FROM THE CHIEF EDITOR

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Modernisation issues of Russia's regions

Currently, profound changes are going on in the world economy. Its leaders (the USA, Japan, the European Union) try to preserve their dominance at all costs, and the Asian Tigers, aspiring to take their place, are increasingly expanding the spheres of their influence to the international level. China has been actively developing in the context of economic integration; it asserted itself as a global power, implementing a wide range of political, economic, military, cultural and other modernisation transformations that lay the foundations for the mighty modern state[1].

Advanced development of new technological modes is crucially important in the implementation of modernisation. Domestic researchers note that in order to join the fastest-growing economies through an actual breakthrough, Russia should establish the technological mode, which would make it possible to achieve 8% of the sixth mode and 31% of the fifth mode by 2020. By 2030 these modes should prevail in the structure of the Russian economy – 20% and 40%, respectively[2]. At the same time, it is necessary to make significant progress in science, education, healthcare, social development in general. Now it is very important not to miss the available opportunities, and first of all – to enhance the efficiency of state management.

In recent years Russia has been undertaking certain measures to accelerate modernisation reforms. The centre for the development and commercialization of new technologies "Skolkovo", the Russian Corporation of Nanotechnologies "RUSNANO" were established. The stratification of the higher education system was initiated, with the allocation of federal and national research universities and universities with special status (Moscow State University and Saint Petersburg State University).

[1] Sharko S.V. Russia and China: opportunities for and development of regional integration: monograph. Moscow: OOO "In-kvarto", 2010.

[2] Kuzyk B.N. Innovation model of Russia's development. The journal of the New Economic Association. 2010. No. 7. P. 153.

Certain measures are being taken to increase the salaries of the staff of academic institutes and institutions of higher and secondary professional education, and school teachers. R&D on the grant basis is being developed. Strategic plans for the development of the leading branches of national economy are being elaborated.

Immediately after assuming office as Russia's President, on May 7, 2012, V.V. Putin signed 11 Decrees[3] aimed at the implementation of his election programme. They contain instructions to the RF Government concerning the implementation of tasks, determining the rate of modernisation acceleration in economic and social spheres; they also determine the indicators, the achievement of which will ensure a sharp increase in Russia's competitiveness, enhancement of national security, creation of decent living conditions for its citizens. Essentially, these are the actions that will facilitate a sharp reduction in the gap between Russia and the world economic leaders, and place Russia among the modern economies with a high quality of life.

The nature, trends, factors and specifics of modernisation have been extensively studied by scientists in different countries. Efficient methods for measuring the level of modernisation are being developed, based on the comparison of key parameters of the socio-economic situation in a certain country and the states leading in innovation development.

A lot of analytical and forecasting research in this area has been recently performed by Chinese scientists. In particular, the scientists at the China Center for Modernisation Research, Chinese Academy of Sciences (headed by Professor He Chuanqi) analysed the data on the development of 131 countries and defined the modernisation stages these countries undergo[4]. Thus it has been revealed that in 2006 12 countries still represented a traditional agrarian society; 90 countries were in the primary stage of modernisation, which, in fact, solves the problems of capitalism accompanied by socio-cultural evolution; 29 countries entered a stage of secondary modernisation characterised by the high quality of life, ecologisation, informatisation of society.

According to the proposed methodology, Russia ranked 41st (97% as compared to the level of the leading countries) in 2006 in the primary modernisation (PM) rating, 31st (66%) in the secondary modernisation (SM) rating and 37th (59%) in the integrated modernisation (IM) rating.

By 2010, the country's position in the world rating has changed insignificantly. It ranks 43rd by PM, 29th – by SM, 36th – by IM *(tab. 1)*. At present, Russia is among the group of countries with a medium level of development, alongside Spain, Greece, Portugal.

How can it be that our country with its enormous production, labour, intellectual, raw materials and other basic resources is among the 'average performers'?

