The consequences of social security contributions' rates changes in Russia

Vadim Potapenko
Institute of Economic Forecasting
Russian Academy of Sciences

Social security contributions' rates in Russia

- Last years system of thresholds and rates for social security contributions changed almost yearly
- In 2013 employers pay for their employees 30% of their wage while its accumulated year amount is under 568 thousands roubles (about 160% of average wage in Russia) and 10% of the amount above this threshold
- It is probable that the rates will be changed again next years. Two of the government's variants of reform (scenarios 2 and 3) are given in the table. But ultimate variant is not still determined

The task is to appreciate consequences of realization of the proposed scenarios

Social security contributions' rates in Russia

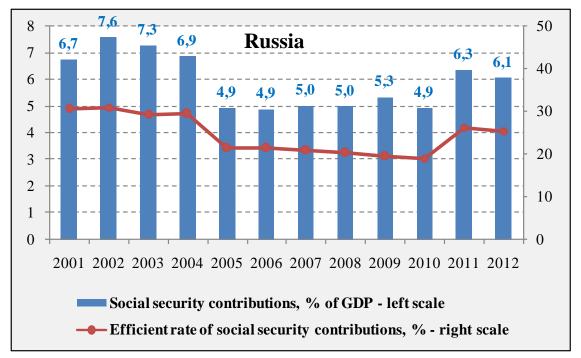
		2009 2010		2011	2012-2013	After 2013		
			2010			Scenario 1 (the same as in 2013)	Scenario 2	Scenario 3
Number of thresholds		2	1	1	1	1	1	1
Value of	the first	115	165	164	About 160		230	
thresholds, % of average wage	the second	247	_	_	_			
Social contributions' rates for intervals , %	before the first threshold	26	26	34	30	30	34	30
	between the first and the second thresholds	10	0	0	10	10	0	10
	above the second threshold	2				_		

Social security contributions in Russia and other countries

- In comparison with most of European countries, amount of social security contributions in Russia is not great. Therefore, there can be significant reserve for increasing of the amount
- All changes of thresholds and rates for social security contributions last years influenced their amount moderately if we consider indicators for total economy

Social security contributions in 2011, % of GDP

Russia	6,3
Germany	14,7
France	14,8
United Kingdom	7,1
Italy	13,1
Poland	11,4
Latvia	8,4
Estonia	11,9
Czech Republic	15,5



Note. Without imputed contributions

Source: Russian Federal Service of State Statistics, Eurostat

Social security contributions in Russia: differences between economic activities

Costs on social security contributions differ significantly by economic activities.

Consequently, changes of thresholds and rates of the contributions influence economic activities in different degrees changing amount and structure of their costs

Indicators of social security contributions and wages by some economic activities in 2011

activities in 2011							
	Social security contributions, % of costs	Efficient rate of social security contributions,	Wages, % of costs	Average wage for economic activity, % of average wage for total economy			
Mining and quarrying	2,0	22,7	8,8	191			
Manufacturing	2,7	28,1	9,7	92			
Manufacture of food products, beverages and tobacco products	2,5	27,0	9,3	80			
Manufacture of textiles	5,0	29,7	16,9	46			
Manufacture of coke and refined petroleum products	0,4	20,7	2,0	204			
Manufacture of chemicals and chemical products	2,6	27,3	9,5	107			
Manufacture of other non- metallic mineral products	4,0	29,6	13,4	87			
Manufacture of basic metals and fabricated metal products	2,4	28,0	8,4	102			
Manufacture of machinery and equipment	5,5	27,9	19,8	98			
Construction	5,0	26,1	19,1	102			
Wholesale and retail trade	3,4	24,4	13,9	88			

Efficient rates of social security contributions for economic activities depend on:

- value of thresholds and rates for contributions
- level of wages
- distribution of wages among employees

Costs on social security contributions are determined by their efficient rate and costs on wages

