Success and Failures of the Russian Pension Reform

M V Bogatyreva¹, A E Kolmakov¹

¹Irkutsk National Research Technical University, Lermontov str, 83, Russia

E-mail: bmv2005@list.ru

Abstract. According to the world experience, it is impossible to balance the federal budget and provide Russians with pensions that would allow them to live with dignity after the end of their working period. Examples are failures that Ukraine and Greece suffered while trying to carry out ambitious retirement plans. The reason is simple. Populist governments accept generous retirement programs under the influence of suddenly increased budget revenues or opportunities to attract cheap resources from financial markets. The problem arises when these sources are temporary. The government has to choose between two alternatives: a balanced budget vs. a tough painful pension reform, generous pension funding vs. devastating hyperinflation. The Russian economy has faced these dilemmas. The first step was the decision of the Government of Russia to raise the retirement age.

1. Introduction
In the modern economy, there are many types of pension systems. Some states fulfill pension obligations. Other states do not perform financial tasks or use combined methods. For example, pensions are paid only to those citizens who worked all their life (or for a certain period) in the public sector, etc. [1]. In those countries where the state acts as a guarantor of the pension system, it exposes itself to a significant risk of budget imbalances or budget deficit. In those countries where the state shifts the financial burden on citizens, the budget deficit and public debts are not high. There are many reasons that push the government to choose one or another pension system. At the same time, in each country, there are factors determining the choice of a pension model. Its evolution is unique. Russia is no exception.

2. Research purpose
The pension system that currently exists in Russia is affected by the historical development of the country. In Russia, this system reproduced the system that existed in the USSR. According to the original plans, the pension system had to reduce participation of the state in pension funding. However, the financial crisis turned the vector of pension transformations in the opposite direction overloading the state with pension obligations. At first, the default threat seemed far-fetched, but after the 2008 financial crisis, the «budget-pension» dilemma manifested itself. The Russian Government took steps to adapt the pension system to the state of the budget. These actions helped predict future events.

3. Research methods
The problem of pension funding belongs to the field of intertemporal choices. At the household level, the optimal solution can be achieved by distributing incomes between consumption, saving and investment. The behavior analysis was conducted within the standard dynamic budget constraint model.
The initial hypothesis was formulated by J. M. Keynes [3]. Further studies identified a constant function of marginal propensity for saving [4]. Models of permanent incomes and life cycles of saving are currently used [5, 6, 7]. Changes in the modern economy make adjustments obligatory. These are changes in employment relations in the IT-industries and harmonization of mutual responsibility within corporations. To study the process of optimization of individual choices, the authors used indifference curves. The method has stood empirical testing at the macro level [8] and at the level of individual choices [9].

4. Findings
The national pension system model is determined by history, national culture [10, 11], political institutions [12], and democratic traditions. The current economic situation affects the pension model only through these factors.

New Russia inherited the pension system of the USSR. It had the following characteristics:
1. Complete dependence of basic parameters of the pension system on government decisions.
2. Predominance of the equalizing principle when awarding pensions.
3. The lack of full-fledged tools that allow households to influence the size of nominal incomes.
4. The lack of opportunities for households to influence the state determining key parameters of the pension system.
5. Pension funding from the federal budget.

For a long time, public authorities of Russia followed this model due to the chronic deficit of the federal budget and increasing public debts. After the payment balance crisis (1998), the budget became deficient. This was one of the main causes of the pension reform. One of the purposes was to release the federal budget from pension funding obligations. One of the first steps was “monetization of benefits”. Thanks to the monetization, the costly and inefficient system of natural benefits was abolished.

![Figure 1. Optimal choice of a household in the intertemporal model.](image)

Fig. 1 illustrates the general idea of the pension reform at the beginning of the twenty-first century. It shows a household choosing between the variants of current income distribution. Is it better to save or to borrow money? Income and consumption of the current period are indicated as C1 and Q1. Income and consumption of the future period are C2 and Q2. The major part of the output (income) of a household in the current period is Q1f. The value of income as above in the future period (in old age), is Q2f. If there is no adequate financial market, a household is forced to adjust its current consumption to the value of current income and is at point f. Based on its preferences, a household is aimed at reducing its current consumption to C1e. As for the rest of the income in the amount of [Q1f − C1e], it is to occur in a future period. This bolsters an increase of its future consumption by [C21e − Q2f] lifting it to the point e on the higher position of the indifference curve. This indicates that financial market instruments will allow a household to increase its wealth obtained not in the current, but in the lifelong period.
The pension reform of the beginning of the 21st century created pension funds and financial instruments that allowed households to make their independent decisions. The differentiated choices of households ensured their unequal welfare in old age. This is a distinctive feature of any "market" reform aimed at providing each individual with an opportunity to choose and use market alternatives.

