

**RUSSIAN INNOVATION INSTITUTIONS DEVELOPMENT THROUGH  
THE PRISM OF THE LVOV'S REFORM STRATEGY\***

**INOVATIVNE INSTITUCIJE RUSIJE KROZ PRIZMU LVOVOVE  
REFORMSKE STRATEGIJE**

*Bagrat Haykovich Yerznkyan*<sup>1</sup>

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**Abstract**

*Regarded through the prism of Lvov's reform strategy, the main problems of development of innovation institutions in Russia with an accent on their main directions and mechanisms are studied.*

**Keywords:** *innovation institutions, development, reform strategy, Lvov, Russia.*

**Sažetak**

*U radu se proučavaju, posmatrano kroz prizmu reformske strategije Lvova, glavni problemi razvoja inovativnih institucija u Rusiji s akcentom na njihove glavne pravce i mehanizme.*

**Ključne riječi:** *inovacione institucije, razvoj, reformaska atrategija, Lvov, Rusia.*

**1. INTRODUCTION**

Institutions, including innovation-oriented, try to harmonize economic, technological, social, political and other approaches to the solving of real-world problems. A key for harmonization is the very notion of institutions. Here are two definitions of institutions given by Douglass North:

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<sup>1</sup> Dr., Professor, Chief of laboratory at Central Economics and Mathematics Institute, RAS, Moscow, Russia

- Institutions are sets of rules, compliance procedures, and moral and ethical behavioral norms designed to constrain the behavior of individuals in the interests of maximizing the wealth or utility of principals (North, 1981, p. 202).
- Institutions are the rules of the game in society or, more formally, are the humanly devised constraints that shape human interaction. In consequence they structure incentives in human exchange, whether political, social, or economic (North, 1990, p. 3).

This treatment of institutions is closer to the ‘new’ rather than the ‘old’ institutional economics. North regards institutions as constraining agents and channeling their incentives. As for him, institutions act primarily as constraints upon the behavior of given individuals and channel unchanging incentives; hence purposes or preferences are themselves changed by institutions. This statement is crucial especially for understanding the essence of innovation institutions, their formation and development as well as their impact on the agents’ behavior which are involved in the innovation system activity.

The Russian Federation with its socio-economic system, especially with regard to Euro-Asian integration processes, needs to transform the way and mechanisms of development domestic and integrative innovation institutions. As shows international practice, the most important role in economic development play rather special institutions created by or through activity of government than private innovation activity of individuals *per se*. Such institutions due to their ability to coordinate and control the fulfilling of strategic innovation-oriented measures have a potential for supporting the private sector and of course the public one in building the modern innovative national economy.

Some problems connected to the Russian science cities development are regarded in (Yerznkyan, Akinfeeva, Abramov). They include:

- financial problems, the essence of which is the lack of investments and inefficient programs of financing;
- social problems with the low level of development in social and engineering infrastructure;
- human resources, including the lack of highly qualified specialists, high level of labor migration;
- socio-political problems with a high level of corruption, the lack of effective dialogue between the authorities and the population of the cities;
- legislative problems based on the incompleteness of the law determining the organization and functioning of the cities (Yerznkyan, Akinfeeva, Abramov, 2015).

As whole, innovation institutions include such institutions which are able to support the innovative development of a socio-economic system. Development institutions are although important but just the part of innovation institutions. Here are some examples of development institutions: the Development Bank of Singapore, which helped build Singapore’s economy, the Bank Rakyat Indonesia,

whose small-business lending programs have set an example for the whole world, the Development Bank of Kazakhstan, which aimed to support the private sector and the government through providing long- and medium-term low-interest loans (export credits in particular) and guaranteeing their obligations to other creditors.