[3] Decree "On the Presidential programme on the improvement of qualification of engineering personnel for 2012–2014" No.594; Decree "On the long-term state economic policy" No.596; Decree "On the activities for the implementation of the state social policy" No.597; Decree "On the improvement of state policy in health care sphere" No.598; Decree "On the measures for the implementation of state policy in the sphere of education and science" No.599; Decree "On the measures for providing the citizens with affordable and comfortable housing and enhancing the quality of housing and communal services" No.600; Decree "On the main guidelines of improving the state management system" No.601; Decree "On the provision of inter-ethnic concord" No.602; Decree "On the implementation of plans (programmes) for the construction and development of the Armed Forces of the Russian Federation, other forces, military formations and bodies, and modernisation of the defense-industrial complex" No.603; Decree "On the further improvement of military service in the Russian Federation" No.604; Decree "On the measures for the implementation of the foreign policy of the Russian Federation" No.605; Decree "On the measures for the implementation of demographic policy in the Russian Federation" No.606. Source: Decrees of the President of the Russian Federation V.V. Putin dated May 7, 2012. Available at: http://www.rsronline.ru/doc/2012_06_25/6.pdf

[4] He Chuanqi. Survey report on modernisation in the world and in China (2001–2010). Translated from English under general editorship of N.I. Lapin, foreword by N.I. Lapin, G.A. Tosunyan. Moscow: Ves Mir, 2011.

Table 1. National modernisation of Russia (among 131 countries)

Modernisation indicator	2000	2005	2008	2009	2010
Primary modernisation index (Rank of the PM index)	92 (52)	96 (45)	99.7 (40)	99.9 (41)	99.9 (43)
Secondary modernisation index (Rank of the SM index)	62 (29)	66 (29)	70 (30)	70 (30)	72 (29)
Integrated index of modernisation (Rank of the IM index)	54 (37)	58 (39)	63 (36)	65 (38)	66 (36)

Source: Research Group for China Modernization Strategies, et al. 2008. China Modernization Report 2008: International Modernization. Beijing: Peking University Press. World Bank. 2008. World development Indicators 2008. Washington DC: World Bank.

According to most analysts and experts[5], the reforms, connected with the change in the social system, that Russia went through over the past 20 years, have been implemented with gross errors (first of all, in privatisation, liberalisation of foreign trade relations, organisation of compensatory measures for the conservation of people's savings). This led to deindustrialisation, the aggravation of territorial differentiation, extension of social degradation, significant reduction in the level of the country's competitiveness, and to other negative phenomena.

Taking into account the fact that in its historical past the Soviet Union was actually the number two power in the world, the key guidelines of V.V. Putin's activity during his third presidency were aimed at achieving by 2018–2025 of the development indicators ensuring a significant increase in the country's competitiveness and enhancement of national security in all the spheres of socio-economic development.

Modernisation of the country in general is determined by the modernisation of its regions. In this regard, defining the trends in the level and rate of modernisation in the regions is the most important research and practical task. This issue became the basis of a major research project "Socio-cultural modernisation of Russia's regions", which has been implemented since 2006 by the Centre for the Study of Social and Cultural Change of the Institute of Philosophy of RAS under the leadership of RAS Corresponding Member N.I. Lapin with the support of the Russian Humanitarian Science Foundation. At that, the tools of Chinese colleagues were adapted to Russian conditions[6].

[5] See, for example: Modernisation and economic security of Russia. Vol.1. Ed. by Academician N.Ya. Petrakov. Moscow: Finance and credit, 2010; Modernisation and economic security of Russia. Vol.2. Ed. by Academician N.Ya. Petrakov. Moscow, Saint Petersburg: Nestor-Istoriya, 2010; Glazyev S.Yu., Lokosov V.V. Assessment of the critical threshold values of the indicators of the state of Russian society and their use in the socio-economic development management. Herald of the Russian Academy of Sciences. 2012. Vol. 82. No.7; Glazyev S.Yu., Fetisov G.N. On the strategy of Russia's sustainable development. Ekonomist. 2013. No.1; Ivanter V.V., Ksenofontov M.Yu. The concept of constructive forecast of the growth of Russia's economy in the long-term. Problemy prognozirovaniya. 2012. No.6; Evaluation of growth factors and the forecast of the socio-economic development of Russia's regions. Ed. by. RAS Academician A.I. Tatarkin, RAS Academician P.A. Minakir. Russian Academy of Sciences. Ural Department. Institute of Economics; Far Eastern Branch. Economic Research Institute. Yekaterinburg: IE Ural RAS Department, 2012; Russian transformation: 20 years later. Ed. By J. Sapir. Moscow: Magistr, 2013; etc.

