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Factors of Financial Imbalance in the Compulsory Pension Insurance System: the Case of Russia

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ABSTRACT

The aim of the article is to study the impact of tax and tariff policy on the financial balance of the compulsory pension insurance system in Russia, as well as to substantiate proposals for its financial stabilization. The authors analyzed the consequences of regression applied on wages while forming tariffs for pensions. The methods used in this study were economic, statistical and empirical methods, analysis and synthesis, abstraction, systemic-structural approach. The authors analyzed the influence of preferential tariffs for certain types of economic activity and the use of simplified tax systems for organizations on the income of the Pension Fund of the Russian Federation. The work contains the calculation of income shortfalls in the compulsory pension insurance system resulting from the use of regression and tax benefits when calculating insurance payments to the budget of the Pension Fund of Russia. The authors estimated the financial consequences of the pension valorization in the Soviet period and the pension indexation policy in Russia resulted in the rising costs of the Pension Fund of Russia. **The conclusion** is that the current procedure for determining insurance contributions to the Pension Fund of the Russian Federation, which provides for a large number of benefits, does not correspond to generally accepted world practice and creates major risks for the financial balance of the pension system. This may cause increasing poverty among seniors. Raising the retirement age did not solve the problem of balancing the pension system, but exacerbated it. The regression in the payment of insurance premiums led to a conundrum in Russia, when an increase in wages resulted in the decrease of the Pension Fund of the Russian Federation's income. This is associated with the precarization of wages and the desire of business to minimize tax payments. The prospect of further research is to study the conditions for financial stabilization of compulsory pension insurance during the Russian economic crisis. The analysis showed that there is a need to create an independent actuarial center for setting tariffs for deductions to the Pension Fund of the Russian Federation, as well as the redistribution of areas of responsibility between the Pension Fund of the Russian Federation and the Ministry of Finance of Russia.

Keywords: insurance rates; pension reform; financial balance of the pension system; tax exemptions; pension fund deficit

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INTRODUCTION

There are many contradictions about the whole compulsory pension insurance system and its financial balance [1]. On the one hand, its fundamental consistency is challenging today, since the demographic burden is growing and the labor market structure is changing. On the other hand, there are various methods to balance it: either by raising the retirement age, or by changing the record system for senior citizenship (the Russian system of scoring pension rights), which basically means decreasing social guarantees. In each case, the approaches to developing the pension system did not include an analysis or study of consequences.

There is a brief answer to the opponents of the pay-as-you-go (PAYG) pension system: it has survived and ensured the normal pension maintenance in all European countries that experienced two demographic shocks in a very short time due to the world wars, which is also confirmed by foreign studies [2]. Besides, widely advertised by the World Bank in the late 90s, the Chilean experimental transition from the PAYG pension system to the funded one, ended in an economic fiasco. The current discussion about the need to introduce an unconditional basic income is nothing, but a variation of the pay-as-you-go social security system.

It is difficult to talk to the followers of the idea of raising the retirement age. They mostly refer to foreign countries, where the retirement age is later than in Russia. Here, it is very easy to refer to our own specifics, but it should be proved. Moreover, the increase of the retirement age in our country was justified by the fact that the insurance pension system is financially imbalanced, which leads to large-scale budget transfers. For example, when discussing this issue in the State Duma, they declared that in the period 2024–2026 maintaining pensions at the current level would require a greater transfer from the federal budget to the Pension Fund of the Russian Federation up to at least 5 trillion roubles, while the financial and economic justification for adopting the Law "On Insurance Pensions" established the indicators of 3.7–2.8 trillion roubles. This provided a completely wrong idea about the real transfers to the Pension Fund from the federal budget.

Compensations for reduced rates of insurance premiums constitute about 1 trillion roubles of total transfers. They do not relate to providing insurance pensions, but are subsidies for developing certain types of economic activities.

There was a thesis about the need to increase the retirement age so that the improved pension system ensured the independence of the Russian Pension Fund budget from transfers from the federal budget.¹ At the same time, the laws of all countries with the compulsory pension insurance system usually provide for subsidiary responsibility of the state for insurance pension funds.

