Budget restrictions of the Russian economic development in long-term prospect

Performed by Savchishina Ksenia Institute of Economic Forecasting September, 2012

Inertial (basic) scenario - calculations

- Quarter macroeconomic model of Russian economy (QUMMIR)
- data: the 1st quarter 1993 the 4th quarter 2011
- forecast period: 2012-2020
- basic scenario: external conditions optimistic
 internal conditions restrictions from labor
 force and fixed capital

Inertial (basic) scenario – main exogenous parameters

- Growth of oil and gas prices;
- Increase of gas production (by 18% till 2020);
- Gas export will rise by 36% till 2020;
- Increase of dollar and euro exchange rate;
- Stable growth of the USA and Europe economies;
- Oil export growth (in natural terms) will be very low;
- Working-age population reduction and the increasing number of retirees

MAIN EXOGENEOUS VARI	TARTES				
MAIN EXOGENEOUS VAN	2012	2014	2016	2018	2020
EXTERNAL CONDITIONS VAR		2014	2016	2018	2020
Oil price Urals, \$/bar.	112	118	124	128	132
-			374	400	425
Gas price, \$/1000 m3	388	345			-
Oil export, mln t	234	240	244	250	255
Gas export, bln m3	207	241	266	270	282
Oil extraction, mln t	514	510	512	517	518
Gas extraction, bln m3	697	741	776	796	824
Euro zone GDP growth rates, %	-0,5	1,4	1,4	1,4	1,3
USA GDP growth rates,%	1,7	2,8	2,5	2,2	2,0
EXCHANGE RATES VARIABLES (average)	age for y	ear)			
Dollar exchange rate	31,3	33,5	35,3	37,1	38,9
Euro exchange rate	39,7	40,5	43,7	43,0	43,0
INVESTMENT ACTIVITY VAR	AIBLES				
House lead-in, mln m2	67	74	77	82	85
CONSOLIDATED STATE BUDGET F	ARAMETER	S			
Expenditures for economy to general amount of expenditure	23	23	24	24	24
Pension, average for year, \$	292	301	311	330	347
DEMOGRAPHY VARAIBLES (mln.	people)				
Working age population	85 , 8	83,8	82,2	80,4	79 , 2

Inertial (basic) scenario – budget exogenous parameters

• main tax rates will be on the 2012 level:

```
VAT tax rate – 18% company profit tax rate – 20% personal income tax rate – 13% social insurance tax rate – 30%;
```

• value of the government loans will not increase greatly:

0.1% to GDP for external loans

1-1.5% to GDP for the internal ones;

budget expenditures structure will not change:

```
share of expenses for national economy (inc. investments) will be 23-24% for education and public health – 23% for transfers to finance deficit of the Pension fund – 12.5% for public government – 4.3-5.5% for interests payments of government debt – 2.5%;
```

• growth of the average pension will be 4%-6% per year

Inertial (basic) scenario – main forecast results

	2012	2014	2016	2018	2020
DYNAMICS OF GDP and ITS COMPONENTS	IN 2008	PRICES, 8	5	·	
GDP	5,0	4,8	5,1	4,8	4,5
Households consumption	5,5	6,5	5 , 2	4,5	4,3
Public consumption	1,0	0,7	0,9	1,0	1,1
Fixed capital accumulation	9,5	7,9	9,3	9,9	8,3
Export	0,6	1,6	1,4	1,3	1,4
Import	10,5	5,4	3,2	4,4	4,1

- 1. growth of the households consumption will exceed the GDP dynamics, but will be insufficient to complete saturation of demand;
- 2. dynamics of investments in 2012-2020 will be 8.8% in average per year exceeding the GDP growth rate that will lead to increase of accumulation rate from 22% in 2012 to 30% in 2020;
- 3. export dynamics will be limited by low growth rates of oil extraction and export;
 - 4. stagnation of public consumption growth rates at level of 0.7-1.1% per year

