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Modernization of the Russian economy in terms of innovative development

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Abstract

The article dwells on problems of further development of the Russian economy, discloses the factors hampering its progress and defines the conditions facilitating its modernization. The author places emphasis on the formation of innovative clusters and specific relations of partnership between the state, the private business and research and development institutions, that all in complex could ensure further economic growth and the sustainable development of the state economy.

Keywords: Regional economy; modernization, innovation, innovative clusters, public-private partnership

The Russian industry keeps on developing as a resource-based economy. Since 2002 the quota of the manufacturing industry in GDP reduced from 17% to 15%, while the extractive industry increased its share from 7% to 11%. Consequently, the resource-dependence of the state economy has been growing for the latest 10 years (according to the data published by Russian Federal State Statistics Service, www.gks.ru).

The structure of the Russian economy is characterized by following indicators: rural economy – 4-6%, material production (except rural economy) – 30-35%, services – 63-68%. At the same time, in the developed countries the share of the rural economy amounts to 2-4%, of the material production – 30-33%, services – 64-67%. Thus, the structure of the Russian economy does not greatly differ from the structures of the developed countries', but nevertheless there is a differentiation in the structures of export (the high proportion of the raw goods) and import (the high proportion of the advanced technology products).

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The dynamics of the GDP growth evidences the slowdown of the economic growth of Russia (see Fig.1 “Dynamics of the GDP growth in 2000-2012”, where the green line features GDP in dynamics and the black line figures the linear trend of GDP). According to the opinion of the majority of the Russian economists, in future the growth at the expense of the extractive industry sector is impossible. Moreover, the resources for stimulating the consumer demand are exhausted as evidenced by the statistics data on retails, on the customers’ credit-dependence. The real income of the population grows slowly, even despite of the increments of the payments in the military and the public sector (Starodubsky, 2013). Thus, the existing economic model does not facilitate the rapid economic growth. The Russian economy needs modernization.

![Fig.1 “Dynamics of the GDP growth in 2000-2012”](image)

Modernization may concern not only the sphere of economy. For example, D.Sokolov singles out three aspects of modernization: sociocultural, economical and political. According to Sokolov’s view, modernization is the transition from the prevalent model of the social, political and economical relations to an alter one, more differentiated and efficient. As applied to the modern society modernization is considered to be a process of advancement to the social and economic structure that comprises (Sokolov, 2011):

- overt political system based on the social and political liberties;
- dynamic market economy;
- advanced science and research complex in condition to acquire innovations and train the highly-skilled professionals in the field of science and technology.

Modernization means the transition to a new step of civilizational development that requires a cardinal renovation of all the constituents of the economic growth (Ivanova, 2010). The recognition of necessity of modernization signifies the acknowledgement of the retardation in development and necessity of the changes for transition to a new stage of development. In case of Russia, as it was shown above, the retardation lies in conservation of the resource-oriented economy, and the need for changes is designated by the fall-off of the economic growth in its rate and quality.

Modernization in the present-day Russia is the transition from the resource-oriented model of economic development to innovative one. It does not imply only the advanced technology sectors, but also includes the development of the extractive and conventional industrial sectors (Ivanova, 2010).
The transition to the innovative model of economy is to be the terminal point of the modernization in Russia. The way of transformation of the institutions and of the economic policy from the actual state of economy to the final point is the strategy of modernization.

There are two strategies of modernization: “institutional modernization” and “designed modernization” (Polterovich, 2008).

The adherents of the “institutional modernization” consider necessary to undertake the institutional reforms focused on refinement of the public administration and the juridical system, suppression of corruption, elimination of administrative barriers, betterment of the human capital etc. If all these problems are solved at least partially, the market will grow of its own.

The adherents of the “designed modernization” suppose that it is necessary to intensify the investment into the most promising sectors of economy. Both strategies of modernization imply the active role of the state. Nevertheless, modernization presupposes the partnership of the state, the private business and the society. Despite the fact that the economic growth directly depends on the level of development of the institutions, we have to agree with the opinion of V. Polterovich on inefficiency of the institutional modernization strategy in case of so called “catch-up countries”. The institutions in such countries should develop even in the course of the economic growth process (Polterovich, 2008). V. Polterovich leans on the modernization based on the western technologies. The same opinion is held by B. Titov, V. Inozemtsev and other economists.

However, many economists find possible to modernize the Russian economy by force of innovations. In particular, the research undertaken by K. Gonchar led to the conclusion that the technological development of the Russian economy is heterogeneous, “none of the branches can be called technically outdated or advanced” (Gonchar, 2009). According to the statistics and the data of the surveys carried out among the top managers of the manufacturing industry enterprises, it becomes evident there are groups of companies with relatively high level of production that are able to put out principally new products.

In our opinion, within the modernization of economy the individual innovative potential should be used with simultaneous adoption of the western technologies. The modernization based only on adoption of the technologies would lead to the economic growth, but not to the technological superiority. It is necessary to be competitive not only in the working efficiency, but also in innovations for the rise of the competitive industrial sectors. Clusters may serve the main platform for the formation and spread of innovations. The geographical bunching is the main characteristic of clusters, and it conditions the knowledge transfer, formation of the special-purpose work force, establishment of the durable subordinate and coordinate relations between the organizations. Availability of the specific work force makes for the knowledge storage and forthcoming of innovations, the close location of the organizations facilitates the spread of innovations within the network.