The followers of balancing the compulsory pension insurance system did not consider the dynamics of the size of budget transfers to the Pension Fund of the Russian Federation: they provided almost half of the payments of insurance pensions in 2011, only one third in 2015 (despite the decrease in the basic insurance rate from 26% to 22%), and in 2018 (with an effective insurance rate of about 18%), the share of budget funds in financing insurance pensions was 27%.² In 2018, there was an accelerated growth of insurance pensions to level the protest moods of the population related to the increase in the retirement age. 500 billion roubles out of 1,840 billion budget transfers made up compensation for reduced rates of insurance premiums.³

¹ How much does the country's budget cost to support the Russian Pension Fund? URL: http://duma.gov.ru/news/27893/ (accessed on 29.05.2020).

² The same.

³ The same.

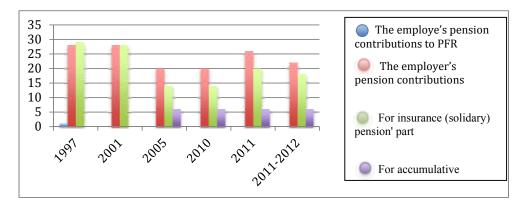


Fig. Changes in rates for social contributions to the pension system, %

Source: Federal Law of May 27, 1998 No. 79-FZ "On the Budget of the Pension Fund of the Russian Federation for 1997" (as amended and supplemented). URL: http://base.garant.ru/12111723/#ixzz6O6QUHy9a (accessed on 20.05.2020); Federal Law of August 8, 2001 No. 125-FZ "On the budget of the Pension Fund of the Russian Federation for 2001". URL: http://base.garant.ru/183608/#ixzz6O6RBsNwU (accessed on 20.05.2020); Federal Law of December 28, 2004 No. 184-FZ "On the Budget of the Pension Fund of the Russian Federation for 2005" (as amended and supplemented). URL: http://base.garant.ru/12138256/#ixzz6O6Ru6Kd4 (accessed on 20.05.2020); Federal Law of November 30, 2009 No. 307-FZ "On the budget of the Pension Fund of the Russian Federation for 2010 and for the planning period of 2011 and 2012". URL: http://base.garant.ru/12171299/ (accessed on 20.03.2020).

To avoid another pension reform, we suggest focusing on the current problems of the social insurance system, rather than criticizing the reforms of the pension system [3]. The current situation testifies to the reassurance of the state and the followers of balancing pension maintenance by raising the retirement age, which can lead to great social problems. We suggest considering the factors rarely mentioned in scientific discussions.

THE FIRST ISSUE IS DEVELOPING A REASONABLE TARIFF POLICY

One of the conditions for balancing the income and expenses of the Pension Fund is the tariff policy and the validity of decisions made in this field. In reality, we face permanent changes in this area. They concern both the calculation of the general tariff and the tariffs applied to certain types of economic activities or certain groups of citizens employed in the economy.

Changes to the tariff policy began in 2002 (*Fig.*). It was then decided to reduce the general rate of the pension insurance

tariff from 28% to 22%. $6\%^4$ went to the funded system and, naturally, did not go to the Pension Fund to pay insurance pensions. At the beginning of the reform (before 2005), due to the need for a stepwise transition, the amount allocated to the funded pension was relatively insignificant (*Table 1*) – 81 billion roubles. However, after 2005, it increased from 385 billion roubles in 2005 to 1,519.8 billion roubles in 2014. Thus, due to a decrease in contributions to the PAYG component by mandatory contributions to the funded part, there appeared the major gap between the income and expenses of the Pension Fund.

The following step in the approaches to developing the tariff for pension insurance was a consistent decrease in insurance tariffs in general. From January 1, 2005, the rate of contributions to the Pension Fund was reduced from 28% to 20%. This was made not to maintain the balance of the

⁴ According to the decision on a funded pension at the expense of compulsory contributions from the wages fund, employers had to consistently increase contributions from 2% in 2002 to 6% by 2007.