[6] Lapin N.I. On the experience of analysing modernisation. Obshchestvenniye nauki i sovremennost. 2012. No.2. P. 5357. The tools have been adapted to Russian conditions (some indicators, relevant for Russia, were added), the changes have been made according to the specifics of regional statistics. So, in the SM index the "Number of TV sets per 1000 persons" has been replaced with the "Number of TV sets per 100 households," in the SM and IM indices the "Number of Internet users per 100 people" has been replaced with the "Number of personal computers per 100 households". In addition, two indicators have been added to the evaluation indicators of the secondary modernisation: the "Share of innovation goods, works and services in the total volume of shipped production, in %" and the "Share of R&D expenditures in GDP, in %". These indicators provide for a better differentiation of the regions according to the SM phases. He Chuanqi agreed with the usefulness of the inclusion of these indicators, explaining that they are absent in the methodology of the China Center for Modernization Research, Chinese Academy of Sciences, because there are no such indicators in the statistics of several countries.

Participating in the project since 2010, the Institute of Socio-Economic Development of Territories of RAS has developed an information and analytical system "Modernisation". For determining the indices, phases and levels of modernisation, 25 necessary statistical indicators reflecting the level of socio-economic development were selected for the years 2000, 2005, 2008, 2009 and 2010. The data cover 83 subjects of the Russian Federation, 8 federal districts and Russia as a whole.

According to the analysis conducted by ISEDT RAS, most of Russia's territories have by 2008 passed the stage of primary modernisation (PM index by the federal districts ranged from 91 up to 99.9). The completion of primary transformations in some districts, (North Caucasian, Southern and Siberian) was hampered, first of all, by an insufficient duration of life of the population. As a result, national average life expectancy in Russia in 2010 was significantly lower than in the leading states.

As for secondary modernisation, its index in Russia as a whole over the last decade has grown by 10 percentage points and reached 72% in 2010. Moreover, the growth was mainly provided by the Central and Northwestern Federal Districts *(tab. 2)*.

Other districts in the 2005–2010 period experienced a decline in the pace of modernisation processes due to the decrease in the value of gross regional product. If this trend remains unchanged, the secondary modernisation in the country will have been completed not earlier than by 2022–2025.

Since the integrated modernisation is a coordinated interaction between both stages, the ratings of these territories according to the integrated indicator turn out to be the result of

Table 2. Dynamics of secondary modernisation indices of Russia's federal districts, %*

Federal District	Year					Growth	
	2000	2005	2008	2009	2010	2000–2005	2005–2010
Central	*With an average level of development*		*With a high level of development*			7.8	7.4
	68.9	76.7	82.8	84.2	84.1		
Northwestern	66.7	72.6	*With an average level of development*			5.9	6.4
			77.4	78.3	79		
Ural	56.2	63.1	67.4	66.6	66.1	6.9	3
Volga	55	61	63.4	63.4	64.4	6	3.4
Siberian	52.6	59.2	62.8	63.2	63.2	6.6	4
Far Eastern	*With a preliminary level of development*	58.6	62.4	62.1	62.1	7.2	3.5
	51.4						
Southern	50.3	55.6	58.3	59.5	59.1	5.3	3.5
North Caucasian	44.2	*With a preliminary level of development*	51.7	52.7	53.6	5.4	4
		49.6					
Russia as a whole	**61.6**	**66.2**	**69.8**	**70.4**	**72**	**4.6**	**5.8**

* The data on the districts are ranked according to 2010.
SM levels: with a high level of development – 81 and more; with an average level of development – 52–80 (the upper third – 72–80; the middle third – 62–71; the lower third – 52–61); with a preliminary level of development – 31–51.
Source: Calculations have been carried out by the Institute of Socio-Economic Development of Territories with the use of information-analytical system of monitoring the parameters of Russian regions' modernisation (IS "Modernisation", patent No.2012661285, 2012), in accordance with the methodological developments of the Centre for the Study of Social and Cultural Change of the Institute of Philosophy of RAS.

summing up the two previous measurements. The Central and Northwestern Federal Districts are also the leaders by the integral index. But even these best values of the indicator correspond only to the average level of modernisation standards, calculated according to the leading countries. In the rest of the districts (Ural, Far Eastern, Volga, Siberian, Southern, North Caucasian) the indicators are below average *(tab. 3)*. The reduction in the rate of modernisation in these districts, and, respectively, in the whole country in 2005–2010 was caused by the crisis and post-crisis phenomena occurring in the given time period.