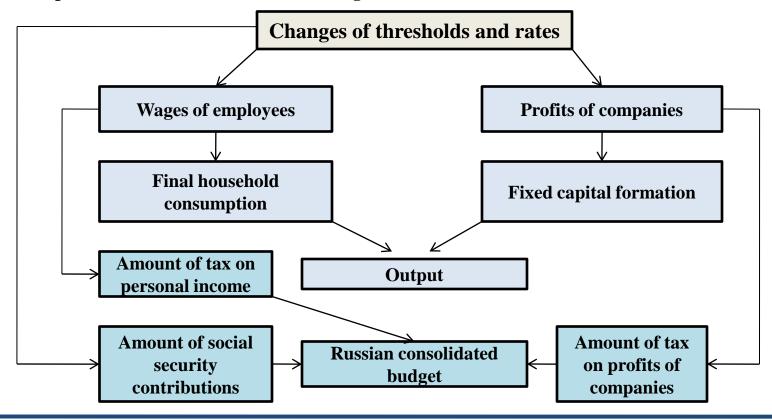
Source: Russian Federal Service of State Statistics

Influence of social security contributions' rates changes on economy

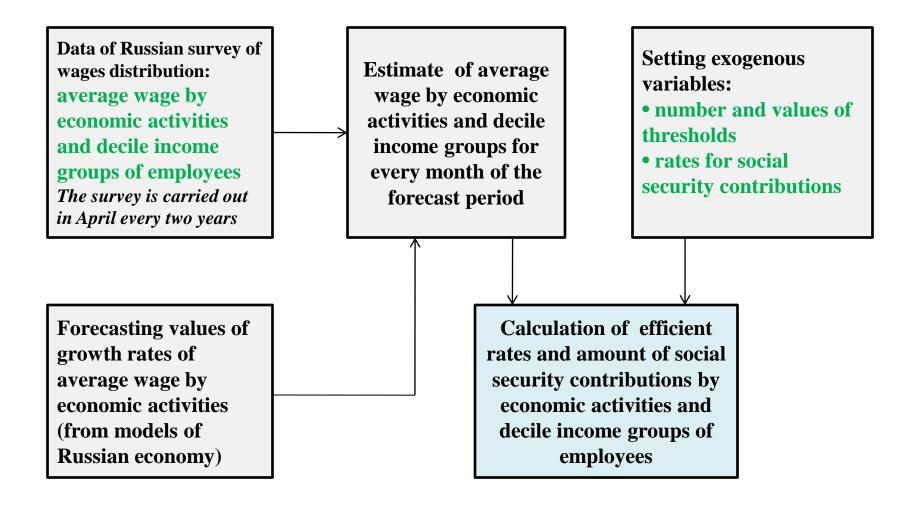
In response to increase/decrease of contributions' rates, companies can choose a number of different actions. The most obvious ones are

- to decrease/increase wages of employees (it means that their wages are less/more than in the case if the rates are lower/higher)
- to decrease/increase profits

In fact, companies can react to contributions' rates changes using a mixture of variants of actions, but in the presentation two above-mentioned edge variants are considered

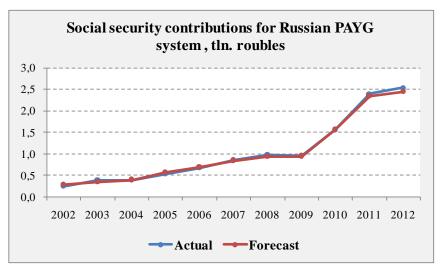


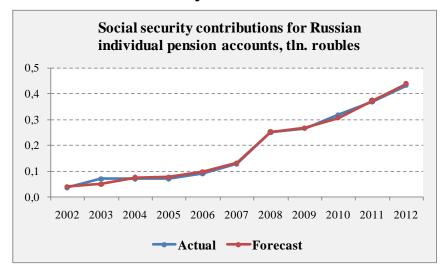
Modelling amount of social security contributions

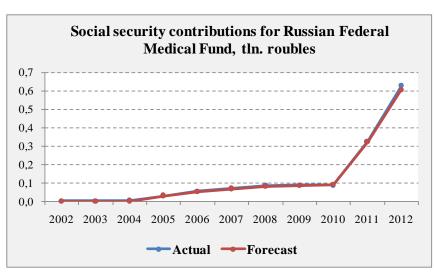


Modelling amount of social security contributions: retrospective

Actual and forecast values of contributions for Russian social security funds in 2002-2012







Retrospective modelling demonstrates that the used procedure lets get forecast values of social security contributions of acceptable accuracy

Forecasting results 1

Forecast of social security contributions' efficient rates for total economy and some economic activities in 2014, %

