

ON THE HISTORICAL
CONTEXT
OF INNOVATIVE
DEVELOPMENT IN RUSSIA

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The present analysis is based on the institutional model of research on social processes. Thus, the idea of possible modernisation of Russian society rests on the consideration of the current situation in the field of economics, management, and science. On the basis of a secondary analysis of statistical data and the works of Russian and international sociologists, this article describes the fundamental conceptual framework of the modernisation of Russian society. In particular, it focuses on the criticism of the modernisation project initiated by the forces that present themselves as conservative. The author also mentions significant problems arising during the modernisation of Russian society; these problems are rooted in both objective conditions of the on-going process and subjective factors. The article addresses the emergence and development of the modernisation idea in Russia. The relevance of this work lies in the identification of the features of the transition of Russian society into a new phase, which reflects the trends of global innovative processes.

Key words: innovation, modernization, social safety, history of modernization concept

An innovative approach to the further development of Russian society persistently and consistently propagandised by the country's top political leaders over the last decade reflects, in its essence, the fundamental needs of a transitory society rather than a partial desire or someone's propensity to use popular categories. The point is that, to a great degree, the negative social, economic, and other process that took place in the society in the late 1980s-1990s, as the statistical data, expert evaluations, and surveys show, stretch to the 2000s and 2010s. These processes leave little room for manoeuvring the administration system so that the country reclaims the position of an industrial and scientific power. Apparently, all of that complicates the problem of modernisation.

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However, before focusing on the history of the idea of modernising Russian society, before designing possible mechanisms and social technologies of bringing Russia onto the path of sustainable development according to the post-industrial scenario, and identifying possible threats and risks, it seems reasonable to pay attention to the actual economic situation, especially that in the field of investment.

As a result of a steep decline in the manageability of all spheres of activity at the end of the 1980s and in the course of the so called reforms of the 1990s, Russian economy went through an unprecedented downturn for peacetime. On a conservative estimate, by 1998 (the lowest level since 1990), GDP decreased by more than 40 % and industrial production by more than 50 %. The worst situation was observed in investment dynamics. The amount of investment in fixed capital had reduced almost fivefold by 1998 (21 % of the 1989 level). Even in pre-crisis 2008, after apparently successful years, its amount reached only 60 % of the hardly prosperous 1989. Despite the fact that, in 2007, real GDP rose for the first time above the level of 1990 in terms of volume, such restoration did not take place in industrial production. Moreover, a number of industrial nomenclature positions continued to decline in the prosperous 2000s [1, c. 34]. It is a well-known fact that in the mid-1980s, the USSR national income accounted for 66 % of that of the USA, whereas industrial manufacturing accounted for 80 % [2, c. 13]. If, back then, labour efficiency in manufacturing accounted for 55 % of that in the USA [2, c. 13], in the late 1990s, this indicators amounted to mere 20—24 % [3]. In the late 1990s, Russia was assuming the features of a poorly developed country reproducing early industrial or even archaic forms of social and economic life: export of unprocessed raw materials, artisanal handicraft, cabbings, and small retail trade. If the share of the USSR in world GDP amounted to 4 % and ranked 6th in the world, then in 1995 Russia accounted for 2 % and was ranked 11th. By the end of the 1990s, in term of this indicator, Russia lost more than 10 positions [4, c. 26].

Post-reform Russia almost ceased exporting industrial products and exported only raw materials and products of their primary processing. In 1985, 20 % of the manufactured motor cars were exported, as well as 28.2 % of watches and clocks, 38.4 % of cameras, and only 5 % of coal. 5.55 % of round wood, 10.7 % of gas, and 19.7 % of oil. In 2009, finished goods accounted for only 4.7 % of export into non-CIS countries, whereas round wood, gas, and coal for 23.8, 28.8, and 66.4 % respectively [1, c. 34]. The World Bank data show that in 2001 oil and gas accounted for less than a half of Russian export. In 2010, they accounted for two thirds and other fossil fuels for 15 %. The share of hi-tech products — predominantly weaponry and other military equipment — was only 9 % [5].

Now let us examine the technological development of production and the level of research, first of all, applied research. According to the Ifo Institute for Economic Research (Germany), whose data were used, for instance, by academician N. Ya. Petrakov, in Russia in the late 1990s, 40 % of equipment was completely (!) worn out [6]. The share of equipment operating for up to 5 years decreased, according to the official statistics, from 29 % in 1990 to 4.5 % in 1998 [3]. There is enough evidence to say that the extraordinary

openness of the domestic Russian market to the products of IBM and other similar companies completely destroyed the national electronics industry.