Calculation of losses from changes in the rate of payment of insurance premiums to the FIU due to the introduction of a funded pension

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Remuneration for employees (including remuneration and mixed income not observed by direct statistical methods), thousand roubles	46.8	47.1	46.1	43.8	44.5	46.7	47.4	52.6	49.6	49.6	44.3	46.2	47.2
Volume of gross domestic output (current prices, billion roubles)	10830.5	13 208.2	17027.2	21 609.8	26917.2	33 247.5	41 276.8	38 807.2	46 308.5	55 967.2	68163.9	73133.9	79199.7
Potential funds not received by the Pension Fund due to the funded pension	304.2	373.1	470.7	568.5	719.2	931.6	1173.9	1224.8	1378.1	1665.6	1811.8	2027.3	2242.9
Funds not received by the Pension Fund due to the funded pension minus receipts from the informal sector	81.13	198.98	251.04	385.19	487.3	631.2	795.4	829.9	933.8	1128.6	1227.7	1373.7	1519.8
Source: developed and compiled by the authors.	iled by the a	uthors.											

Pension Fund of Russia, but to create more benefits for business and to bring wages out of the shadows. This decision was also justified by the "surplus" in financing the basic pension (14%). The new gap between the total income and expenses of the Pension Fund reached 318.8 billion roubles in 2005.

The artificial deficit of the Pension Fund income accumulated by 2005 due to the tariff reduction in favor of the funded pension and the reduction of the tariff rate by 8% amounted to about 558 billion roubles. Before the 2002 reform, even during the 1998 financial crisis, the balance of the Pension Fund was absolute: in 2001, the Pension Fund budget surplus was about 100 billion roubles, or almost 16% of annual insurance premiums. The first step in unbalancing the Pension Fund budget was made in 2001 by proceeding from the introduction of the Uniform Social Tax (UST), which approved recourse payments to social funds: the higher was the wage, the lower was the insurance payment. This is a unique innovation that does not exist almost anywhere else in the world. Employers started using this scheme to pay envelope wages. The wages of the majority of employees were reduced (and so the UST payments and receipts to the Pension Fund of Russia), and the wages of managers increased. A reduced social tax was charged and paid on higher wages. Consequently, the tariff manipulation had a negative effect on the social insurance system.⁵

The regression in the payment of insurance premiums created a paradox in the Russian pension system: increasing wages of employees reduced the Pension Fund income. This is explained by a few reasons. These are "gray" wage payment schemes, a reduction of employees, crisis conditions for the Russian economy, the desire of business to reduce tax payments, a decrease in the population and the employed in the economy, while this trend continues in the future, as well as relatively few (slightly over 15%) employees, for who a regressive scale of contributions to the pension fund was used [4]. The data of state statistics on wages in the context of industries for calculating revenues to the pension fund do not provide a real picture, since many people do not work full-time. For example, the indicated salary is 100 thousand roubles can in reality be 50 thousand roubles, and therefore no regression scale will apply to it.

The developers of the regression approach with contributions considered neither its short-term negative impact on the withdrawal of wages out of the shadows, nor the long-term consequences for the balance of the Pension Fund expenses and income. Artificial lowering the wages of employees to "save" the UST, in fact, creates the need for the government to provide support measures to poor pensioners in the future (i.e., additional transfers to the PAYG system), who failed to save for a normal pension due to the optimization of the UST payments by applying regression to high wages. Liabilities for payments of pensions, on the contrary, grew due to the need to index the latter to the inflation rate.

Dividing pensions into basic and insurance, introducing a regressive scale of the UST payment depending on the size of wages, decreasing the UST tariff by 8% and redirecting 6% of the tariff on creating a funded pension by 2007 increased the dependence of the Pension Fund budget on the federal budget: the share of receipts from the federal budget in the total Pension Fund budget exceeded 50% [5].

We consider the case of reducing tariffs for the payment of insurance premiums when introducing special tax payment regimes and for certain types of economic activity. The public analytical materials of the Federal Tax Service of Russia reveal that only for the period of 2014–2018, the num-

⁵ In 2011, the UST was canceled, but from 2017 it was restored in the new transformation cycle of the tax system.

