The long term forecast of Russian pension system to 2030

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Current conditions of Russian pension system

A pension in Russia consists of 3 parts:

- **a basic flat-rate benefit**
- **a benefit based on the notional accounts** (pay-as-you-go part of Russian pension system)
- **a benefit based on the value of individual accounts** (assets on these accounts are invested in different equities)

Sources of pension expenditures:

- **social contributions**
- **federal budget**

In 2011 social security contributions financed about 60% of all pension expenditures

In 2011 87% of retirement social security contributions went into pay-as-you-go system, and 13% - into individual accounts

Characteristics of pension systems of Russia and other countries

	Pensions, % of GDP	Social security contributions, % of GDP
Russia	7,5	6,3
Germany	13,1	15,8
France	14,5	16,7
Italy	16,0	13,4
United Kingdom	12,5	7,8
Sweden	12,9	8,6
Norway	8,8	9,7
Poland	12,4	11,1
Latvia	8,4	8,4

Source: Pension Fund of Russian Federation, Eurostat

Individual pension accounts were introduced in 2002. Now pension assets on these account is more than 3% of GDP. In the future, they can become important investment resource

Nowadays pension pressure on Russian economy far less than in other developed countries

Demographic situation

Some characteristics of pension systems

	Retirement age		Pensioners, % of whole population	Number of employed persons per one pensioner
	Male	Female		
Russia	60	55	28,1	1,74
Germany	65	65	28,7	1,64
Italy	65	60	27,5	1,39
United Kingdom	65	60	22,1	2,11
Sweden	65	65	27,1	1,78
Norway	67	67	22,7	2,26
Poland	65	60	26,0	1,60
Latvia	62	62	26,5	1,65

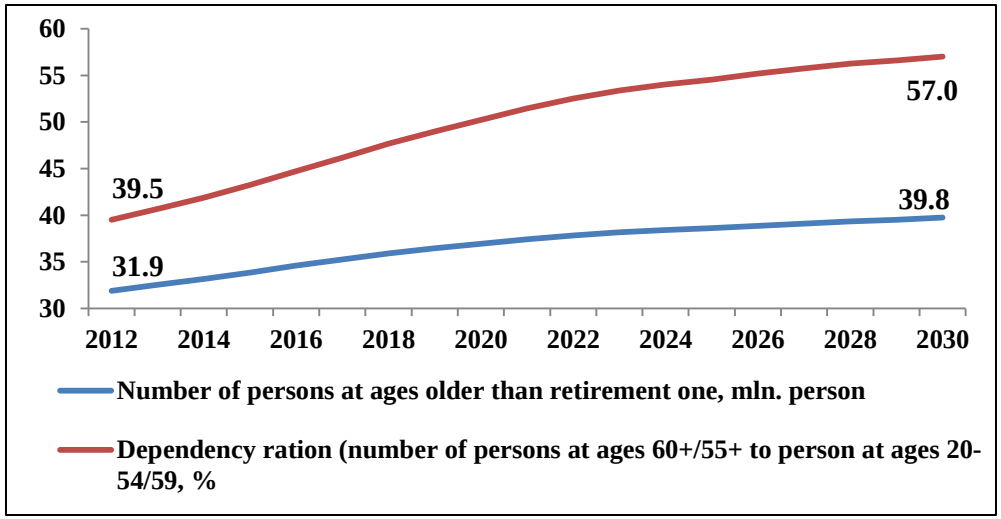
Source: Russian Federal Service of State Statistics, Eurostat

Nowadays demographic pressure on Russian economy is almost the same as in most European countries

Although retirement age in Russia is very low it is adequate to current demographic situation

In the next twenty years number of Russian pensioners and its ratio to number of working population will increase significantly. Thus, for providing acceptable living standards of pensioners pension expenditures will increase too. In addition, due to demographic situation there is no possibility to change retirement age

Results of official demographic forecast for Russia (medium variant)



Source: Russian Federal Service of State Statistics

Russian social policy agenda

Because of the inevitable growth of pension expenditures for the next years, development of pension system has become the most discussable question of social policy in Russia

Many Russian officials and economists believe that pension expenditures' growth is one of the main restrictions of economic development of Russia

Demographic situation won't let increase retirement age in a middle term period. So the most popular proposal for reducing pension expenditures is refusal of individual pension accounts