Inertial (basic) scenario – main forecast results

	2012	2014	2016	2018	2020
MACROINDICATORS IN CURREN	T PRICES				
GDP, including (% to total):					
Gross profit and gross mixed income	33,8	33,9	36,3	37 , 8	39,1
Salary fund (including latent)	46,5	47,6	46,7	46,5	46,2
Net taxes on production and import	19,7	18,5	17,0	15,7	14,7
GDP per capita by PPP (ths. US dollars)	23,5	26,7	31,2	35,4	39,9
Share of GDP per capita in US GDP estimated by PPP, %	44,9	47,4	51,4	54,4	57,3
International reserves (bln.dollars)	574	672	795	922	1060
DEFLATORS DYNAMICS, % pe	r year				
GDP deflator	7,5	6,6	5,8	5,1	4,7
Consumer price index	6,2	5,6	5,1	4,6	4,1
HOUSEHOLDS INCOMES (% to	o GDP)				
Households incomes	62,2	61,6	58,6	56,5	54,4
Formal savings	2,4	2,5	2,3	2,2	2,1
Net household credits, per year	0,3	3,2	3,9	4,3	4,9
LABOR FORCE					
Labor productivity, dynamics in %	106,3	104,4	104,2	104,0	103,2
Employed, mln people	71,0	69,8	70,4	70,9	71,7
Unemployed, mln people	4,8	4,1	4,0	3,5	2,8

- •GDP per capita by PPP in the USA level will be less than 58%;
- •labor productivity growth (in 1.4 times in 2012-2020) won't allow to remove completely restriction by the labor supply;
- •Share of gross profit in GDP by sources of income will growth significantly because of decrease of the net taxes share;
- •Households incomes (% to the GDP) will decrease despite of growth of net credits

Inertial (basic) scenario – budget variables forecast

CONSOLIDATED BUDGET PA	RAMETER	RS			
	2012	2014	2016	2018	2020
Incomes of consolidated budget, trln. rubles	20,2	23,4	27,0	30,2	33,7
- share of oil-and-gas incomes, %	31,9	28,6	26,7	24,9	23,4
- share of non oil-and-gas incomes, %	68,1	71,4	73,3	75,1	76,6
Incomes of consolidated budget, % to GDP	33,0	30,9	28,6	26,4	24,7
Expenditures of consolidated budget, trln. rubles	20,7	24,8	27,5	30,4	33,6
Expenditures of consolidated budget, % to GDP	33,8	32,7	29,0	26,6	24,6
Deficit of consolidated budget, % to GDP	-0,8	-1,8	-0,4	-0,2	0,1
Net government paper issue, % to GDP	1,1	1,4	0,9	0,9	0,5
Net external loans, % to GDP	-0,2	0,1	0,0	-0,1	-0,1
SOCIAL PARAMETE	RS				
Expenditures for education, % to GDP	4,1	3,9	3,5	3,2	3,0
Expenditures for public health, % to GDP	4,3	4,1	3,7	3,4	3,1
Ratio of average pension to average salary, %	16,3	14,3	12,8	11,9	11,2

- In 2012-2016 the budget incomes dynamics will be 7.1-7.8% per year, 5.6%-5.9% in 2017-2020;
- Decrease of share of the oil and gas incomes in the budget revenues (from 32% in 2012 to 23.4% in 2020);
- The budget expenditures increase will be in 5-7 times less than in 2005-2008;
- The pension dynamics will decelerate from 13.5% in 2012 to 5% per year in 2013-2020;
- Dynamics of the national economy expenses won't exceed 10% in 2013-2016 and 6% in 2017-2020;
- The consolidated budget will be completely balanced only in 2019

Inertial (basic) scenario – demands to the public budget sphere

- increase of the budget role in investment activity by:
 - the budget investments in the infrastructure projects
 - co-financing of interest payments for investment loans etc.;
- increase of a living standards of the population and corresponding growth of the households consumption:
 - increase of the pensions (to pre-crisis growth rate)
 - growth of salaries in the budget sector;
- increase of financing of education and public health sectors;
- intensification of the public consumption



- scenario of tax rates increase
- scenario of changes of the budget expenditures structure and a schedule of their financing within a year

Scenario of tax rate increase – budget exogenous parameters

Tax rates	2012	2013	2014	2015	2016	2017	2018	2019	2020
VAT	18%	18%	21%	21%	24%	24%	24%	24%	24%
Company profit tax	20%	22%	22%	24%	24%	27%	27%	27%	27%
Personal income tax	13%	13%	15%	15%	15%	15%	17%	17%	17%

