

## Characteristic Features of Implementing Social Security Schemes in Russian Regions (The Case of the Republic of Tatarstan)

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### Abstract

The study looks at the activities of the Regional Office of Social Insurance Fund of the Russian Federation (SIF RF) in the Republic of Tatarstan (RT) regarding national insurance coverage. The study uses instruments for correlation – regression analysis to identify the factors to increase social security payments. The authors explain the projected change in insurance fees against short-term disability and maternity; formulate recommendations for regional offices of the SIF RF aimed to reduce past due debts; identify the role of the RF Social Insurance Fund in providing sustainable macroeconomic development.

**Keywords:** government non budget trust funds, Regional Office of Social Insurance Fund of the Russian Federation (SIF RF) in the Republic of Tatarstan (RT), regional economy, national insurance coverage, insurance schemes.

### 1. Introduction

Social Insurance Fund of the Russian Federation (SIF RF) was established in 1990 by the regulation of Council of Ministers of the RSFSR (December, 25, 1990) with a view to managing national insurance funds in Russia. SIF is currently an independent state financial institution affiliated to the RF government. This Fund's monetary assets are held by the government, but do not form part of the RF federal budget or that of any of its territorial entities. Social Insurance Fund can help face the following social challenges:

1. Form monetary funds to cover the expenses for supporting the disabled, not involved in work flows;
2. Provide necessary amount and structure for labour force reproduction;
3. Reduce the income gap between working and nonworking citizens;
4. Raise living standards of social groups not involved in labour processes.

The current attempts to transit from public assistance to social insurance model presuppose that it must be guided both by global and national practices. This implies that creation of a social insurance program is closely connected with the principles of the latter and must rest on the theory of social risks and actuarial expectations; it must be realized in a set of autonomous self-managed partnerships. The current Russian social insurance scheme still acts as a public assistance system which does not entirely correspond with the insurance principles. This is evidenced by the fact that the premium rate does not correspond to the level of social and occupational risks, rights and guarantees of both insurers and the insured who are not involved in fund management. Under the existing system of premium collection and accumulation together with centrally controlled fund allocation the link between insured events included in social insurance (illness, workplace injuries, working condition fringe benefits, etc.), employer's insurance contributions (companies) and the received benefits, pensions and medical care is rather obscure. The institutions (both state and public, trade unions, insurance companies), which could efficiently assess social and occupational risks, provide information, statistical data and personnel for social insurance system, are not sufficiently developed. An urgent priority for active measures in this sphere becomes more evident taking into consideration the substantial underdevelopment in insurance schemes in the context of worsening macroeconomic environment.

Various Russian (2007, 2005) and foreign (Malloy, 1979; Clasen, 1997; Rubinow, 2012; Ferrara, 1980; Eberts & Hobbie, 2008; Saltman, Busse, & Figueras, 2004; Butler, 1999; Rogne, Estes, & Grossman; Marmor, Mashaw, & Pakutka, 2013) scholars addressed social insurance problems in their studies.

Against the background of lowering living standards the Fund efficiency will have an impact on social indicators in the Russian Federation and its regions.

## 2. Methods

The key event for the national insurance system in the field of enforcing insurance regulations in the activities of the RF Social Insurance Fund is indeed the resumption of premium payment practices instead of paying a Unified Social Tax (UST). The notion “insurance premium” is quite distinct from that of “tax”. Firstly, insurance premium is goal-oriented. Unlike taxes which are collected to finance the state and (or) municipal entities, insurance premiums are entirely goal-oriented, i.e. they are intended for financing civil rights guaranteed by the state regarding mandatory social insurance. Secondly, insurance premium can be compensated. This implies that insurance premium requires a repayment of insurance coverage by the state (legally represented by the Fund) if certain events occur. Thirdly, insurance premiums are transferred to the RF Social Insurance Fund’s budget. This is primarily because of insurance nature of the payment. In the course of implementing Federal law № 212-FZ several amendments were made to the Budget Code of the Russian Federation. Contributions to the mandatory social insurance scheme were classified as nontax payments. Therefore contributions to the RF Social Insurance Fund are defined as required payments, mandatory or voluntary (in cases stipulated by applicable legislation), which are paid by insurers and transferred to the RF Social Insurance Fund’s budget in order to finance civil rights guaranteed by the state in accordance with the mandatory social insurance.

Certain fears regarding transfer of payment acceptance function from tax agencies to insurance funds, which could cause reduction in the amount of social insurance contributions, did not pan out. Following the results of the year 2011 the amount of contributions to the RF Social Insurance Fund equaled to 98.9%, which exceeded the best results of tax agencies in 2010 by 1%. According to the performance analysis of the Republic of Tatarstan regional office of the RF Social Insurance Fund in 2012 the amount of payment in the region equaled to 98.77%, the Key Performance Indicator being 98%. This evidence proves the efficiency of the payment administration Fund.