Thus, the assessment of modernisation rate at the regional level has shown that in Russia's regions this process is going on unevenly. Modernisation in cultural-cognitive and production spheres is especially poor.

The main factor hampering the pace of modernisation in Russia is a considerable differentiation of its regions by the level of economic and social development. The regions with substantial economic resources for modernisation have only a quarter of the country's population, the 'second-rate' regions – almost 2/3 and underdeveloped regions – about 15% of the Russian citizens.

The analysis proves that the small number of agglomerations, which are the centres for modernisation, is another factor that influences the rate of modernisation. Russia has only 11 cities with population of 1 million and more; 38% of the population lives in the cities with population over 250 thousand, and 36% live in small towns, rural areas and villages that have minimum resources for modernisation.

Table 3. Dynamics of integrated indices of modernisation in Russia's federal districts, %*

Federal District	Year					Growth	
	2000	2005	2008	2009	2010	2000–2005	2005–2010
Central	*Below average* 57.7	*Average* 65.8	72.4	73.7	73.2	8.1	7.4
Northwestern	53.9	*Below average* 60.9	66.2	67.3	68.4	7	7.5
Ural	49.3	57.3	62.6	*Below average* 61.6	61.7	8	4.4
Far Eastern	47.8	55.6	60.1	60.4	59.9	7.8	4.3
Volga	*Low* 47.7	55.3	58.6	58.9	59.9	7.6	4.6
Siberian	46.4	54.2	59.2	59.7	59.6	7.8	5.4
Southern	44.8	52	55.5	56.5	56	7.2	4
North Caucasian	41.1	*Low* 47.3	50.2	51.1	51.6	6.2	4.3
Russia as a whole	**51.1**	**57.9**	*Below average* **62.5**	**63.5**	**65.4**	**6.8**	**7.5**

* The data on the districts are ranked according to 2010

Intervals of the indices: high – 88 and more; above average – 78–87; average – 64–77; below average – 48–63; low – 33–47; very low – 32 and less.

Source: Calculations have been carried out by the Institute of Socio-Economic Development of Territories with the use of information-analytical system of monitoring the parameters of Russian regions' modernisation (IS "Modernisation", patent No.2012661285, 2012), in accordance with the methodological developments of the Centre for the Study of Social and Cultural Change of the Institute of Philosophy of RAS.

The main limiting factors determining the level of human capital development include low life expectancy and a great differentiation of the population by income. In recent years the difference between decile groups with the highest and lowest incomes has been 15–16 times. The main reason for low incomes lies in the insufficient level of wages in some sectors, especially in the budget sphere. The approved minimum wage still lags far behind the income enough for decent living. The insufficient level of information and innovation culture of the population adversely affects the pace of modernisation as well.

The President's Decrees dated May 7, 2012 provide for fundamental changes in the key areas, determining the rate of modernisation *(tab. 4)*.

ISEDT RAS calculations show that the values of the main indicators of modernisation processes for the target scenario (by the Decrees of the RF President) will outpace the inertial trend formed in 2000–2010.

If life expectancy by 2020, in accordance with the inertial forecast is estimated at 74.3 years, then in accordance with the target indicators it will be equal to 75.2 years *(tab. 5)*.

Table 4. Objectives for the modernisation of the economy, set out in the Decrees dated May 7, 2012 by the RF President

Presidential Decree	Main targets set out in the Decree
'On the long-term state economic policy' No. 596	– improvement of Russia's position in the World Bank rating of business environment up to the 50th in 2015 and up to the 20th in 2018;
	– 1.3-fold increase in the share of hi-tech and knowledge-intensive production in the gross domestic product by 2018 as compared to 2011;
'On the activities for the implementation of the state social policy' No. 597	– 1.4–1.5-fold increase in real wages by 2018;
	– bringing the average salaries of kindergarten teachers to the regional average in the sphere of general education in the specific region;
	– increase in the number of highly qualified workers by the year 2020 so that it would amount to not less than one third of the number of qualified workers;
	– creation of up to 14.2 thousand jobs for disabled persons annually in the period of 2013 – 2015;
	– creation of not less than 5 centres for cultural development in small towns by 2015;
	– 2-fold increase in the number of exhibition projects realized in the constituent entities of the Russian Federation by 2018;
	– increase in the number of children participating in creative activities and events up to 8% of the total number of children by 2018;
'On the improvement of state policy in health care sphere' No. 598	– reduction of death rate from cardiovascular diseases to 649.4 cases per 100 thousand population;
	– reduction of death rate from neoplasms (including malignant) to 192.8 cases per 100 thousand population;
	– reduction of death rate from tuberculosis to 11.8 cases per 100 thousand population;
	– reduction of death rate in road traffic accidents by 10.6 cases per 100 thousand population;
	– reduction of infant mortality, in the first place through its reduction in the regions with a high value of its indicator, to 7.5 per 1000 live births;
	– increase in the volume of domestic production of medicines according to the list of strategically important medicines and the list of vital and essential pharmaceuticals up to 90%;