A crucial role in providing credit in the form of higher risk loans, equity positions and risk guarantee instruments to private sector investments in developing countries play *development financial institutions*, especially in the sphere of microfinance. They as specific types of economic institutions are focused on the needs of small-scale enterprises and individuals (individual entrepreneurs or simply physical entities) in financial resources, without which their effective operation is either impossible or extremely difficult (Yerznkyan, Vardanyan, 2006). However, microfinance is nowadays a well-established specific system of financial activity not only in developing but also in developed countries. As suggested in (Vardanyan, Yerznkyan, 2014), microfinance institutions using innovative methods in order to overcome the obstacles faced by people with low incomes, such as lack of security and customer stories, may be useful in economies in transition, including Russia, as well. One of such institutions is the Russian Microfinance Center, the leading, since its establishment in 2002, think-tank, service provider, and advocate in our country.

However, the aim of this paper is to concentrate on the innovation institutions in general – in the sense that they are subsystems of the whole institutional system whose main goal is to support the building of an innovative national economy. This will require the improvement of current institutions and the development of new ones, i.e. innovation institutions as whole are rather a population of institutions than a fixed set of given and unchangeable institutions. To achieve this goal, the Russian Federation will need to improve and better align the management and structure of existing and emerging innovation institutions, and better connect R&D to demonstration and deployment. In what follows, we highlight the directions and the mechanisms of developing the innovation institutions, and we discuss them in the light of Dmitry Lvov strategy of reform.

## 2. A BRIEF VIEW OF THE LVOV'S REFORM STRATEGY

Beginning in the early 1990s, Russia entered the phase of neo-liberal reforms, “carrying the banner that read: democratization of power, liberalization of the economy and humanization of public relations. The people were ready to pay for it”. However, “the result of the adopted policy turned to be deplorable” for them (Lvov, 1995, p. 4). These reforms, their pluses and minuses, benefits (if any) and losses, the goals, mechanisms, reasons, factors, *etc.*, all of them may be viewed from the different points of view. It should be mentioned that from the very beginning of realization of the neo-liberal reforms in Russia for many of prominent scholars became clear that realization of proposed for Russia transition experiment “has fallen far short of what the advocates of the market economy had promised, or

hoped for. For the majority of those living in the former Soviet Union, economic life under capitalism has been even worse than the old Communist leaders had said it would be" (Stiglitz, 2002, p. 133).

While this paper is primarily about the proposals of Lvov to find the ways leading to creation of such a stationary future it is appropriate to briefly present the chronology and essence of the previous proposed plans on reforming the economic system of the USSR and then Russia (see Table 1).

Table 1. Economic Plans Proposed to and Abandoned by Gorbachev

	<i>Plan</i>	<i>Economist</i>	<i>Date</i>
1	Intensification & Acceleration	Abel Aganbegyan	March 1985
2	Overall Economic Plan	Leonid Abalkin & Institute of Economics	Late 1988
3	Overhaul Economy & Move to Market	Abalkin & Commission on Economic Reform	October 1989
4	Plan & Market	Nikolai Ryzhkov	December 1989
5	Support for Market	Nikolai Petrakov	May 1990
6	Five-Year Plan	Gorbachev	May 1990
7	400-Day Plan	Gregory Yavlinsky Mikhail Zadornov Aleksei Mikhaylov	February 1990
8	500-Day Plan	Stanislav Shatalin	August 1990
9	Plan & Market	Abalkin & Ryzhkov	Fall 1990
10	Integrate Shatalin & Abalkin & Ryzhkov	Aganbegyan	November 1990
11	Referendum on Property & Market Reform	Gorbachev	September 1990
12	Compromise	Aganbegyan	October 1990

*Source:* Goldman, 1994, p. 76.

It should be mentioned, that in some of these plans took part researchers from Central Economics and Mathematics Institute, Russian Academy of Sciences, including Dmitry S. Lvov himself. And although to find a way out from the post-reform disastrous situation, characterized by reformers as "the adaptation to the new structures of social relations", however, called by Lvov as "the syndrome of adaptation to catastrophe", was incredibly difficult, Lvov and his colleagues accounted they had "the right to think a fundamental restructuring of all of Russian society" was underway, in which the abovementioned "Gorbachev period and the following troubled times" were "only episodes in a renewal of the Eurasian and, possibly, world order" (Lvov, Moiseev, Grebennikov, 1996, p. 43). There were, according to Lvov, three determining factors which provided conclusion for the effective development and joining the ranks of the leading countries of the world:

- country's huge reserves of fuel, minerals, fertile soil and other natural resources; exceeding of Russia's per capita resource potential over that of the U.S. 2 to 2.5 times, Germany – 6 times and Japan – 18–20 times;
- a unique potential of highly qualified specialists and scientists enable to solve the most complicated problems pertaining to science, technology and production;
- powerful industrial base (Lvov, 1995, p. 2).