Pension system is a large element of economy that has a lot of interconnections with its other elements. Therefore proposed changes of the system should take into account these interconnections

Main interconnections between pension system and economy

Pension expenditures influence HOUSEHOLD CONSUMPTION

Growth of GDP and compensation of employees increases current and future PENSION EXPENDITURES

Social contributions influence HOUSEHOLD CONSUMPTION because social contributions paid by employees could be used for purchasing goods and services

Funded pension assets are used for acquiring different types of equities Thus, they can be used for financing **FIXED CAPITAL FORMATION**

Growing pension expenditures can increase DEFICIT OF GOVERNMENT BUDGET and REDUCE GOVERNMENT CONSUMPTION

Social contributions influence FIXED CAPITAL FORMATION because social contributions paid by business could be used for financing fixed capital formation

Need to use interindustrial model

To analyze above-mentioned interconnections we need MODEL OF PENSION SYSTEM, MODEL OF ECONOMY and LINKAGES between them

Used model of economy should be INTERINDUSTRIAL because the interconnections have significant interindustrial differences

Pension assets can be funded in equities of companies from different economic activities
In this way, fixed capital formation can be financed. But multiplicative effects of such investments and growth of outputs due to investments differ for economic activities, **so changes of investment structure of pension assets lead to various economic effects**

There are significant differences between structures of consumption of pensioners and employees who pay social contributions**.**
Therefore changes of pensioners' living standards and rates of social contributions **affect structure of household consumption and have different multiplicative effects for economy**

Social contributions costs vary significantly in economic activities
So changes of social contribution rates influence economic activities in different ways

Examples of need to use interindustrial approach

Social contributions for some economic activities in 2011, % of costs

Mining and quarrying	1,7
Manufacturing	2,2
Manufacture of food products, beverages and tobacco products	2,1
Manufacture of textiles, wearing apparel, leather and related products	4,3
Manufacture of coke and refined petroleum products	0,4
Manufacture of chemicals and chemical products	2,2
Manufacture of other non-metallic mineral products	3,3
Manufacture of basic metals and fabricated metal products	2,0
Manufacture of machinery and equipment	5,0
Construction	4,3
Wholesale and retail trade	2,2

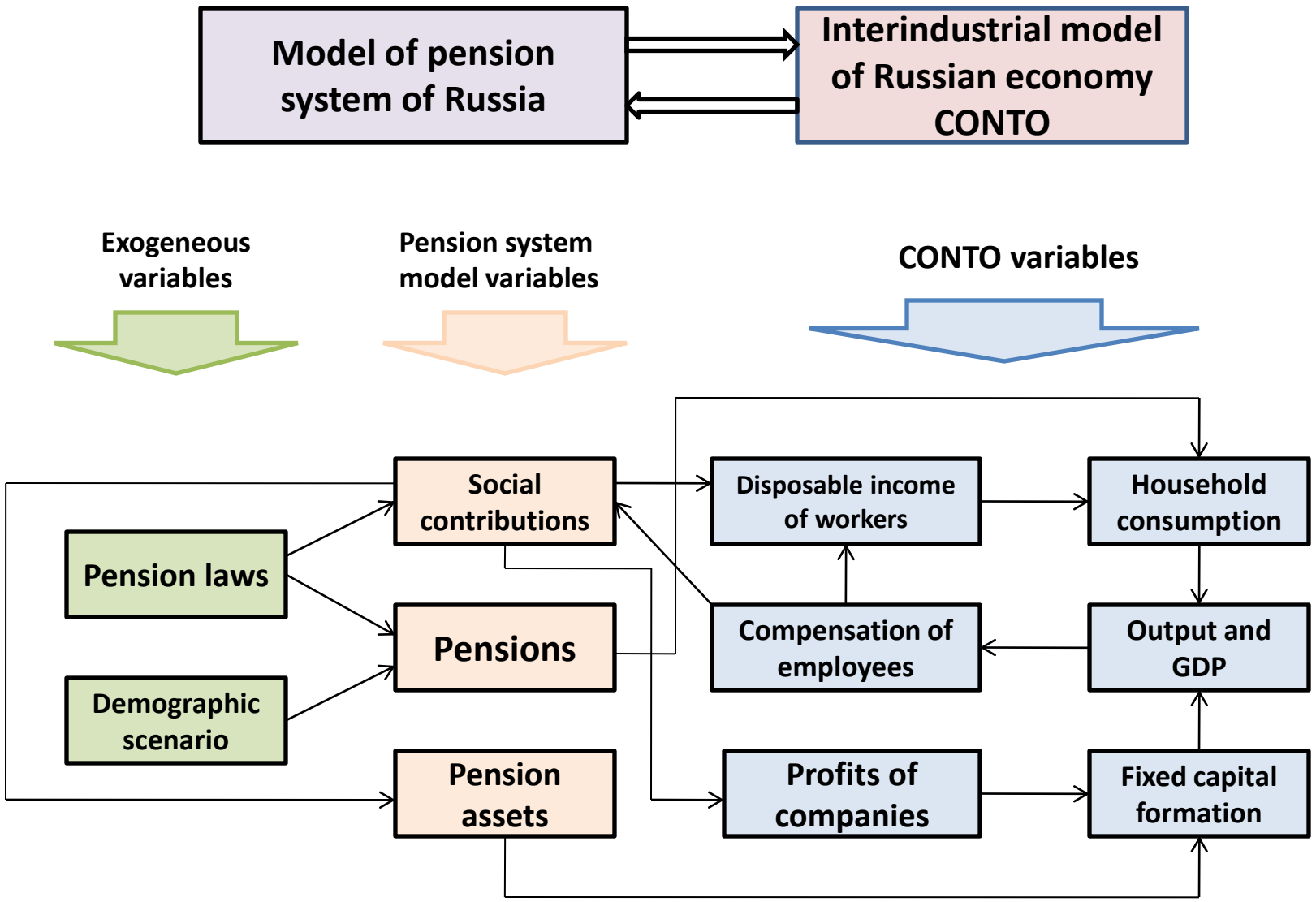
Source: Russian Federal Service of State Statistics