Another important factor is the amount of allowances for temporary disability, maternity, etc. as these payments are the most frequent in the Fund expenditure pattern. In the Republic of Tatarstan regional office they form more than 80.7% from the total expenditure. Under the UST this amount was fixed centrally and equaled to the upper limit which trespassed against the fundamental social insurance principle of correspondence between insurance contributions and benefits. Transition to insurance contributions made it possible to eliminate the problem, recover the “equivalence principle”, and substantially raise social security payments. The upper level is currently defined by the ceiling on the amount of taxable annual income. It initially equaled to 415 thousand rubles, with the subsequent indexation based on average wage growth. People with high income who wish to increase insurance coverage can purchase optional insurance.

In order to enable the Fund provide temporary disability insurance benefits and maternity insurance benefits in the period between 2013 and 2015 it introduces a new system of direct insurance coverage payments to the citizens. In compliance with the new system the employer is to pay insurance premiums to the Fund according to the established tariffs, and the Fund in its turn pays full amount of insurance to eligible policyholders in the event of happening the insured event. Until 2012 up to 80% of insurance benefits were paid by the employers (insuring party) via companies’ accounting departments on account of insurance premiums. However, taking into consideration the fact that 37% of companies are unable to pay, this scheme does not guarantee implementation of the state’s social responsibilities by the employers, neither do they guarantee that the insured employee will receive the benefit payment if the insured event occurs.

The target to pay insurance benefits directly to more than 30 mln. citizens (the population of the Republic of Tatarstan is more than 1.5 mln.) is rather ambitious, therefore it will be achieved gradually, in several years. The first to introduce the new interaction patterns between insurance carrier, insurer and the insured were the pilot projects initiated by the Fund in 2011, which used abundant web-based software. By 2015 every RF citizen is expected to have a social electronic card for all sorts of social payments including social insurance against cases of temporary disability and maternity. In 2011 the new methods to pay this sort of insurance benefits were adopted by two regions as a part of the pilot project (the Nizhni Novgorod Region, and the Karachayevo-Cherkessian Republic); in 2013 other regions prepared to such a transitions joined them. Beginning in 2014 the Fund started transferring benefits to working citizens directly to their electronic bank accounts.

## 3. Results

In the years to come the budget must become completely balanced in accordance with the basic principles of social insurance (equivalence between payments and insurance benefits). That is the reason why the Fund to

administer insurance contributions is still necessary. By applying mathematic economic model we have identified the factors affecting wage rates. The initial data to create the model are presented in Table 1.

Table 1. Initial data to create the mathematic economic model

Year	Y	X <sub>1</sub>	X <sub>2</sub>	X <sub>3</sub>
2006	106605.91	49713.1	7846.61	3.2
2007	122574.64	52493.6	10019.73	2.9
2008	163802.18	57076	12810.25	2.9
2009	215043.78	61235.7	16400.81	2.9
2010	218033.1	58843.1	17695.73	2.9
2011	241992.85	56281	22212.4	2.9
2012	317037.64	58602.5	21067.29	2.9

where Y – are revenues collected via social security contributions against cases of temporary disability and maternity, mln. rubles; X<sub>1</sub> – is working age population, thousand of people; X<sub>2</sub> – is average wage rate in the Russian Federation, rubles; X<sub>3</sub> – are social security contributions to the SIF RF, per cent.

On the basis of the selected factual historical data we can develop a multiple regression model with Microsoft Office Excel.

In order to find out if the selected variables have an influence on the revenues collected via social security contributions we should refer to Table 2, which illustrates relationship between facts.

Table 2. Relationship between variables

	Y	X1	X2	X3
Y	1			
X1	0.730335	1		
X2	0.932259	0.709307	1	
X3	-0.55099	-0.73377	-0.61531	1

The data in the tables above reveal that factors 1 and 2 are collinear, i.e. are in linear dependence with each other, for example  $r_{x_1, x_2} > 0,7$ . In order to avoid doubling it is necessary to eliminate one of the factors. It is more reasonable to include factor X1 in the regression as the relationship between X1 and X3 is closer than between X2 and X3. Using the selected factors we will develop a new model as in Table 3.

Table 3. Verified initial data for creating mathematic economic model

Year	Y	X <sub>1</sub>	X <sub>2</sub>
2006	106605.91	7846.61	3.2
2007	122574.64	10019.73	2.9
2008	163802,18	12810.25	2.9
2009	215043.78	16400.81	2.9
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In order to see if the selected variables have an effect on the revenues collected via social security contributions, let us turn to Table 4, which illustrates the relationship between facts.