- 1. increase of excises rates was already realized in the inertial forecast;
- 2. increase of tax rates on the gas production and export contains also in the basic scenario;
- 3. tax rates on the oil production and export is not reasonable to increase as restrictions on the oil production won't allow to raise tax burden on this branch;
- 4. import duties taxes will not be raised in connection with Russia's entry to the World Trade Organization;
 - 5. tax rates of social contributions seem to be maximum permissible

Scenario of tax rate increase – main forecast results*

THE MAIN FORECAST RESULTS	- DIN	AMICS			
	2012	2014	2016	2018	2020
DYNAMICS OF GDP and ITS COMPONENTS	IN 2008	PRICES, %	5		
GDP	5,0	4,8	5,1	4,8	4,5
	6,0	4,1	5,8	4,9	5,3
Households consumption	5,5	6,5	5,2	4,5	4,3
	6,5	5,7	5,7	3,9	4,9
Public consumption	1,0	0,7	0,9	1,0	1,1
	0,7	1,2	1,7	1,7	1,7
Fixed capital accumulation	9,5	7,9	9,3	9,9	8,3
	11,9	5,6	10,5	10,8	9,7
Export	0,6	1,6	1,4	1,3	1,4
	0,6	1,6	1,4	1,3	1,4
Import	10,5	5,4	3,2	4,4	4,1
	10,9	5,2	3,5	4,5	4,6

^{*} the top line - results of the inertial forecast, bottom line - the scenario with the raised tax rates

Intensification of economic growth from **4.6%** on the average in 2012-2020 in the inertial forecast to **5.1%**:

- increase of the households consumption because of growth of pensions (from 300 dollars per month in 2012 to 720 dollars in 2020);
- rise of the public consumption (annual dynamics will be 1.1%) will have long-term character (till the end of the forecast period);
- acceleration of investment activity will allow to exceed minimum level of investments dynamics (10%) required for removal of restrictions on the capital

Scenario of tax rate increase – main forecast results*

Salary fund (including latent) 34,8 33,1 34,6 35,7 37,4 Salary fund (including latent) 46,5 47,6 46,7 46,5 46,2 Met taxes on production and import 19,7 18,5 17,0 15,7 14,3 19,5 19,7 19,3 18,0 16,8 GDP per capita by PPP (ths. US dollars) 23,5 26,7 31,2 35,4 39,9 23,7 27,1 32,0 36,5 41,9		2012	2014	2016	2018	2020
Gross profit and gross mixed income 33,8 33,9 36,3 37,8 39,1 34,8 33,1 34,6 35,7 37,4 Salary fund (including latent) 46,5 47,6 46,7 46,5 46,2 45,7 Net taxes on production and import 19,7 18,5 17,0 15,7 14,7 19,5 19,7 19,3 18,0 16,8 GDP per capita by PPP (ths. US dollars) 23,7 27,1 32,0 36,5 41,9	MACROINDICATORS IN CURREN	T PRICES	·		·	
Salary fund (including latent) 34,8 33,1 34,6 35,7 37,4 Salary fund (including latent) 46,5 47,6 46,7 46,5 46,2 Met taxes on production and import 19,7 18,5 17,0 15,7 14,3 19,5 19,7 19,3 18,0 16,8 GDP per capita by PPP (ths. US dollars) 23,5 26,7 31,2 35,4 39,9 23,7 27,1 32,0 36,5 41,9	GDP, including (% to total):					
Salary fund (including latent) 46,5 47,6 46,7 46,5 46,2 45,6 47,1 46,1 46,2 45,7 Net taxes on production and import 19,7 18,5 17,0 15,7 14,7 19,5 19,7 19,3 18,0 16,8 GDP per capita by PPP (ths. US dollars) 23,5 26,7 31,2 35,4 39,9 23,7 27,1 32,0 36,5 41,9	Gross profit and gross mixed income	33,8	33,9	36,3	37,8	39,1
45,6 47,1 46,1 46,2 45,7 Net taxes on production and import 19,7 18,5 17,0 15,7 14,7		34,8	33,1	34,6	35 , 7	37,4
Net taxes on production and import 19,7 18,5 17,0 15,7 14,7 19,5 19,7 19,3 18,0 16,8 GDP per capita by PPP (ths. US dollars) 23,5 26,7 31,2 35,4 39,9 23,7 27,1 32,0 36,5 41,9	Salary fund (including latent)	46,5	47,6	46,7	46,5	46,2
19,5 19,7 19,3 18,0 16,8		45,6	47,1	46,1	46,2	45,7
GDP per capita by PPP (ths. US dollars) 23,5 26,7 31,2 35,4 39,9 23,7 27,1 32,0 36,5 41,9	Net taxes on production and import	19,7	18,5	17,0	15,7	14,7
23,7 27,1 32,0 36,5 41,9		19,5	19,7	19,3	18,0	16,8
23,7 27,1 32,0 36,5 41,9						
	GDP per capita by PPP (ths. US dollars)	23,5	26,7	31,2	35,4	39,9
		23,7	27,1	32,0	36,5	41,9
Share of GDP per capita in US GDP estimated by PPP, $\$$ 44,9 47,4 51,4 54,4 57,3	Share of GDP per capita in US GDP estimated by PPP, %	44,9	47,4	51,4	54,4	57 , 3
45,4 48,0 52,6 56,1 60,2		45,4	48,0	52,6	56,1	60,2