A similar situation has been faced by other industries and branches that determine the level of technological progress — those engaged in innovative activity and IT development. Investment in basic and applied science and R&D is at the level which is insufficient to ensure even simple reproduction of scientific schools, individual lines of research, staff training, implementation of target programmes and large research projects, etc. i. e. is not sufficient to promote continuity of scientific tradition, evolutionary change of generations of scholars and constructors.

As many specialists believe, the experience of developed countries shows that the share of GDP allocated for research cannot be lower than 2 %. If it decreases to 1.5 %, it is indicative of a slow decline of fundamental research, i. e. the basics of science in general and the system of research staff reproduction in particular. In Israel, this indicator reached 2.5 % in the mid-1990s, in Japan 3.05 %, in the USA 2.74 %, in Russia 0.32 % [7, c.178]. It is not a coincidence that, on the market of civil hi-tech goods, the share of Russian products is less than 1 %, whereas that of the USA is 36 %, and that of Japan 30 % [3].

However, today the country's leadership aims to support research and science in general. In accordance with the presidential decree "On the measures of implementing public policy in the field of education and science", the government has to "ensure the achievement of the following indicators in the field of science: an increase in the total financing of public research foundations to 25 bln roubles until 2018; an increase in national expenditure on R&D — to 1.77 % of GDP until 2015, 11.4 % of which are to be spent on higher education institutions" [8]. In comparison to the 1990s, there is an evident attempt to increase the share of GDP allocated to science. At the same time, such growth will not help fundamental and applied research to rise above the level of survival and secure reproduction of highly qualified research staff.

Now let us address the problem of human capital, whose development ensures the success of the modernisation project. Russia ranks 66th in the Human Development Index published by the UN. In a year, the country, which ranked 65th in 2010, lost one position; however, the absolute value increased from 0.719 to 0.755. In 2011, Russia ranked between Belarus and Grenada. Such countries as Libya and Cuba occupied higher positions. As well as two years before, Norway ranked first. The lowest position was occupied by the Democratic Republic of Congo. All in all, the index included 187 countries in comparison to 169 a year earlier. HDI also takes into account such indicators as life expectancy, education index, and GDP per capita. Since 1990, it is published by the UN together with the Human Development Report. The 2011 report places emphasis on the fact that an increase in the index is often accompanied by environmental problems. It also shows that the extension of rights and opportunities contributes to a higher standard of living. Moreover, the report shows the interconnection between sustainable development and equal opportunities [9].

The early 2000s gave rise not only to the expectations of a considerable economic growth, but also a seemingly tangible opportunity to overcome the negative effects of the 1998 financial crisis. So, in 200—2003, the average GDP growth amounted to 6 %, whereas the rate of saving increased from 16 to almost 20 %. According to the Federal State Statistics Service, in 2003, the rate of actual GDP growth amounted to 7.3 %, which took place against the background of stagnation of the world leading economies — the consequences of the crisis are still visible in Japan and the EU countries. The main driving forces of the recent Russian upturn are evident: a massive devaluation of the rouble as a result of the financial crisis; the availability of unloaded capacities as a result of the preceding long-term crisis; high oil prices [10]. It is not a coincidence that during that period, President V. V. Putin formulated an ambitious task in his annual address to the Federal Assembly: “Over the next decade, we must at least double our country’s gross domestic product” [11]. However, President D. A. Medvedev, in his address of 2009, emphasised that “... in the twenty-first century, our country once again needs to undergo comprehensive modernisation. This will be our first ever experience of modernisation based on democratic values and institutions. Instead of a primitive raw materials economy, we will create a new smart economy producing unique knowledge, new goods and technology for people” [12].

The statement about the need for modernisation made in the address rests on a more comprehensive review of the problem given in D. A. Medvedev’s article “Go, Russia!” It describes the main lines of modernisation, in particular, those in the economic sphere. Firstly, Russia must become one of the leading countries in production efficiency, energy transportation and use, which requires the development and introduction of new types of fuel into domestic and foreign markets. Secondly, there is a need to maintain and improve nuclear technologies. Thirdly, Russian specialists have to further develop information technologies, gain influence on global information network development by using supercomputers and other infrastructure elements. Fourthly, the country must develop its own ground- and space-based infrastructure for data transfer, so that Russian satellites “see” the whole world helping Russian citizens, as well as people all over the world communicate, travel, do research and engage in agricultural and industrial production. Fifthly, Russia has to become a leader in the manufacturing of certain types of medical equipment, modern diagnostics devices, and design medications for treating viral, cardiovascular, oncological, and neurological diseases [13]. One cannot but notice that, on the one hand, the objective of GDP doubling corresponds to the modernisation objective, but, on the other hand, seems to be rather autonomous, since it cannot be reduced to quantitative growth parameters and is associated with the qualitative component.