Structure of household consumption in 2009, %

	All households	Pensioner's households
Food and non-alcoholic beverages	32,3	57,4
Alcoholic beverages, tobacco	8,8	2,7
Clothing and footwear	10,2	9,8
Housing, water, electricity, gas and other fuels	10,6	15,8
Furnishing, household equipment and routine maintenance of the house	5,4	4,9
Transport	12,5	2,2
Communication	5,6	3,8
Recreation and culture	5,2	0,5
Education	1,4	1,1
Restaurants and hotels	3,9	0,5

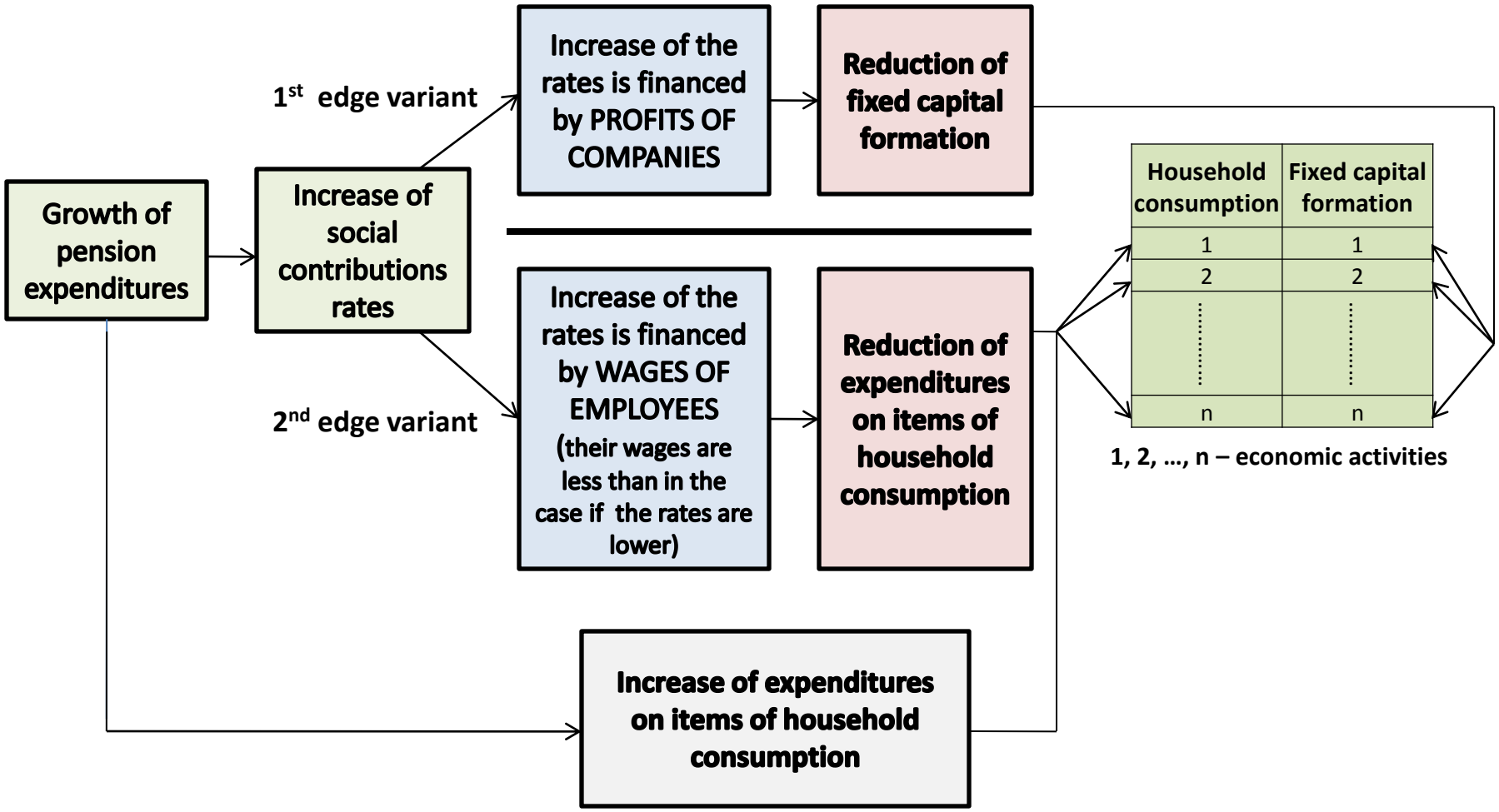
Source: Russian Federal Service of State Statistics

Scheme of modelling



Detailed example of modelling

For example, consider scenario of increasing pension expenditures and, in response, increasing social contributions rates. There is a scheme of corresponding linkages of used models



Macroeconomic results

The system of models depicted above was used for building a long term forecast of Russian economy. There is main macroeconomic results of the forecast in a table below.

Average growth rate, % a year

	11-15	16-20	21-25	26-30
Household consumption	7,5	7,5	4,5	3,8
Government consumption	3,1	3,2	2,0	1,6
Fixed capital formation	10,3	11,6	3,8	3,1
Export	1,4	2,7	4,3	4,2
Import	5,9	6,6	3,1	3,1
GDP	6,2	7,0	4,3	3,6

Source: IEF's calculations

Scenarios and results

Next assumptions were used for forecasting:

- **Retirement age is constant**
- **Not falling living standards for pensioners (replacement coefficient in 2012-2030 is 35% as in 2011)**
- **Individual pension accounts are not touched**