^{*} the top line - results of the inertial forecast, bottom line - the scenario with the raised tax rates

Reduction of the business and households disposable incomes by the tax mechanism won't be extremely high:

- the gross profit share will reduce only in 2012-2014, then it will rise (to 37.4% of the GDP);
- the population disposable incomes will growth in average by 8-10% annually

Scenario of tax rate increase – social and budget parameters forecast

CONSOLIDATED BUDGET PA	ARAMETERS	}			
	2012	2014	2016	2018	2020
Incomes of consolidated budget, % to GDP	33,0	30,9	28,6	26,4	24,7
	32,6	32,8	31,5	30,4	28,4
Expenditures of consolidated budget, % to GDP	33,8	32,7	29,0	26,6	24,6
	33,5	34,0	31,5	30,3	28,3
Deficit of consolidated budget, % to GDP	-0,8	-1,8	-0,4	-0,2	0,1
	-0,9	-1,2	0,0	0,1	0,1
SOCIAL PARAMETE	RS				
Expenditures for education, % to GDP	4,1	3,9	3,5	3,2	3,0
	4,0	4,1	3,8	3,6	3,4
Expenditures for public health, % to GDP	4,3	4,1	3,7	3,4	3,1
	4,2	4,3	4,0	3,8	3,6
Ratio of average pension to average salary, %	16,3	14,3	12,8	11,9	11,2
	16,6	15,7	15,6	15,5	15 , 9

^{*} the top line - results of the inertial forecast, bottom line - the scenario with the raised tax rates

- The value of the consolidated budget incomes in % to the GDP will decrease from 31.8% in 2012 to 28.4% in 2020 (nevertheless, being more than level of the inertial forecast -24.7%);
- It will be possible to balance the consolidated budget in 2016 (in the inertial scenario in 2019);
- Decrease of the main social parameters will be less sharp than in the inertial scenario

Scenario of changes of the budget expenditures structure and financing schedule-budget exogenous parameters

The main features:

- no changes of the tax system (except being included in the inertial scenario);
- emphasis will be made on change of a financing schedule of the budget expenses and their structure;
- main target indicators:
 - increase of average old-age pension level
- production of the Value Added in the services of a social orientation (education and public health care)

Problems in financing mechanism of the budget expenses

- Unevenness of the public expenditures financing during fiscal year in the inertial scenario:
- in the 1st quarter less than 20% of the planned value of expenses,
 - in the 2nd quarter -22%,
 - in the 3rd quarter -23%,
 - in the 4th quarter more than 35% are financed
- In new scenario the hypothesis about the following schedule of financing is accepted:
- in the 1st quarter 23.5% from the planned level of expenses,
 - in the 2nd quarter -24.5%,
 - in the 3rd quarter -25%,
 - in the 4th quarter 27% are financed

Problems in financing mechanism of the budget expenses (2)

- Inertial scenario: the budget costs structure produces very low growth rates in branches "Education" and "Public health" (0.1% and 0.8% per year respectively)
- Expenses for education in Russia (5.3% to the GDP in 2008) are less than ones in many developed countries (8% in the USA, 5.9% in France, 6% in Great Britain), though the number of students on 1000 people (70 students) exceeds twice similar indicators of France and Great Britain and for 15% an indicator of the USA
- Expenses for public health is much less than in other countries with similar age structure of the population: in Russia this indicator is equal 5.2% to the GDP (2008), in the USA 16%, in France 11.1%, in Germany 10.4%, in Poland 6.6%
- Expected growth of pensioners number will be 9.4% till 2020 (or 3.7 million people) that will raise burden of the public health system