Special Tax Regime Index	2017	2018	Growth rate
STS (Simplified Tax System):			
Income, bln roubles	13130	16967	129.2
Number of taxpayers, people	3056467	3241687	106.1
UTII (Unified Tax on Imputed Income):			
Income (imputed), bln roubles	892	904	101.3
Number of taxpayers, people	2044154	2072711	101.4
SAT (Single Agricultural Tax):			
Income, bln roubles	1549	1690	109,1
Number of taxpayers, people	100673	97035	96,4
Patent:			
Income (potential), bln roubles	215	242	112,5
Number of taxpayers who have been granted a patent, people	287766	325630	113,2

Some indicators of special tax regimes applied in 2017-2018

Source: Analytical review "The role of small business in the economy". URL: https://analytic.nalog.ru/portal/index.ru-RU.htm (accessed on 20.03.2020).

ber of taxpayers working in the simplified tax system increased by 29%, with a significant increase in 2017 and 2018 (106.3% and 106.1%, respectively). This is due to the following factors:

• low (compared to the general tax regime) tax rate (15% or 6%, depending on the selected tax object);

• a simplified accounting option;

• cancellation of corporate income tax, VAT and property tax of organizations or individuals (in relation to property that has no cadastral value).

These tax regimes allow to reduce the burden of paying insurance premiums to extra-budgetary funds. Introducing special tax regimes creates more favorable conditions for destructing the insurance principles of the current compulsory social security system, since the relationship between the size of wages and contributions to the Pension Fund is lost.

According to the Federal Tax Service,⁶ in the Russian economy, 5.7 million of 8.1 million economic entities (organizations and individual entrepreneurs) applied special tax regimes at the beginning of 2019. At the end of 2018, the share of taxpayers applying special tax regimes in the total number of taxpayers was 71% (it was 59% in 2014). The share of taxpayers working under the gen-

⁶ The role of small business in the economy. Analytical overview. URL: https://analytic.nalog.ru/portal/index.ru-RU.htm (accessed on 29.05.2020).

Accrual and receipt of payments for taxes on total income for simplified tax regimes (as of 01.01.2019, thousand roubles)

		Incom	e to social fu	nds:
Total in Russia	Total payments received	Federal Compulsory Medical Insurance Fund	Social Insurance Fund	Pension Fund of the Russian Federation
Tax imposed with the application of the simplified tax system	422190406	2346	2346	3492
Including:				
Tax imposed on taxpayers who chose income as a tax object	292464351	835	835	х
Out of it:				
Tax imposed on taxpayers who chose income as a tax object	292447695	х	х	х
Tax imposed on taxpayers who chose income as a tax object (for tax periods ended before January 1, 2011)	16656	835	835	х
Tax imposed on taxpayers who chose income as a tax object reduced by expenses	129942671	349	349	х
Out of it:				
Tax imposed on taxpayers who chose income as a tax object reduced by expenses	129935665	Х	х	х
Tax imposed on taxpayers who chose income as a tax object reduced by expenses (for tax periods ended before January 1, 2011)	7006	349	349	х
Minimum tax credited to the budgets of state non- budgetary funds [paid (collected) for tax periods that expired before January 1, 2011]	5816	1162	1162	3492
The minimum tax credited to the budgets of the constituent entities of the Russian Federation (for tax periods that expired before January 1, 2016)	-222432	х	х	х
Unified tax on imputed income for certain types of activities	64 458 992	857	857	х
Including:				
Unified tax on imputed income for certain types of activities	64 441 838	х	Х	х
Unified tax on imputed income for certain types of activities (for tax periods that expired before January 1, 2011)	17154	857	857	х

•

Table 3 (continued)

		Incom	e to social fu	nds:
Total in Russia	Total payments received	Federal Compulsory Medical Insurance Fund	Social Insurance Fund	Pension Fund of the Russian Federation
Single Agricultural Tax	13628402	159	288	х
Including:				
Single Agricultural Tax	13623914	Х	х	Х
Single Agricultural Tax (for tax periods ended before January 1, 2011)	4488	159	288	Х
Tax imposed with the application of the patent taxation system	12467406	Х	х	Х
Including:				
Tax imposed with the application of the patent taxation system, credited to the budgets of urban districts	5 02 3 309	х	х	Х
Tax imposed with the application of the patent taxation system, credited to the budgets of municipal districts	1 340 935	х	х	х
Tax imposed with the application of the patent taxation system, credited to the budgets of cities of federal significance	5 999 7 2 7	х	х	Х
Tax imposed with the application of the patent taxation system, credited to the budgets of urban districts with intracity division	103 427	Х	х	х
Tax imposed with the application of the patent taxation system, credited to the budgets of intracity districts	8	Х	х	Х
Tax levied on the patent value due to the application of the simplified tax system	944	0	0	х
Including:				
Tax levied on the patent value due to the application of the simplified tax system	935	Х	х	х
Tax levied on the patent value due to the application of the simplified tax system (for tax periods ended before January 1, 2011)	9	0	0	x

