part-time retirement. In Finland, part-time retirement is possible from age of 60 if an insured person has reduced working hours. In Norway, part-time retirement is possible from the age of 62 provided that the pension received is at least equal to the minimum pension. A person can gain 20, 40, 50, 60 or 80 percent of a pension if he/she continues working, also obtaining additional retirement rights. This approach requires part-time work. Early retirement is possible, but its conditions are more severe. Early retirement was possible in many national systems and often on benefit conditions. Considering economic consequences of early retirement of workforce and qualified experienced employees, countries tighten the rules. Nevertheless, early retirement is still possible in many countries, and in some situations may be justified, especially for employees with extreme conditions. In France, early retirement is possible in full rate on the basis of 41 years of pension contributions. In the USA there is flexibility in decrease of pension age.

In Turkey pension age is 60 for men and 58 for women. Retirement may be postponed without age limitations. In Slovenia monthly pension is 26 percent (men) or 29 percent (women) of the insured person's average adjusted income for the first 15 years of contributions plus 1.25 percent (men) or 1.41 percent (women) of the average adjusted income for each additional year of coverage (from 2017–1.25% for men and women). Early retirement decreases its amount by 0.3 percent for each month before 65. Postponed registration of pension rights is increased by 1 percent for every three months of coverage before 60 (early retirement) or 65 (old-age pension) up to three years. An employee may remain in an employment relationship without age limit.

Each state-member of the European Union (EU) is introducing reforms in existing pension systems. Although reforms range from small changes to significant changes in the creation of completely new pension systems as in Sweden and Italy, all reforms go in one direction: less liability of the state and more individual liability, which lead to risk individualisation, a long-term reduction in public pension spending and an increase in the importance of private savings schemes. The consequences of these gender-neutral reforms have a negative impact on women, many of whom are engaged in atypical

work models, such as part-time or temporary work, in addition that care and fulfilling other household duties take time. As a result, the current wave of pension reforms in the EU disadvantages women models of labour market and encourage, as a rule, men labour models (Earles, 2013; Vavzhenchuk, 2019). Risks for the women of employment age due to non-coverage by pension accumulation in Kazakhstan are real. This is influenced by both traditional circumstances precluding employment (pregnancy, childbirth, parenting), and national characteristics: a large percentage of the self-employed among women.

#### *Analysis of the Council Recommendation on Aging Policy and Employment*

It is recommended to create incentives for employers to use the labor of older workers by:

1. Elimination of discrimination by age in employment through adoption of legislative measures, public awareness events, liquidation of discrimination in the process of hiring, career and educational promotion and preserving employment;
2. Using balanced approach to the protection of employment, guaranteeing that age is not a criterion of degree of employment protection while promoting more efficient access to quality jobs for older workers;
3. Obstruction or additional limitation of obligatory retirement from the side of employers in close consultation and cooperation with representatives of employers and employees allowing early retirement for the separate categories of employees, working in extreme conditions;
4. Encouraging representatives of an employer and employees to detect a mechanism of retention and recruitment of older employees including practice of establishing a salary considering labour productivity and competencies, not age;
5. Encouraging employers to manage hired labour through public and private initiatives that promote knowledge and experience exchange in different age groups, correction of labour duties and mechanism of working time, taking into account health and physical abilities of older employees;
6. Extending the participation in professional training of employees during their working life by providing respective educational services and correcting education in line with experience and needs of employees of different age including access to education at work for persons with non-standard forms of employment;
7. Providing effective assistance in employment for persons searching for work regardless of their age; cooperation that aged persons searching for a job have the same responsibilities as young to get unemployment benefit from the perspective of work search, but also equal rights in terms of access to targeted re-employment services.

#### **Conclusion**

On Kazakh market, thanks to pension funds, there is a large domestic investor that affects the economy positively, especially the stock market, which until recently was

undeveloped. Besides, international experience and practice convince that accumulative pension funds are the largest financial institutions. Financial resources of pension funds are huge potential, which is strategically important for both the state and separate enterprises. There are grounds to transform Kazakhstan's pension system into a new big sphere of the economy, which would create a good opportunity to increase the funds needed for the maintenance of future pensioners and provide decent pensions to people in old age.

Structural reforms in pension system are necessary. In further, they will be carried out under the influence of implementation of the best experience and standard of the OECD. In Kazakhstan, according to the constitutional guarantees, it is unacceptable to carry out pension reform without pay-as-you-go system using the only mechanism of individual accumulation. Last transformations in the accumulative pension system demonstrates introduction of nominal accumulative element and state guarantees to everyone for pensions at the minimum level.

#### **Conflict of Interest**

There is no conflict of interest.

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