The situation changed when the Russian budget began to reap the fruits of a favorable conjuncture in the world hydrocarbon market. It created an innumerable financial surplus which was used to pay the public debt and create financial reserves. Then the financial surplus was used to increase the rate of pensions. It was a populist policy. The vector of reforms changed, the dependence of pensioners on the state increased, their ability to form pensions decreased. The state abandoned the previous course aimed at reducing pension payments. The share of "pension" costs in the overall cost structure of the Russian business became higher than average world prices which limited investment [14]. This maneuver was dangerous because it did not increase the budget imbalance. Public obligations were not considered retroactive.

The budget deficit was created in 2014 when the era of “three-digit” oil prices ended in the world market. The Government of Russia faced a dilemma: to keep a balanced budget at the expense of pensioners or fund current pensions increasing the budget deficit. In the future, the hyperinflation can bring the value of real pensions to financial possibilities of the budget. Pensioners will lose their incomes. It should be clearly understood that in the short term, there is no third way. The government closed down other alternatives when it decided to implement this populist pension model.

It is evident that the Russian government has chosen the first option that is a balanced budget financed by the relief of obligations to pensioners. This hypothesis is supported by specific facts. Thus, at the beginning of 2016, the government refused to index pensions in accordance with the actual rate of inflation (13 %). Instead, it indexed the pension in accordance with the “planned” rate of inflation (4 %). Later, the government stopped indexing pensions to working pensioners. In fact, such decisions of the authorities are classified as a technical default. This commonly result in voluntary or forced resignation of the government. However, with the current specific features of the Russian cultural capital and its level of political institutions development, the Prime Minister did not take the responsibility for this situation and, therefore, did not resign, but continued leading the economy. In turn, the population did not consider that the Prime Minister was to blame, and, therefore, people gave him a powerful vote of confidence in the next elections after the announced pension reform. This observation may seem to distract the research from its focus. However, the political maturity of the population and the weakness of democratic institutions can explain many processes in the evolution of the Russian banking system.

When the measures taken in 2016 were exhausted, the Government faced the same dilemma. Over the past years, there have been no decisions to “unload” the budget from its obligations to pensioners. It should be noted that even after the adoption of "default" decisions, the pension system of Russia was very generous in terms of real long-term possibilities of the national economy. Real long-term opportunities are the national GDP which is free from market fluctuations. The generosity of the Russian pension system has two aspects. First, the nominal pension rate was too high. Secondly, the duration of employment required for retirement was too short. When the budget deficit is zero, one of the types of “generosity” should be sacrificed. The Government faces an "age - pension" dilemma.

The main thing is another aspect: without the conditions for economic growth in Russia, the main dilemma of balanced budget vs "decent" pensions will remain. Will Russia’s economic growth begin in the near future? What are the reasons for this growth? What reforms can start this economic growth? The answers to these questions are in the focus of the next work of the authors.

References
[1] Stiglitz J Yu 1997 Economics of the Public Sector (Moscow) INFRA-M
[2] Sachs J D, Larrain F B 1999 Macroeconomics A Global Approach (Moscow) Delo
[3] Keynes J M 2007 General theory of employment, interest and money Selected writings
(Moscow) Eksmo

[4] Kuznets S 1946 National Income Summary of Findings New York National Bureau of Economic Research

[5] Friedman M 1957 A Theory of the Consumption Function (Princeton) University Press

[6] Ando A, Modigliani F 1963 The Life–Cycle Hypothesis of Saving: Aggregate Implications and Tests (New York) American Economic Review

[7] Greenspan A 2010 The Age of Turbulence. Problems and Prospects of the Global Financial System (Moscow) United Press Ltd

[8] Leontief V 1933 The Use of Indifference Curves in the Analysis of Foreign Trade Quarterly Journal of Economics 47 493-503

[9] Buchanan J M, Tullock G 1975 The Calculus of Consent: Logical Foundations of Constitutional Democracy (Michigan) The University of Michigan

[10] Bourdieu P, Passeron J–C 1973 Cultural Reproduction and Social Reproduction Knowledge Education and Cultural Change 71–112

[11] Grondona M 2000 A Cultural Typology of Economic Development (New York) Basic Books

[12] Lewis M 2015 Boomerang: Travels in the New Third World (Moscow) Alpina Publisher

[13] Tyrol Zh 1996 Markets and Market Regulation: Theory of Industrial Organization (St.Petersburg) Economic School

[14] Kornai J 1990 Deficiency (Moscow) Science

[15] Hart O D 2001 Incomplete contracts and the theory of the firm (Moscow) Delo

[16] Pindyke R S, Rubinfeld D L 2000 Microeconomics (Moscow) Delo

[17] Williamson O 1996 Economic Institutions of Capitalism: Firms, markets, «relative» contracting (St. Petersburg) Lenzdat

[18] Spence M 1974 Market Signaling (Cambridge) Harvard University Press

[19] Milgrom P, Roberts, J 1986 Prices and Advertising Signals of Produkt Quality Journal of Political Economy 94 796–821

[20] Michael S 1974 Market Signaling (Cambridge) Harvard University Press