	Scenario 1	Scenario 2	Scenario 3
Total economy	25,9	27,0	27,6
Mining and quarrying	24,6	24,0	27,0
Manufacturing	25,3	27,0	26,8
Food products	25,4	26,9	26,9
Textiles, leather and related products	23,4	25,4	23,4
Coke and refined petroleum products; chemical products; rubber and plastic products	25,2	26,8	26,7
Other non-metallic mineral products	23,9	26,1	24,9
Basic metals and fabricated metal products	26,8	28,6	28,4
Machinery and equipment; electronic equipment; transport equipment	24,8	26,9	26,2
Construction	23,3	24,1	24,9
Wholesale and retail trade	19,6	19,7	21,4
Financing	21,6	20,2	23,5
Education	22,5	24,9	23,5

Forecast of social security contributions' efficient rates for income decile groups of employees in 2014, %

Income decile group	Scenario 1	Scenario 2	Scenario 3
1st - 8th groups	≈ 30	≈ 34	≈ 30
9th group	27,7	30,1	29,4
10th group (with the highest amount of wages)	19,7	16,7	23,8

Source: author's calculations

Forecasting results 2

Change of government revenue's items, percentage points of GDP

	Scenario 2 m	inus scenario 1	Scenario 3 minus scenario 1		
	change of wages	change of profits	change of wages	change of profits	
Social security contributions	0,27	0,28	0,41	0,40	
Tax on individual income	-0,04		-0,06		
Tax on profits of companies		-0,06		-0,08	
Total	0,23	0,22	0,35	0,32	

Forecast of amounts of social security contributions for some economic activities

	Scenario 2, % of costs	Scenario 3, % of costs	Scenario 2 minus scenario 1, percentage points	scenario 1,
Mining and quarrying	2,0	2,2	-0,05	0,21
Manufacturing	2,9	2,8	0,17	0,14
Manufacture of food products, beverages and tobacco products	2,6	2,6	0,14	0,14
Manufacture of textiles	5,3	5,0	0,33	0,00
Manufacture of coke and refined petroleum products	0,4	0,4	0,03	0,03
Manufacture of other non-metallic mineral products	4,3	4,1	0,29	0,13
Manufacture of basic metals and fabricated metal products	2,6	2,5	0,15	0,13
Manufacture of machinery and equipment	5,9	5,8	0,41	0,27
Construction	5,2	5,3	0,15	0,30
Wholesale and retail trade	3,4	3,6	0,00	0,24

Source: author's calculations

Next steps

Now the modelling of consequences of social security contributions' rates changes is not completely finished

Next steps should provide possibility to calculate interindustrial changes provoked by increasing or decreasing the contributions' rates and thresholds

Two linkages should be built:

- Influence of changes of wage on final household consumption
- Influence of changes of profits on fixed capital formation

Conclusions: detailed

Changes of social security contributions' threshold and rates in 2014 in accordance with scenarios 2 and 3 will not lead to significant growth of the contributions' amount: efficient rate of the contributions for total economy will increase by 1,1 and 1,7 percentage points in comparison with scenario 1 scheme, respectively

Additional amount of social security contributions due to realization of scenarios 2 and 3 will not exceed 0,4 percentage points of GDP, and additional amount of total government revenue will not exceed 0,3 percentage points of GDP

Influence of schemes of scenarios 2 and 3 on economic activities will differ. Scenario 3 will lead to significant increase of efficient rates for mining, financing, refine petroleum products (which have a little share of costs on labour) and trade. In turn, for most of activities with great costs on labor – machinery, textile, non-metallic mineral products – the rates with scenario 3 will be lower than with scenario 2

In case of realization of scenario 3 additional amounts of the contributions for most of manufacturing activities will be lower than with scenario 2, for construction – higher

Possible changes of the thresholds and rates will not affect the contributions' efficient rate for the 1-8th decile income groups of employees. The changes will increase the rate for the 9th group by 3 percentage points.

However, scenario 2 will lead to decrease of the rate for the 10th group by 3 percentage points, and scenario 3 will increase the rate by 4 percentage points

Conclusions: short

Changing of social security contributions' thresholds and rates with scenarios 2 and 3 will not increase revenues of the government extremely.

However, the scenarios will lead to different changes of fiscal burden and costs for different economic activities. But magnitudes of the changes will not be critical

The realization of scenarios 2 and 3 will influence the income of employees with the highest wages

THANK YOU FOR ATTENTION!