However, there was a powerful gap between the huge opportunities for Russia's prosperity and the harsh reality of life, claimed Lvov, and in order to diminish this gap by analyzing the post-reform situation and offering principles and ways of implementing the needed measures for breaking to the future there emerged a need for adequate strategy

A reform strategy developed by Dmitry S. Lvov (1995) as a reply to global challenges and being a part of Russian economy's modernization and development project catches at least six aspects:

– *social orientation* – the thesis of the archaic character of the state and its discrepancy with market economy conditions can hardly be accepted for the sole reason that this system was introduced in the countries with the highly developed market economy;

– *social-psychological factors* – the psychological aspect plays a fundamental role in the complex of measures aimed at overcoming the crisis. Not only the national economy and political institutions must be reconstructed, but also the people's subjective attitude towards the reality;

– *old-new structures correlation* – there are many aspects of co-operation of the new and old economic structures;

– *economy's openness* – the thesis of transition to the open economy as such does not evoke objection, however its general concepts do not necessarily mean that all exchanges are usually economically and politically effective and their terms are inessential;

– *privatization, its necessity and consequences* – although property is the central question of the economic reforms, in the situation of 1990's Russian reforms it could neither be solved nor correctly formulated;

– *inflation* – in 1990s Russia, the true vehicle of inflation was not be excessive money demand but the economic behavior of technologically backward and monopolized producers (Lvov, 1995, pp. 9–18).

As claimed Lvov, in order to begin doing something after reform and post-reform years collapse and thus to catch and stand on the way leading to the favorable future, it should be changed the following positions:

- attitude to the people – they should be supported by their native culture and spirit – the only way to avoid the transmutation of human beings into a physical "labor force" that waits to be exchanged for lifeless animal comforts;

- public revenue distribution system – it includes the returning financial resources to everyone for achieving sustainable economic growth and prosperity for every citizen;
- social conditions – the doubling or tripling of average wages especially in those industries, which should then become a starting norm for other sectors; activation of investment policy; shifting the main tax burden from incomes to people’s real estate; declaring the principle of free housing for people on the lowest incomes, free land plots, and other social guarantees;
- distortions – that occurred as a result of the voucher privatization scheme;
- state property system – by creating a system national property and national dividend;
- relation to rent – in a sense that its socialization is both a real opportunity to provide sustainable public revenue and a condition for allowing Russia to remain an independent geopolitical unit and competitive participant in the modern world (Lvov, 2001).

In short, insights of Lvov presented in the abovementioned reform strategy are the best illustration of his central message – to indicate a way to the future for Russia, moreover not only for Russia itself, but also to help other counties, including Eurasian ones, to find their own ways to the future. And the only way out of the tragedy caused by reformers’ efforts to copy Western practices and norms ignoring the commonality of interests of the population and giving priority to the cult of individual, was “to build an economy that reflects the common interests of the people and their natural endowments, the organizing mechanism for which would be a restructured public finance” (Harrison, 2001, p. 7), an economy – to be added – based on innovation institutions as an organic part of the emerging national innovation system and at the same time of the developing national institutional system.

To realize the mentioned changes, using mainly rent as the source of public revenue that can be serve as the materialization of the highest rights of society to territorial and natural resources, it is necessary to pay special attention to the scientific groundings of the process of changes and offer proposals as to the directions of scientific-technological development of Russia (Yerznkyan, 2015a). Some of the proposed directions are given in Table 2.