Continuation of table 4.

'On the measures for the implementation of state policy in the sphere of education and science' No. 599	– increase from 3% up to 25% by 2020 in the share of secondary vocational education institutions and higher education institutions, the premises of which are adjusted for educating people with disabilities;
	– increase up to 2.44% by 2020 in the share of publications by Russia's scientists in the total number of publications in the world scientific journals included in the Web of Science data base;
	– increase by 2015 of the domestic expenditures on R&D up to 1.77% of GDP with the increase in the share of higher education institutions in these expenditures up to 11.4%;
'On the measures for providing the citizens with affordable and comfortable housing and enhancing the quality of housing and communal services' No. 600	– increase in the share of borrowed funds in the total volume of capital investments in heat supply systems, water supply and sewerage systems and wastewater treatment up to 30% by 2017;
	increase in the number of granted mortgage loans up to 815 thousand a year;
	– provision of Russia's citizens with an opportunity to improve their housing conditions no less than once every 15 years ;
	– reduction in the price for 1 square metre of living space by 20% through increase in the volume of commissioned economy class housing;
	– provision of affordable and comfortable housing to 60% of Russian families willing to improve their housing conditions;
'On the main guidelines of improving the state management system' No. 601	– reduction in the average number of appeals from the representatives of business community to the state government body of the Russian Federation (local government body) for obtaining one state (municipal) service connected with entrepreneurial activity to 2 by the year 2014;
"On the implementation of plans (programmes) for the construction and development of the Armed Forces of the Russian Federation, other forces, military formations and bodies, and modernisation of the defense-industrial complex" No.603	– priority development of nuclear deterrence forces, air and space defense systems, communications, intelligence and control systems, electronic warfare, complexes of unmanned aerial vehicles, robotized missile strike systems, modern transport aviation, precision weapons and counterweapons, the systems of individual protection of military personnel
	– development of the Navy, first of all, in the Arctic zone of the Russian Federation and in the Far East, for protecting the strategic interests of the Russian Federation
'On the further improvement of military service in the Russian Federation' No. 604	– provision of housing to the military personnel of the Russian Federation Armed Forces, other forces, military formations and bodies to the full extent in 2013 in accordance with the legislation of the Russian Federation;
	– formation of the military housing fund by 2014;
	– establishment of money allowances of military personnel at a level not less than the remuneration of employees at the enterprises of the leading sectors of the economy;
	– annual increase in the pensions of citizens dismissed from military service by not less than 2% above inflation rate;
	– annual increase in the number of military personnel serving under the contract not less than by 50 thousand people, over the period of 5 years.;
'On the measures for the implementation of demographic policy in the Russian Federation' No. 606	– provision of increase in cumulative birth rate up to 1.753 by 2018;
	– provide the increase in life expectancy in the Russian Federation up to 74 years by 2018;
	– co-financing, at the expense of federal budget allocations, of expenditure obligations of the subjects of the Russian Federation, emerging at the awarding of payment, in those subjects of the Russian Federation, in which the demographic situation is unfavourable and the value of total fertility rate is below the national average.
Source: Decrees of the President of the Russian Federation V.V. Putin dated May 7, 2012. Available at: http://www.rsr-online.ru/doc/2012_06_25/6.pdf	