Source: Report adjusted by form No. 1-NM as of 01.01.2019, consolidated for the Russian Federation. URL: https://www.nalog.ru/rn77/ related_activities/statistics_and_analytics/forms/7600100/ (accessed on 29.05.2020).

eral tax regime fell from 41% to 29%. Special tax regimes make it possible not only to reduce the tax burden, but also (as in the case of regression) create preconditions for paying under the counter, i.e. no payments to the Pension Fund system.

If we calculate the possible payments to the Pension Fund from organizations with the simplified option and have chosen income as the tax object, we will see a huge gap (*Tables 2, 3*).

At 22% rate, the contributions of these organizations from the wage fund to the Pension Fund of Russia should have been 199.46 billion roubles in 2018. In fact, they were only 3.4 billion roubles (*Table 3*) from all types of simplified taxation. The deficit of social contributions for those employed in organizations with preferential tax regimes is more than 200 billion roubles per year. Some items subject to taxation on total income by simplified tax regimes from *Table 4* had no contributions.

The deficit in the Pension Fund is primarily related to tax regulation, and then to demographic factors. Compared to 2014, the number of employees in organizations and individual entrepreneurs using the simplified tax system was about 12.5 million people in 2018, i.e. increased by 450 thousand people (by 3.7%). The total share of these employees in the total working population was about 19%. In other words, over 4 years the share of "normal" payers of social contributions (employed in enterprises with a regular tax regime) decreased by 450 thousand people. These are much greater losses than those associated with mortality and fertility.

Optimization of taxation and insurance contributions not only reduces potential revenues to the social security system, but also creates a strategic problem. In the long term, there will appear a large group of citizens unable to prove their seniority and the right for an insurance pension, since taxes were not paid for them. This means they will be doomed to poverty. There will also be a category of citizens for whom the minimum contributions to the Pension Fund were paid, which means they will receive a minimum pension. In this regard, in the future, the state will have to divert a significant amount of funds from the federal and regional budgets for social benefits for poverty [6].

The tax approach provides for various preferences in paying insurance premiums to the Pension Fund, in contrast to other economic and social factors, creates imbalances for the Pension Fund budget in the current period, and for the consolidated budget in the future (*Table 4*).

Table 4 shows that tax breaks provided for the payment of insurance premiums to offbudget funds for certain types of economic activity create no less problems. The information industry and financial activities have the greatest preferences. The highest burden is on industrial and manufacturing industries. The total income lost by the Pension Fund of Russia per year due to the difference in the percentage of contributions paid for all types of economic activity amounted to 378.7 billion roubles in 2017. The total tax transformations of insurance premium rates leads to a deficit in Pension Fund income of more than 578.7 billion roubles.

The situation in this area remains practically unchanged. Since 2019, new legislation in the field of employment has come into force.⁷ However, self-employed citizens do not provide contributions to the compulsory insurance system (although they are able to). This deprives them of the right to receive state insurance pension. According to preliminary data from the Federal Tax Service, at the beginning of August 2019,

⁷ Federal Law No. 422-FZ of November 27, 2018 "About carrying out an experiment on establishment of special tax regime "A tax on professional income" in the federal city of Moscow, in the Moscow and Kaluga regions as well as in the Republic of Tatarstan".