Scenario of changes of the budget expenditures structure and financing schedule – budget exogenous parameters

Expenditure structure, %	2012	2013	2014	2015	2016	2017	2018	2019	2020
Education	15%	15%	16%	16%	17%	19%	20%	20%	21%
Public health	14%	14%	17%	19%	21%	21%	23%	23%	24%
Transfers to Pension fund	14%	13%	13%	14%	15%	15%	17%	18%	19%
National economy	31%	32%	30%	29%	25%	23%	18%	17%	14%
Public administration	5%	5%	5%	5%	5%	5%	5%	5%	5%
Other expenses	21%	21%	19%	17%	17%	17%	17%	17%	17%

Main idea: increase share of budget expenses for education, public health and pensions by decreasing share of government, defense and government investments expenditures

Scenario of changes of the budget expenditures structure and financing schedule—main forecast results:*

THE MAIN FORECAST RESULTS	- DINA	AMICS			
	2012	2014	2016	2018	2020
DYNAMICS OF GDP and ITS COMPONENTS	IN 2008	PRICES, %	5		
GDP	5,0	4,8	5,1	4,8	4,5
	6,1	5,2	5,5	5,2	5,1
Households consumption	5 , 5	6,5	5,2	4,5	4,3
	6 , 5	7,0	5,9	5,5	5,1
Public consumption	1,0	0,7	0,9	1,0	1,1
	0,5	1,3	1,8	2,5	2,1
Fixed capital accumulation	9,5	7,9	9,3	9,9	8,3
	13,0	7,7	8,8	8,9	8,5
Export	0,6	1,6	1,4	1,3	1,4
	0,6	1,6	1,4	1,3	1,4
Import	10,5	5,4	3,2	4,4	4,1
	11,0	5,6	3,4	4,7	4,4

^{*} the top line - results of the inertial forecast, bottom line - the scenario of changes of the budget expenditures financing mechanism

- increase of average annual growth rate of GDP by 0.6 points;
- change of the budget expenditure structure will lead to an intensification of households and public consumption with simultaneous reduction of investments growth rates;
- the share of the state investments reducing from 15% in 2012 to 6% in 2020

Scenario of changes of the budget expenditures structure and financing schedule—budget forecast results:*

CONSOLIDATED BUDGET PA	RAMETERS				
	2012	2014	2016	2018	2020
Incomes of consolidated budget, % to GDP	33,0	30,9	28,6	26,4	24,7
	32,6	30,5	28,2	26,0	24,2
Expenditures of consolidated budget, % to GDP	33,8	32,7	29,0	26,6	24,6
	33,4	32,3	28,8	26,6	24,8
Deficit of consolidated budget, % to GDP	-0,8	-1,8	-0,4	-0,2	0,1
	-0,8	-1,8	-0,6	-0,6	-0,6
SOCIAL PARAMETE	RS				
Expenditures for education, % to GDP	4,1	3,9	3,5	3,2	3,0
	4,0	5,2	4,9	5,3	5,2
Expenditures for public health, % to GDP	4,3	4,1	3,7	3,4	3,1
	4,7	5 , 5	6,0	6,1	6,0
Ratio of average pension to average salary, %	16,3	14,3	12,8	11,9	11,2
	16,6	15,8	15,6	15,5	15,8

^{*} the top line - results of the inertial forecast, bottom line - the scenario of changes of the budget expenditures financing mechanism

- increase of the monthly average pension for 10% per year to \$720 in 2020 (that will be 16% to average salary);
- the budget expenses on public health will increase to 6% to the GDP (from 4.7% in 2012);
- the budget expenses for education will increase from 4% to 5.2% to the GDP;
- the consolidated budget will be executed with deficit during all forecast period;
- intensification of the economic dynamics with realization of the socially oriented budgetary expenses is possible, but only on condition of the government loans growth or use of the sovereign oil-and-gas funds (which are about 145 bln.\$)

Thank you!

Savchishina Ksenia savchishinak@mail.ru