Table 5. Life expectancy in Russia, years

Federal District, country	Actually by the years			Growth			2020, expert forecast	
	2000	2005	2010	2000–2005	2005–2010	2000–2010	inertial*	targeted**
Central	66.1	66.5	71.2	0.4	4.7	5.1	76.3	76.7
Northwestern	64.5	64.2	70.1	-0.3	5.9	5.6	75.7	75.5
Southern	66.6	67.1	70.7	0.5	3.6	4.1	74.8	76.2
North Caucasian	68.8	69.9	72.6	1.1	2.7	3.8	76.4	78.2
Volga	65.5	65.3	69.2	-0.2	3.9	3.7	72.9	74.6
Ural	64.6	65.2	69.4	0.6	4.2	4.8	74.2	74.8
Siberian	63.7	62.7	67.7	-1	5	4	71.7	72.9
Far Eastern	63.2	62.2	66.4	-1	4.2	3.2	69.6	71.5
Russia as a whole	**65.3**	**65.4**	**69.8**	**0.1**	**4.4**	**4.5**	**74.3**	**75.2**
For comparison								
USA	77	77.9	79	0.9	1.1	2	–	–
China	71	72.5	76	1.5	3.5	5	–	–

* Inertial forecast is based on the invariability of annual growth rate for each region and the country in general (the value in 2020 in each region and in Russia was obtained by multiplying the indicator of 2010 by the number of years (10) and average annual growth).
** Targeted forecast is based on the prolongation of the value of the indicator set out in the RF President's Decree No.606 up to the year 2020 (the value of the indicator for 2020 in the RF was calculated by multiplying the indicator of 2010 by the number of years (10) and average annual growth obtained as a result of forecast calculation. An average annual increase for the country as a whole was used provisionally for the regions).
Source: Russia's regions. Socio-economic indicators. 2012: stat. digest. Rosstat. Moscow, 2012.; UN data (world health statistics, 2012, 2013). Available at: http://www.who.int/gho/publications/world_health_statistics/en/index.html; ISEDT RAS calculations.

At the same time it should be noted that the efforts aimed at health modernisation and demographic development of the country in the period from 2005 to 2010 facilitated a noticeable increase in population's life expectancy by reducing infant mortality (from 11% in 2005 to 7.4% in 2010) and mortality of working-age population (from 8.3% in 2005 to 6.3% in 2010). And if the initiated measures are carried on and life expectancy increase rates remain at the 2005–2010 level, then by 2020 the country can achieve the value of the indicator amounting to 78 years (which exceeds the benchmarks outlined in the Decree of the RF President)

However, these growth rates will not be enough to reach the modernisation standards of the leading countries[7]. The life expectancy of 80 years (national average) can possibly be achieved by 2025–2030. Meanwhile, the experience of many countries shows that this period can be substantially reduced.

China, where life expectancy was 76 years in 2010, will have crossed the threshold of 80 years by 2017–2020. In Japan, Sweden, Canada (where life expectancy was 82–83 years in 2011) life expectancy at birth will exceed 85–86 years by 2020.

The absolute and relative amounts of domestic expenditures on research and development are crucial for accelerating the pace of modernisation.

As domestic experts and analysts note, "the level of R&D expenditures in our country is extremely low; the share of these expenditures in Russia's GDP is 3–4 times less than in developed countries"[8].

In Russia as a whole, the share of expenditures on R&D is currently 1.4% of GDP *(tab. 6)*. The RF President V.V. Putin set a task to increase this figure to 2.1% by 2020. However, the countries leading in R&D expenditures

[7] According to the standard methodology, a 100% level of secondary modernisation by the indicator of life expectancy is considered to be achieved, if life expectancy at birth is 80 years.

[8] From the report of the Director of the Institute for US and Canadian Studies S.M. Rogov. Shock therapy and the "reform" of RAS: the realities of the Russian science. Available at: http://www.ras.ru/news/shownews.aspx?id=4c3d3366-ea114a33a18c799aa0a52070

Table 6. Internal R&D expenditures, % of GDP (GRP)

Federal District, country	Actually by the years			Growth			2020, expert forecast	
	2000	2005	2010	2000–2005	2005–2010	2000–2010	inertial*	targeted**
Central	2.08	1.91	2.16	-0.17	0.25	0.08	2.2	2.8
Northwestern	1.86	1.72	1.81	-0.14	0.09	-0.05	1.8	2.3
Southern	0.73	0.72	0.57	-0.01	-0.15	-0.16	0.4	0.7
North Caucasian	0.30	0.27	0.30	-0.03	0.03	0	0.3	0.5
Volga	1.30	1.37	1.32	0.07	-0.05	0.02	1.3	1.7
Ural	0.58	0.44	0.58	-0.14	0.14	0	0.6	0.7
Siberian	0.70	0.77	0.83	0.07	0.06	0.13	1.0	1.1
Far Eastern	0.53	0.60	0.46	0.07	-0.14	-0.07	0.4	0.6
Russia as a whole	**1.33**	**1.28**	**1.40**	**-0.05**	**0.12**	**0.07**	**1.5**	**2.1**
For comparison								
USA	2.64	2.68	2.79	0.04	0.11	0.15	–	–
China	0.76	1.34	1.7	0.58	0.36	0.94	–	–