Summary on the composition of organizations' labour costs by the studied types of economic activity in 2017

Type of economic activity	Wages fund of employees, thousand roubles	Insurance premiums for compulsory insurance paid to state extra- budgetary funds (thousand roubles)	Insurance premiums to the Pension Fund of Russia, thousand roubles	Effective percentage of insurance premiums in the Pension Fund of Russia	Lost insurance premiums, thousand roubles
Total in economics	11893227607	3189194016	2 2 3 7 7 3 5 8 0 7	18.8	378774266
Including:					
Mining	850215799	233 309 514	165 292 250	19.4	21755226
Manufacturing industries	2953628531	852557596	616 267 314	20.9	33 5 30 963
Electricity, gas and steam supply; air conditioning	764094377	212165395	151037845	19.8	17062918
Water supply; wastewater disposal, waste collection and disposal, pollution elimination activities	172749589	47900215	34 080 248	19.7	3924661
Construction	762 373 272	201 900 578	140910716	18.5	26811404
Wholesale and retail trade. Repair of motor vehicles and motorcycles	1 515 036 821	394 875 375	273 672 429	18.1	59635671
Transportation and storage	1491321134	406 574 075	287 268 384	19.3	40 822 265
Hotels and catering	164514135	45 610 429	32 449 298	19.7	3743812
Information and communication	560 908 484	126339669	81 466 991	14.5	41 932 876

Type of economic activity	Wages fund of employees, thousand roubles	Insurance premiums for compulsory insurance paid to state extra- budgetary funds (thousand roubles)	Insurance premiums to the Pension Fund of Russia, thousand roubles	Effective percentage of insurance premiums in the Pension Fund of Russia	Lost insurance premiums, thousand roubles
Financial and insurance	837546254	198157558	131153857	15.7	53 106 319
Real estate	321088487	84778399	59091320	18.4	11 548 147
Professional, scientific and technical activities	1 231 528 200	312197468	213675212	17.4	57 260 992
Administrative activities and related additional services	268 222 526	72 827 745	51369943	19.2	7639013
Industrial production (industry)	4740688296	1 345 932 720	966 677 657	20.4	76 273 769

Table 4 (continued)

Source: developed and compiled by the authors based on Rosstat data. URL: https://www.gks.ru/labour_costs?print=1 (accessed on 10.06.2020).

there were 162 thousand people. These are the citizens who cannot count on an insurance pension if their insurance record (the period of payment of insurance premiums to the Pension Fund) is not at least 18 years. *Table 5* shows the calculations for the total aggregate losses per year after all types of reductions in the tariff rate for payment of insurance contributions to the Pension Fund of the Russian Federation for compulsory social insurance.

INDEXING PENSIONS

The second most important factor in the financial imbalance of the Pension Fund is the introduction of a system for indexing pensions.

To increase the size of pensions for a certain category of pensioners in 2010, the government carried out the valorization of pensions established during the Soviet period and in the period up to 2002. Indexing was neither associated with the growth of wages, nor with the growth of contributions to the Pension Fund. This sharply increased the Pension Fund expenses (the average labor pension in 2010 increased to 170.2% of the pensioner's subsistence minimum). According to Rosstat, in 2009 this ratio was 1.3 times.⁸

In general, the principles of indexing pensions in the Russian Federation are not

⁸ On pension maintenance and the living standard of pensioners. URL: https://www.gks.ru/bgd/regl/b10_04/IssWWW.exe/ Stg/d01/1-pens.htm (accessed on 20.05.2020).

Table 5

No.	Budget losses of the Pension Fund of Russia	Billion roubles
1	Changes in tariff policy and introduction of compulsory funded pension	2841.3
1.1	By introducing insurance contributions for funded pension	682.2
1.2	By reducing the tariff from 26% to 22%	709.5
1.3	By reducing the tariff to 10% from wages above the insured level	851.4
1.4	Introduction of preferential tariffs for certain types of economic activities and the use of a simplified tax payment system	578.7
1.5	Benefits for TAD: 50 thousand jobs	19.5

Results of tax changes in 2003–2018 (calculations were made in the statistics and budget parameters for the specified period)

Source: developed and compiled by the authors.

related to insurance approaches. According to the ILO recommendations,⁹ the main criterion for the effectiveness of the compulsory pension system is the replacement rate for lost earnings, which should reach 40% [7]. In classical Western models of compulsory pension insurance, indexing pensions is aimed at maintaining this coefficient for those pensioners who left the labor market long ago. Indexing pensions is carried out strictly in proportion to the growth rate of wages. Consequently, indexing pensions takes place only if wages increase. This is the solution for balancing the income and expenses of the pension system. It is possible to increase expenses as much as income has increased.