Table 4. Relationship between variables according to the verified mathematic economic model

	Y	X1	X2
Y	1		
X1	0.932259	1	
X2	-0.55099	-0.61531	1

The data in Table 4 prove that all the selected factors have influence on the sum of contributions to funds. The developed model is as follows:

$$Y = 12.82 X_1 + 23465.5 X_2 - 69077.9$$

To check overall quality of the regression equation we may use  $R^2$  determination coefficient. For the created model it equals to 0.8699, which means that all the selected factors have 86.99% influence on the amount of social security contributions, and the factors not covered by the model affect 13.01% of this value. Economic interpretation of the model is the following: if average wages in the Russian Federation increase by 1 ruble the social security contributions index will go up by 12.82 mln. rubles, and in the event of growth in the amount of social security contributions by 1% the social security contributions index will rise by 2346.55 mln. rubles. With the help of this model it is possible to forecast the amount of social security contributions for the years 2013-2016 (Official website of the Social Insurance Fund of the Russian Federation). The forecast data are presented in Table 5.

Table 5. RF social and economic development forecast for 2014-2017

Year	Average salary in the Russian Federation, rubles	Amount of social security contributions to the RF Social Insurance Fund, per cent
2014	26402	2.9
2015	29562	2.9
2016	33053	2.9
2017	36769	2.9

With the help of the developed model we will calculate the projected amount of revenues collected via social security contributions against cases of temporary disability and maternity for 2014-2017. The data obtained is presented as a graph in Figure 1.

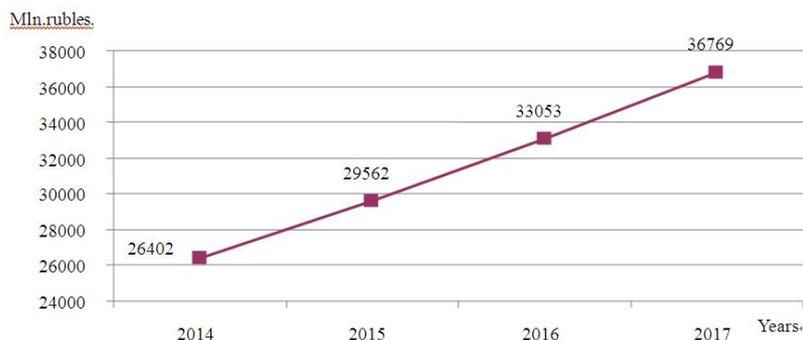


Figure 1. Projected amount of revenues collected via social security contributions against cases of temporary disability and maternity for 2014-2017, mln. Rubles

As is clear from the graph in the forthcoming years we can expect a rise in the amount of revenues collected via social security contributions against cases of temporary disability and maternity, primarily due to an increase in salaries in the Russian Federation.

The amount of social security contributions also depends on adequate and efficient arrears management, which implies a need to work out a set of appropriate tools to solve the problem in every single region. In the Republic of Tatarstan along with active arrears management there is another method which consists in publishing the list of debtors whose debt exceeds 100 thousand rubles on the official site of the RT regional office of the Social Insurance Fund. Therefore, the RF Social Insurance Fund acts not only as a social security scheme for the citizens but also plays a significant role in economic development in general.

#### 4. Conclusion

To provide financial stability to the system of Mandatory Social Insurance as well as full and exact correspondence between the scope of rights of the insured and the scope of obligations, we must employ a special mechanism to achieve balance between revenues and expenditures by imposing adequate insurance rates. Such a mechanism is based on actuarial calculations and implies forming insurance funds as well as implementing reinsurance practices. Insurance funds may be capitalized which provides new investment opportunities for the national economy.

In our opinion to achieve positive social and economic effect from social security against occupational accidents and professional diseases it is necessary to work out a set of scientific, organizational and practical measures.

What is more, it should be done considering national environment together with international best practices in such type of social security. We recommend the following measures to improve the system of social security against occupational accidents and professional diseases and impose insurance rates:

- to assign all the insurance issues related to professional risks, from preventive measures to paying all sorts of insurance benefits, to a single institution;
- while calculating insurance rates, consider the probability of occurring the insured event and calculate the indexes for three years instead of one;
- to make amendments to the Classification of economic activities according to the type of occupational risk, approved by the RF Ministry of Healthcare and Social Development (December, 18, 2006, № 857) by adding new classes of occupational risk up to 100 (for instance) in order to keep insurance relations smooth and balanced;
- to impose special insurance rates for each company corresponding to its workplace assessment, accident rate and professional diseases.

In the forthcoming years the Fund is expected to be ungraded, among others, the insurance coverage against occupational accidents and professional diseases, which is to become an efficient instrument to manage occupational risks, including that of occupational disability. Due to the measures proposed, it will be possible to solve such a vital problem as improving health among working-age citizens, relieve the excessive burden on the retirement system budget and solve the problem of life support in our country.

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