* Inertial forecast is based on the invariability of annual growth rate for each region and the country in general (the value in 2020 in each region and in Russia was obtained by multiplying the indicator of 2010 by the number of years (10) and average annual growth).
** Targeted forecast is based on the prolongation of the value of the indicator set out in the RF President's Decree No.606 up to the year 2020 (the value of the indicator for 2020 in the RF was calculated by multiplying the indicator of 2010 by the number of years (10) and average annual growth obtained as a result of forecast calculation. An average annual increase for the country as a whole was used provisionally for the regions).
Source: Russia's regions. Socio-economic indicators. 2012: stat. digest. Rosstat. Moscow, 2012.; OECD, Main Science and Technology Indicators database, February 2011. RK Statistics Agency, 2011; ISEDT RAS calculations.

are planning to increase funding of research up to 3% of GDP (USA, Germany, France) and even up to 4% of GDP (Finland, Sweden, South Korea, Japan)[9].

It should be emphasized that most of the advanced industrialized countries are now changing the attitude to the industry and industrial policy, actually setting ambitious targets for re-industrialisation.

The 2012–2013 post-crisis situation clearly showed that the reserves of Russia's development model based on the export of raw materials have been exhausted. V.I. Matviyenko, the Chairperson of the Council of Federation of the Federal Assembly of the Russian Federation, points out in her recent article: *"Russia requires a large-scale restructuring of its economy on the basis of a new industrialisation, capable of providing the innovation revival of the industry and the development of human potential"*[10].

The Head of the Upper Chamber of the RF Parliament claims that Russia is facing a daunting task: to take a worthy place in the development of advanced industrial mode under a simultaneous innovation-based recovery of the industries of the previous mode. This can be achieved only with the formation of the balanced long-term state industrial policy. The successful implementation of state programmes, according to V. Matviyenko, will require substantial governmental support: "Despite the fact that some of the RF subjects have already adopted laws on industrial policy, the majority of our colleagues in the regions are already suggesting the adoption at the federal level of the basic law defining the goals, objectives and tools of providing state support to industrial development".

V.I. Matviyenko continues: "I would like to note that the Russian Government does not unanimously support the need for such a law and, moreover, they believe that it is unnecessary. In my opinion, the elaboration and adoption of such a law are long overdue, as it will help

[9] Ibidem.
[10] Matviyenko V.O. On the new industrialisation of Russia. Ekonomist. 2013. No.7. P. 3.

to define the main vector of industrial policy in Russia, as well as the powers and responsibilities of the authorities of all levels in this sphere"[11].

We can add that for implementing the large-scale and indeed ambitious tasks set out by President V.V. Putin Russia and all of its regions will require significant efforts of federal and regional authorities to bridge the gap in many aspects of economic and social modernisation. These issues require profound scientific and public discussion in order to elaborate a system of solutions for changing the existing modernisation trends and reducing the gap in the level of modernisation between Russia and the leading countries.

It is important to introduce the key indicators of modernisation into the assessment of the performance of the regional and federal authorities and to consider them as the criteria of national security. An efficient public control of the activity is required in this sphere. Socio-economic reforms are a success when the most significant forces like power, business and civil society are consciously and responsibly involved in them.

We would like to dwell upon the issue concerning the efficiency of state management, which plays a key role in the implementation of strategic plans for enhancing national security.

We have already noted that a fragile model of state management, the implementation of which was dictated by the circumstances (2008–2011), the so-called 'power tandem', is fading into the past very slowly. Unfortunately, the backbone of the team, which was formed during D.A. Medvedev's Presidency, smoothly flowed into the government and is trying to pursue the same course of extreme liberalism, large-scale withdrawal of the state from the spheres of economic and social policy[12]. This course under the current state of affairs, in essence, leads to the undermining of V.V. Putin's election programme, set out in the Presidential Decrees dated May 7, 2012.