- **Increase of social contribution rates since 2015 so their effective rate will be 35% (in 2011 the effective rate was 27%)**
- **Increase of social contribution rates is financed by both employees wages and profits of companies (their shares in financing are equal)**

	2011	2020	2030
Pensioners, % of population	28,1	32,4	35,6
Pension expenditures, % of GDP	7,5	9,2	10,4
Real average pension, 2011 = 100	100	165	248
Social contributions, % of GDP	6,3	8,6	8,7
Pension assets, % of GDP	3,0	9,2	15,8
Real GDP, 2011 = 100	100	178	263

If government lets living standards of pensioners fall (so that in 2012-2030 pension expenditures are 7,5% of GDP as in 2011), so GDP would be 3% higher than in the case of base scenario

But this hypothetical scenario of decreasing pensioners' living standards is impossible due to social reasons

Conclusions

In the next twenty years supporting relatively acceptable living standards of Russian pensioners will require significant growth of pension pressure on economy – corresponding expenditures will increase by 3 percentage points of GDP

However, growing pension expenditures won't lead disastrous consequences for Russian economy. Disadvantages connected with them are partly overlapped by advantages due to increase and structural changes of household consumption.
So pension pressure on economy won't become critical restriction of Russia's economic development

The refusal of individual pension accounts is not reasonable because they will become important source of investments in a long time period

THANK YOU!