Table 2. Proposed Directions of Scientific-Technological Development

	<i>Problems / Spheres</i>	<i>Proposals / Directions</i>
1	Management	Economy’s dividing into two intersecting contours of management – state one and commercial (market) one. Strict rules for interacting between these two sectors.
2	Science	The fundamental science sphere must be embedded into the state sector. The most important function of management in the state sector is establishing of priorities of scientific-technological development.

3	Presidential Council	Forming the Presidential Council on science and technology consisting of the most prominent scientists and specialists of wide profile. The main task of the Council serving as a "brain headquarters" of the President of Russian Federation is estimating those long-range priorities where the country has got a stable niche in the world scientific-technological development.
4	Targeting-programming Committee	Creating the Targeting-programming Committee to which the development and accompanying of Presidential programs should be put on implementing priority directions of scientific-technological development.
5	Presidential Program	Synchronizing the procedure of preparation, approval and correcting of Presidential programs with the procedure of development and consideration of state budget.
6	Scientific foundations	Creating a network of scientific foundations in Russian Academy of Sciences receiving money for research part of Presidential Programs and distributing them for particular projects and grants.
7	Regime of functioning	Introducing a regime of tax-free functioning for all organizations of Russian Academy of Sciences, for education-research and experimental-production complexes as well as for enterprises of military-industrial complex participating in fulfillment of Presidential programs.

Source: adapted according to: Lvov, Grebennikov, Dementyev, 1996, pp. 56–58.

### 3. DIRECTIONS OF INNOVATION INSTITUTIONS DEVELOPMENT

In a paper (Glaziev, Naumov, 2012), a topic of knowledge-based economics in the light of a new direction in the economic science – *institutional constructivism* – is discussed. The development of this theory suggests study of the socio-economic and psychological factors underlying the institutional relation-making of economic operators, including the interaction of the underlying factors of production, storage and consumption of material and spiritual wealth.

Innovation institutions development could be regarded as an essential part of a new institutional system constructing. Their directions corresponding to the special spheres in the light of above-mentioned strategy of reforms could be as follows:

*First*, economy is dividing into two intersecting contours of management – state one and commercial (market) one. Strict rules for interacting between these two sectors.

*Second*, the fundamental science sphere must be embedded into the state sector. The most important function of management in the state sector is establishing of priorities of scientific-technological development.

*Third*, there is need of forming the Presidential Council on science and technology consisting of the most prominent scientists and specialists of wide profile. The main task of the Council serving as a "brain headquarters" of the President of Russian Federation is estimating those long-range priorities where the country has got a stable niche in the world scientific-technological development.

*Forth*, creating the Targeting-programming Committee to which the development and accompanying of Presidential programs should be put on implementing priority directions of scientific-technological development.

*Fifth*, synchronizing the procedure of preparation, approval and correcting of Presidential programs with the procedure of development and consideration of state budget.

*Sixth*, creating a network of scientific foundations in the Russian Academy of Sciences, receiving money for research part of Presidential Programs and distributing them for particular projects and grants.

*Seventh*, introducing a regime of tax-free functioning for all organizations of the Russian Academy of Sciences, for education-research and experimental-production complexes as well as for enterprises of the military-industrial complex which participate in fulfillment of Presidential programs (Lvov, Grebennikov, Dementyev, 1996, pp. 56-58).

These directions lead not only to the narrowly understood scientific-technological development of Russia, they indicate ways for or at least create pre-conditions for the effective development of Russian society and economy as a whole by making our own history through means of the forming new institutional reality and stationary innovative-oriented economic system. As Tony Lawson claims: "Fundamentally I believe that we can make our own history. We can grasp the structures of reality and we - the community at large - can intentionally transform them in part according to our own goals. The future is not predetermined. So as I say we can make our own history" (Cambridge, 2009, pp. 106-107).

#### **4. IMPLEMENTATION OF STRATEGY FOR INNOVATION DEVELOPMENT**

The current state of the Russian economy and its prospects are closely associated with the state of the world economy, which is in the process of transition to a new technological and global economic order, claims Sergey Glaziev (2015).