If one addresses the historical aspect, it becomes evident that Russian society underwent a long-term and rather successful phase of the so called Soviet modernisation in the 20th century. The classical interpretation defined modernisation as a process taking place simultaneously with industrialisation, where the decisive factor is the replacement of traditional values that hinder social changes and economic growth with the values that motivate

business entities for innovative activity, i. e. the development and dissemination of new technologies and generation of new organisational and economic relations. Modernisation was understood as the process of modernity supplant the tradition or as the ascending development from the tradition society to the modern one. At the same time, the tradition was believed to hamper social progress, thus, it was to be overcome and eliminated. The development of all countries and nations was considered from the universalistic perspective — it had to have the same direction, stages, and patterns. Certain national features of modernisation were recognised by considered to be of minor importance [14, c. 233—247].

The Soviet modernisation did indeed change the country, having transformed it from a mainly agrarian into an industrial state, which was inevitably accompanied by changes in the social structure of society, the emergence of a large group of engineers and technical specialists, the elimination of illiteracy of the majority of population, and the levelling of existing disparities in the sociocultural development of many regions of the country. Over a short period, not only whole industrial branches were created from a scratch, but there also emerged an independent foundation for basic and applied research. In the late Soviet period (1985—1990), the ideas of acceleration and perestroika were, perhaps, an ill-formulated idea of a need for new modernisation. Evidently, today one can speak of a transition to post-industrial society, which can underlie neomodernisation.

But this idea — the idea of modernisation of modern Russian society — is strongly criticised by different parties and from different angles. Often such criticism is of conceptual, theoretical nature. So, A. G. Dugin, in his report “The critique of the modernisation concept. A conservative response on the basis of the fourth political theory”, emphasises that “there is development, but there is also decline. Those who rely solely on growth and development contradict the rules of sociological laws. Such modernisation, such growth, such development, such progress are impossible” [15]. Thus it concerns not only modernisation, but rather a more gradual evolutionary process based, in particular, on some traditional values and rules. One should keep in mind that such transformation is a rather long processes consisting of several phases. For example, Piotr Sztompka believes that the path of modernisation transformations consists of consecutive stages, for instance, “traditional-transitional-modern”, “traditional — achievement of preliminary conditions for changes —beginning of continued growth — maturing — achievement of the mass consumption level” [16, c. 172]. Hence the question about to what extent the society has reached the stage of maturing, including its mental elements, i. e. the readiness of mass consciousness to not only accept, but also support such transformations.

In this context, it becomes obvious that, since the end of 1991, the reform process has encountered a standard set of system-development problems and crises, which must be resolved (or overcome) in a certain admissible way, if our state system claims the status of a “modern” one in accordance with the criteria of “differentiation”, “equality”, “viability”, “democracy”, etc.

According to J. Coleman’s classification, the path of modernisation is fraught with the problems of “national identity”; “political legitimisation” of

the modernising elite; “penetration”, i. e. the establishment of institution in line with the “modern” demands of “masses” “integration”, i. e. imparting the qualities ensuring the achievement of socially significant objectives and “distribution”, i. e. “the effective use of government power to bring about economic growth, mobilize resources, and distribute goods, services, and values in response to mass demands and expectations”, to the political process [17, p. 400].

It seems that today the most threatening phenomenon is the crisis of participation, which — as well as all others — exhibit specific features in Russia. Not only the unreadiness to create institutions of inclusion of masses into social, political, and other processes, but rather the internal unreadiness for such inclusion acts as a blocking element of modernisation.

As to the prospects of a successful modernisation in Russia, M. Gorshkov, the director of the Institute of Sociology of the Russian Academy of Sciences, detected a negative trend on the basis of the data of numerous surveys. The trend consists in that “even within the youngest groups (under 26 years old); the dominating sentiment is that an independent choice of one’s fate is impossible. And it is the youth of the modern world, of today’s Russia! Only, within senior age groups, the role of one’s independent choice becomes dominating: a person comes to a conclusion that their voice has to be heard and is ready to be the architect of one’s fate. In my opinion, the pyramid should be overturned — from the perspective of the civilized world. It should not be like that in modern Russia either, otherwise, no reforms will help us implement modernisation in our country” [18].

The above suggests that the modernisation of modern Russia can mean, first of all, a reversal of archaisation of relations and interactions, which resurfaced in the 1990s. In other words, it means that a certain civilizational throwback characteristic of Russia in the 1990s, should be not only overcome, but also levelled at an advanced rate. Secondly, this process can be carried out on the basis of wide introduction of such civil society institutions that would not be a simulation of the democratic process but would indeed ensure the inclusion of the most active social layers into the modernisation of Russian society. Thirdly, the modernisation of modern Russia contains the possibility of minimising risks and threats to further progress of the society towards the stage of information society.