A remarkable example supporting this conclusion can be found in the Resolution of the RF Government dated January 31, 2013 "Main guidelines of activities of the Government of the Russian Federation up to 2018". Out of the 30 figure indicators, contained in Presidential Decrees, the Resolution lacks 19 indicators; the intermediate or final values of five indicators are absent; and the planned values of two indicators have been changed.

During the session in Elista held April 16, 2013 the President responded in the following way: *"How do we work? The quality of the work is pitiful, everything is done superficially. If we continue this way, we won't do a thing! But if we work persistently and competently, we will make it. Let's raise the quality of our work. It ought to be done! If we don't do it, it will have to be admitted that it is either me working inefficiently or it is you failing to do your job properly. Take notice that, judging by the current situation, I, personally, lean toward the latter. I think it's clear. No one should have any illusions"*[13]. Such reaction reveals all the acuteness of the situation at the highest levels of Russia's power.

One more related example concerns the submission of the draft law "On the Russian Academy of Sciences and the reorganisation of the state academies of sciences" by the RF Government to the State Duma and its accelerated passage[14].

[11] Ibidem. P. 4.

[12] Ilyin V.A. Anxious expectations remain. Economic and social changes: facts, trends, forecast. 2013. No.2(26). P. 917.

[13] NEWSru.com. News of Russia. Wednesday, April 17, 2013.

[14] Dynamics of the bill's movement is as follows: June 27, 2013 at a government session a draft law "On the Russian Academy of Sciences and the reorganisation of the state academies of sciences" was promulgated; July 2, the Lower House of the Parliament proceeded to the consideration of the draft law on reforming the Russian Academy of Sciences; July 3, the deputies of the State Duma approved the government bill in the first reading. 234 deputies voted for the adoption of the document, which only slightly exceeded the required minimum of 226 votes; July 5, the State Duma voted for the draft law in the second reading. 344 deputies voted for the document (nobody voted against and one MP abstained).

The short-lived decisions were met with the waves of public outrage, people expressed their discontent not only with the form and methods of passing the draft law through the State Duma, but mainly with its content aimed at the virtual elimination of the Russian Academy of Sciences and the transfer of all the powers, set out in the charters of the academies, to the officials of the Ministry of Education and Science.

The liquidation of the Russian academies of sciences, in fact, opens the way for the privatisation of academies' considerable assets. It can be assumed that oligarchs and officials are already carving them up sneakily: who will get what and for how much? **This leads to the ultimate stagnation of the Russian Federation among the countries with the catch-up type of development based on the sales of raw materials (this is exactly what the efforts of our geopolitical rivals have been focused on over the last 25 years).**

V.V. Putin had to held a series of consultations[15] personally, after which he suspended the process of passing the draft law in the third reading, giving time to the academic community for preparing amendments[16].

It can not be allowed that Head of State had no tool for ensuring the scientific and technological competitiveness of the country. RAS Academician V.B. Betelin states: "What was the Academy of Sciences in the Soviet Union? It was a tool for promoting the country's technological competitiveness, it was a tool of the state. Targets were set before us, and the government provided us with the conditions for their implementation"[17].

In an open letter to the RF President Vladimir V. Putin, Academician Zh.I. Alferov pointed out: *"The struggle for the preservation of the RAS is not only a struggle for the future of Russian science, it is a struggle for the future of the country. And we really wanted to fight for this together with you"*[18].

Will the President have enough strength to fulfil his election programme? Is Vladimir V. Putin ready to run for 2018 Presidency to head the Russian Federation again?

...Anxious expectations remain.

[15] July 3, the Head of State held meetings with the President of the Russian Academy of Medical Sciences Ivan Dedov, Rector of Moscow State University Viktor Sadovnichy, RAS Academician Yevgeny Primakov and former Head of RAS Yury Osipov. July 4, there was a meeting with the President of the Russian Academy of Agricultural Sciences Gennady Romanenko.

[16] By August 7, 2013 the comments from the academic community have been prepared, published and placed in the Internet, sent to the President of the Russian Federation, the State Duma of the Russian Federation, the relevant committee of the State Duma. The general meeting of RAS is appointed at September 9, 2013.

[17] The long-term competitiveness. Interview with the Director of the Scientific Research Institute for System Studies of RAS, Director of the Institute of Microtechnologies, National Research Centre "Kurchatov Institute" Vladimir Betelin. Expert. 2013. No. 32. 12-18 August.