In Russia, they followed this rule until the early 2000s. Then the principle was transformed. Pensions were now indexed at a higher rate. In such a way, a socio-political approach followed the normal economic approach: an accelerated rise in pensions to address poverty and political stability. If during this period the government distributed responsibility (the Pension Fund would be responsible for balancing the budget in terms of income, and the federal budget would take responsibility for fighting poverty among pensioners), then today the Pension Fund budget would have been perfectly balanced.

CONCLUSIONS

Thus, the problems of pension maintenance attract the attention of both Russian [8–11] and foreign specialists [12–16]. In their monograph "Criteria for disability in de-

⁹ ILO Convention No. 102 "On Minimum Standards of Social Security" (Geneva, June 25, 1952) (as amended and supplemented). URL: http://base.garant.ru/2541190/ (accessed on 21.05.2020).

termining the retirement age and ways to modernize the compulsory social insurance system" [8], the authors investigated the issues of determining the retirement age on a large body of data. They proved that its increase in our country will not reach the expected effect in the future, due to the specifics of the Russian labor market, focused on workers of the most working age, demographic, economic and financial factors. The work discussed the problems of pension maintenance and social guarantees for workers employed in jobs with harmful and hazardous working conditions, as well as at enterprises in unfavorable climatic conditions. The authors of other publications devoted to pension issues also note the wrong decision to increase the retirement age and prove the financial inconsistency of this approach [9]. One of the main reasons for the Russian Government to reform the pension system was an attempt to find financial resources by reducing the number of pension recipients. The projected savings should have amounted to about 800 billion roubles, but they did not consider that "... for example, RUB700 billion roubles of potential savings will be spent on increasing pensions ..." [9]. These disadvantages of reforming the pension system are pointed out by Yu. M. Voronin and Yu. N. Maksimov in their work "Once again on the reform of the pension reform of the 2018 model: It is prudent to postpone – the appeal of scientists to the deputies of the State Duma" [11].

Foreign authors pay great attention to the health issues of older workers before and after retirement [12], since it is the most important factor in determining the criteria for retirement. Scientists in European countries pay attention to the need to consider risks that may arise between generations with their pension maintenance [13, 14]. Austrian researcher points out that many pension systems are regressive due to differences in life expectancy across occupational groups, which must be considered when building pension systems [14]. It is advisable to better study the French pension reform that resulted in the unemployment decrease among older workers [15].

However, the experience of developing countries was not fully considered. For example, Taiwanese experts note that when implementing innovations, it is necessary to consider the institutional and socio-cultural contradictions that can jeopardize the results of reforming the system [16].

The analysis of the Russian compulsory pension insurance system based on statistical data, as well as the generalization of research by Russian and foreign scientists on this topic, allows us to make the following conclusions.

First, the ongoing reforms did not balance the compulsory pension insurance system. On the one hand, the regression in the payment of insurance premiums led to a decrease in the Pension Fund income. On the other hand, an artificial understatement of wages to reduce the amount paid by the UST in the long term may lead to an increase in the number of poor pensioners. This, in turn, will require the state to support certain costs.

Second, the use of special tax regimes in for insurance pension contributions leads to the destruction of insurance principles and causes an imbalance for the Pension Fund budget at the present time, and for the funded one in the future.

The main problems in the pension system of Russia are related not to the demographic situation, but with the imbalance in the Pension Fund budget as a result of numerous reforms in the tariffs of contributions to pension insurance and implementing social programs to increase the income of pensioners of the Soviet period.

A few conditions must be satisfied for the financial stabilization of compulsory pension insurance in the Russian Federation. First, a special national actuarial center must be now authorized to set tariffs for contributions to the Pension Fund. It should be independent from the Government of the Russian Federation and be governed on the basis of tripartism.

Second, it is necessary to redistribute the responsibility between the Pension Fund

and the Ministry of Finance of Russia. The Pension Fund should be responsible for indexing pensions by income level. The Ministry of Finance of Russia should be responsible for financing special pensions and additional indexing to a level above inflation.

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