All these result in upsurge of the innovative activity of all the enterprises – the cluster composites. Besides, “the growing cluster starts attracting the direct foreign investment in the form of production facility or service rendering, and delivery (Porter, 2010), i.e. clusters work on attracting foreign investment entailed by new foreign technologies. It’s noteworthy to mention that the development of clusters brings out the improvement of infrastructure and legislature, adjusts the staff training that causes the development of institutions. Consequently, the development of the territorial clusters prompts the modernization of the economy in whole.

It is necessary to pay attention to all kinds of clusters both on the regional and federal levels. Even in the rural economy clusters are capable of contributing to the labour productivity of the region they are located and of other regions through the cluster network.

The disputable conservative approach of M. Porter should be used in development of the existing and incipient clusters, but not in the process of new clusters formation. New branches and new clusters, according to his opinion, better appear from the already existing ones. It is important to select the specialization so as not
to compete directly with adjacent producers. The backing measures may consist in the indirect support of the regional competitive advantage determinants (competitive ratio, factor conditions, demand parameters, backing from the supporting organizations) (Porter, 2010).

Ch. Ketels considers the policy of the “cluster administration” (Ketels, 2003), to be the best support policy. The cluster administration presupposes that the role of the state is to be reduced to elimination of the barriers hampering the clusters’ evolution and to arrangement of conditions by means of improvement of business environment and infrastructure in order to enable the cluster’s further independent development.

The difficulty with application of the cluster policy lies in impossibility of replication of the positive experience in cluster formation in other regions. In cluster formation account must be taken of local geographical, infrastructural and sociocultural factors.

Cluster policy is more efficient when it is applied in the regional level. Minor countries successfully use the cluster approach as a basis of the state policy. Greater countries, especially federal in structure, use the cluster approach as a part of the extensive industrial policy. At that there is a distinct tendency: the “closer” the area of responsibility of the particular authorities to the regional or local cluster is, the more intensive cluster policy is carried by them.

I.V. Pilipenko suggests the following classification of the cluster policies (Pilipenko, 2011). He subdivides the cluster policy into the policy of the first generation that comprises the set of measures on cluster identification, profile specification of the companies forming the cluster and realization of the general cluster support policy, and the policy of the second generation that is based on the clear idea of the clusters existing in the region and all through the country and implies the individual approach to the problems of development of every cluster in particular.

Depending on the cluster policy initiator the two types of policies are singled out: “top-down” and “bottom-up”. The “top-down policy” initiators are mainly the federal or regional authorities. Such kind of policy was carried out in Finland, Netherlands, and Denmark. In case of the “bottom-up policy” the initiators are local business associations. Programs of that type were called “cluster innovation”.

The starting point for the innovative cluster formation can be a regional or federal program gathering manufacturing and service companies, scientific institutes. In this case the growth of the innovative potential is achieved owing to that in the market of the high-tech innovations there will be competing research-and-production complexes (not the separate enterprises) that by means of cooperation between their members ensure the intra- and intersectorial transaction cost reduction.

M. Wickham points out 5 factors of the efficient role of the state: 1) the state responds to the needs of the cluster with regard to entrepreneur, geographic and historic contexts; 2) the state may the influence of the main factors, even the role of chance (which in Porter’s model is exogenous and unpredictable, similar to the state’s role) here can be effectively used on condition of concentration of the state’s recourses and forces; 3) the role of the state is to vary according to the stage of the cluster’s life cycle, i.e. the state methods of regulation cannot be focused only on one single approach; 4) the state should provide the required infrastructure for the cluster development, moreover, trying to foreseen the needs of the business structures, not just to pursue their current demands; 5) the support of the state is to be focused on the leading company, the core of cluster.

According to the role of the state M. Enright singles out:

• Catalytic, when the state brings the interest parties together, e.g. the private companies or science and research organizations, and so that it stands for the “catalyst” of interaction and provides the limited funding of the projects.
• Supportive, when the authorities in addition to the catalytic cluster policy assign means for the development of the regional infrastructure, education and training and take action about stimulation the cluster development.

• Directive, when the government forms and implements the programs aimed at changing the specialization of the region by means of cluster development.

• Interventionist, when the government alongside with directive measures takes responsibilities for making decisions on directions of further cluster development determining its specialization by means of giving grants and transfers, setting legislative restrictions and by force of active control over the companies in the cluster.

Legislative regulation is the direct method of the governmental regulation, when the state by force of the authorities influences the social relations allowing the participants the legal action, conferring rights and charging with duties, and gives them chance to choose a certain behavior within the limits set by legal regulations (Kozbanenko, 2002). Legal regulation, in our opinion, is one of the basic methods of governmental regulation in the field of cluster development. It is used alongside with other methods of direct governmental regulation (persuasion, enforcement, public administration, state control etc.) and the methods of indirect regulation (education, democratization of regulation, governmental contractual work, taxation, custom values estimation etc.).

Normative and legal regulation is a corpus of norms, standards and procedures of the social activity in the sphere of exercise of the state power and the state regulation by means of ensuring of the law compliance by the authorized subjects of the administrative relations and legitimized by the trust and recognition from society (Kozbanenko, 2002).

Thus, normative and legal regulation of the clusters’ activity means creation of the system of norms, standards, procedures through which the government influences on the social relations in the sphere of regulation of territorial-production clusters. This regulation is to result in development of the existing clusters and formation of the new ones, which in its turn is to lead to strong innovative growth of economy.

References