To implement a coordinated macroeconomic and long-term technical and economic development policy in order to concentrate resources in the creation of a new kernel technological structure and to achieve synergetic effects by forming clusters of new industries, it is necessary to create a system of strategic management with such aims as to identify the promising areas of economic growth, to guide the functioning of public development institutions and tools of economic regulation. A coordinated innovation development policy must include:

- forecasting of science and technology;
- creating and realizing the strategic planning;
- selecting the desirable ways of increasing scientific and technological capacity;
- adopting these ways and budgeting target programs and indicative plans<sup>4</sup>
- controlling a process of plans' realization.

Given the crucial importance of state-owned banks, corporations, development institutions, it is necessary to develop on the state level the medium-term plans, balanced on industrial, investment and financial parameters. Documents of socio-economic, industrial and territorial strategic planning should form a single complex and be developed on a common methodological basis.

A key role in the modernization and development of the economy on the basis of a new technological system plays a sharp increase of innovation activity. Given the critical and high uncertainty of R&D results, the economy's development regulation and strategic planning functions should be on the state. These functions should be aimed at the supporting the relevant scientific and technological environment, which includes:

- well developed fundament of fundamental knowledge and search research;
- network of institutions for applied research and development;
- an incentive system of development and diffusion of new technologies and so on (Glaziev, 2015, p. 53).

## **5. CONCLUDING REMARKS**

The priorities of innovation development are heavily determined by perceptions of what is going to happen in the future. To foresee this future and act in a relevant way, it is necessary to justify the public expectations, otherwise, be they seriously distorted, we would face a heightened risk of avoidable mistakes occurring. What are the sources of possible risks? In his Nobel speech, Douglass North points to one of the sources: the risks, according to him, can be generated by the fact that countries borrowing institutions as a result of their introduction into their institutional system do not receive the direction of development, which was practiced in the countries (North, 1993). For the countries of the former Soviet Union, it is important not to lose sight of the fact that the mechanical transfer of political and economic laws of Western markets is not a sufficient factor in the success of its operation, and privatization and institutional reforms are not a panacea for the economic problems solution (Yerznkyan, 2014, p. 127). The main danger is that the potential risks threaten both the institutional system of society and its structures and codes as a whole. They destroy "not only socio-psychological climate in society, but also the health of the people" (Lvov, 2003, p. 15), so "the starting point for the breakthrough to the future" must become "the spiritual and moral renaissance of the nation" (Lvov, 2001, p. 49).

The strategy of D.S. Lvov on the ways for Russia's breakthrough to the desirable stationary independent future having in mind the contemporary situation with international sanctions undertaken against Russia is nowadays still on agenda (Yerznkyan, 2015b). "Today, in a time of renewed interest in the heterodox economic theory, including institutional, evolutionary and other ramifications of modern economic thought, Lvov's strategy of independent development as a fore-

runner of recent strategies, appears as a useful instrument which should not be neglected; moreover, it should be carefully reconsidered" (Yerznkyan, 2015a, p. 82).

Innovation institutions as a part of institutions in general can be regarded as object-systems, which include objects as systems-institutions such as technology companies, public administration, government, supporting organizations (technology centers, associations, foundations, platforms, technology parks). However, such way of investigation is out of the frames of the present paper as well as the nature of economy of Russia: "throughout most of its history, Russia has had a mixed economy and a mixed society. There are fragments of various technological and socioeconomic modes co-existing in Russia. Russia's crises occur when the power is taken by various "purists" or by leaders striving to rush forward, as a matter of principle, trying to forget their links to the past, or by people who do not accept the future and attempt to reverse history" (Kleiner, 2009, p. 29).

In conclusion, let us underline that Lvov's insights presented in this paper are the best illustration to indicate a way to the future not only for Russia, but also to help other counties to find their own ways to the future. The only way out of the tragedy caused by reformers' efforts to copy Western practices and norms ignoring the commonality of interests of the population and giving priority to the cult of individual, was "to build an economy that reflects the common interests of the people and their natural endowments, the organizing mechanism for which would be a restructured public finance" (Harrison, 2001, p. 7).

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