References

1. Golubovich, A. D., Idrisov, A. B., Inozemtsev, V. L., Titov, B. Yu., Spiegel, M. M. 2009, Vyhod iz krizisa: otkaz ot syr'evoj modeli. Novaja industrializacija [Out of the crisis: the rejection of raw model. new Industrialization], *Ezhegodnyj jekonomicheskij doklad «Delovoj Rossii»* [The annual economic report "Business Russia"], Moscow.
2. *Narodnoe hozjajstvo SSSR za 70 let. Jubilejnyj statisticheskij ezhegodnik* [The national economy of the USSR for 70 years. Jubilee Statistical Yearbook], 1987, Moscow, Finansy i statistika.
3. Putin, V. V. 2000, Rossija na rubezhe tysjacheletij [Russia at the turn Millennium], *Kaliningradskaja Pravda*, 12 January.
4. Salmin, A. M. 1999, Rossija, Evropa i novyj mirovoj porjadok [Russia, Europe and the New World Order], *Polis*, no. 2, p. 10—31.

5. Bashkatova, A. 2011, Ottok kapitala i utechka mozgova — vmesto razvitiya [Capital flight and brain drain — instead of development], *Nezavisimaja gazeta* [Independent newspaper], 9 June.
6. Petrakov, 1999, N. Ya. Vse vzgljady v nash karman [All views in our pocket], *Delovoj vtornik* [Business Tuesday], 17 August.
7. Osipov, G. V., Levashov, V. K., Lokosov, V. V., Hlopiev, A. T. 1996, Perestrojka i radikal'nye reformy: desjat' let spustja [Restructuring and radical reform: ten years later], *Social'no-politicheskij zhurnal* [Socio-political journal], no. 1, p. 170—184.
8. Executive Order on implementing state policy in science and education, 2012, *President of Russia*, 7 May, available at: <http://eng.kremlin.ru/acts/3768> (accessed 7 September 2012).
9. Rossiya poterjala poziciju v rejtinge chelovecheskogo razvitiya [Russia lost its position in the ranking of human development], 2011, *Rambler-Novosti* [Rambler-News], 5 November, available at: <http://news.rambler.ru/11674697> (accessed 14 June 2012).
10. Putin, V. V. 2003, Annual Address to the Federal Assembly of the Russian Federation, *President of Russia*, 16 May, available at: http://archive.kremlin.ru/eng/speeches/2003/05/16/0000_type70029type82912_44692.shtml (accessed 15 July 2012).
11. Grigoriev, L. M. 2004, V poiskah puti [Finding the way], *Strategija Rossii* [Russia's Strategy], no. 2, p. 13—24, available at: http://sr.fondedin.ru/new/fullnews_arch_to.php?subaction=showfull&id=1076446310&archive=1076446855&start_from=&ucat=14& (accessed 17 July 2012).
12. Medvedev, D. A. 2009, Presidential Address to the Federal Assembly of the Russian Federation, *President of Russia*, 12 November, available at: http://archive.kremlin.ru/eng/speeches/2009/11/12/1321_type70029type82912_222702.shtml (accessed 20 August 2012).
13. Medvedev, D. A. 2009, Rossiya, vpered! [Russia let's go!], *Gazeta. Ru*, 10 September, available at: http://www.gazeta.ru/comments/2009/09/10_a_3258568.shtml (accessed 28 August 2012).
14. Ermahanova, S. A. 2005, Teorija modernizacii: istorija i sovremennost' [Modernization theory: Past and Present]. In: *Aktual'nye problemy social'no-ekonomicheskogo razvitiya: vzgljad molodyh uchenyh* [Actual problems of social and economic development: a view of young scientists], Novosibirsk, p. 233—247.
15. Dugin, A. G. 2010, Kritika koncepta modernizacii. Konservativnyj otvet na osnovanii chetvertoj politicheskoj teorii [Criticism of the concept of modernization. The conservative answer on the basis of the Fourth Political Theory], *Centr Konservativnyh Issledovanij* [Center for Conservative Studies], 21 March, available at: <http://konservativizm.org/konservativizm/theory/210310203701.xhtml> (accessed 26 August 2012).
16. Shtompka, P. 1996, *Sociologija social'nyh izmenenij* [Sociology of social change], Moscow.
17. Coleman, J. J. 1968, Modernization. Political aspects, *International Encyclopedia of the Social Sciences*, Vol. 10, N. Y.
18. Rossiya: cennosti sovremennogo obshestva [Russia: the values of modern society], 2008, *POLITKOM. RU*, 12 November, available at: <http://www.politcom.ru/7234.html> (accessed 27 August 2012).

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