
The Development of Cluster Relations within the State and Business Structures in Terms of Strategy of Non-Primary Sector Import-Substitution

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Abstract:

The main aim of the article is to determine how the implementation of the strategy of import substitution in non-primary sector of the Russian economy can be insured. Rostov region and other Southern regions of Russia were selected as the subjects of the study by the authors. Research particularly focuses on the main areas of socio-economic development as well as the process of implementation of the import substitution policy.

The authors also analyzed the possibility of solving the problems of import substitution in the non-primary sector of the regional economy, formulated algorithmic bases of realization of cluster interaction of state and business structures. The authors have presented some promising industry clusters for the South of Russia Region. This article contains suggestions for the creation of regional clusters in terms of import substitution. As a result authors concluded that within the non-primary development of regional economy the principle of cluster interaction of state and business structures allows for efficient implementation of the import substitution strategy in the industrial sector.

Key words: *The concept of cluster development, cluster cooperation, non-primary sector of the economy, territorial and sectoral clusters, import substitution.*

JEL Classification Codes: F60, F63, O35, O44

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1. Introduction

The adopted policy of overcoming the problem of resource dependence and the modernization of the Russian economy and its regions, it is necessary to formulate mechanisms of development on the course to import substitution. In this case, the transition strategy to non-primary scenario of economic development of the South Russian regions is based on network and cluster interactions of economic agents that will allow for the further increase of the economic potential of the Russian Federation. As a consequence, this will facilitate increase in competitiveness of the regions, which is closely linked to the implementation of cluster policy, which is based primarily on the interaction between state and business structures. Clusters are seen as tools for economic synergies (Dasanayaka and Sardana, 2015; Frank *et al.*, 2016; Kolchanova and Kolchanova, 2016; Ryzhkova and Prosvirkin, 2015).

To solve the problems of implementation of import-substitution strategy and translation of results into practice, economic science has developed a number of conceptual approaches that help identify and analyze localized regional space competitive advantages (Ivanova and Bikeeva, 2016). Analysis Conducted in the context of functional and meaningful context, has allowed structuring the main points of regional development theory and considering their advantages and disadvantages in terms of identifying opportunities in the formation of the theoretical and conceptual basis. This can later on be applied to analyze the transition of Russian economy towards the non-primary model (Kormishkin *et al.*, 2016; Salimova and Makolov, 2016).

2. The model of non-primary scenario of economic regional development of Russia

In modern conditions of structural changes in the geopolitical space, that are mainly due to external threats, economic sanctions between Western Europe and Russia, issues of preservation and maintenance of sustainable development of regional economic systems is proportional to resource dependence and requires the implementation of the import substitution strategy. According to S.Y. Glazyev, a way out of the current depression will be accompanied by large-scale geopolitical and economic changes. Leading countries have demonstrated their lack of institutional innovations that could channel the free up capital into economic restructuring on the basis of a new technological foundation of the economy.

The current irregularity of regional reproduction and distribution of productive forces, the unevenness of Russian territorial space, as well as asymmetry of socio-economic development of regions (that gets more severe in times of crises) is formed each separate territory. As a result these «profiles» of resources are formed which create opportunities for creation of non-primary development potential. Under these conditions, however, it is important not to oppose primary and non-primary sectors of the economy. It is crucial that the innovative potential of primary industries is

used in the most efficient way. According to research done by a number of scientists, the primary sector can become a driver of innovation through such a phenomenon as «interpenetration». This can mean expansion to other industries and sectors as well. Therefore, there is a problem of optimization of the sectoral structure of the region, given the governmental course targeting rational import-substitution in non-primary economic sectors. In the context of this approach, the main reference should be the completed supply chains that allow for production of products with high added value, i.e. following a principle: «sell finished products, not raw materials». For the South of Russia the main activities are likely to be ones listed in table 1, the modernization of which is possible on the basis of rational combination, mutual substitution, and / or integration of primary and non-primary sectors where significant multiplier effect of output growth in related industries is possible. As a result, in general, localization of the region's economy in this activity is possible. Looking through the prism of extended economic sanctions, it should be noted that there are sufficient opportunities for the development of these regions.

Despite the deficit and limitations of investment sources, their remains growth and technological improvement of production, as the real prospects of development of Russian industry may be associated with the implementation of the model of export-oriented import substitution. In this respect, one of the most realistic directions of sectoral specialization of the Russian economy in the South, it is the agro-industrial complex, which includes both: primary (agriculture), and non-primary (tractor and agricultural machinery, food processing) areas of activity, as well as infrastructure units (procurement, storage, transportation, sale, and others.). Currently, this sector has a very low proportion of production with full cycle of processing of agricultural products: as a rule, the listed areas are functioning quite individually, which has a negative effect on both the financial results of participants and product quality.

Table 1. *Priority directions of development activities to create production and processing chains for the production of products with high added value in the regions of Southern Russia*

Region	Activity
Republic of Adygea	Agriculture, tourism, construction materials
Krasnodar region	Transport and logistics complex, fuel and energy, agriculture, production of clothing, shoes and accessories, building materials
Volgograd region	Chemical and petrochemical industry, metallurgy, machine building, agriculture, shipbuilding, textile industry
Republic of Kalmykia	Agriculture, tourism and recreation activities, production of building materials
Astrakhan region	Agriculture, fuel and energy complex, shipbuilding

Rostov region	Agriculture, tourism, construction materials, agricultural machinery, textile and footwear production
Republic of North Ossetia-Alania	Agriculture, tourism, construction materials
The Republic of Dagestan	Agriculture, tourism, construction materials
The Republic of Ingushetia	Agriculture, tourism, construction materials
Kabardino-Balkar Republic	Agriculture, tourism, construction materials
Karachay-Cherkess Republic	Agriculture, tourism, construction materials
Chechnya Republic	Agriculture, tourism, construction materials
Stavropol region	Agriculture, tourism, construction materials

The main idea of a new regional paradigm in the framework import-substitution strategy in non-primary sector is the formation of "multiscale" structure of regional economy, which should be based on the network forms of business cooperation to ensure the effective integration. Formation of non-primary development strategies of a mixed economy is based on backbone principles in the formation of a balanced developing meso economy oriented on modernization of growth. This strategy relies on the principles traditionally highlighted as a scientific basis to produce strategies of development of economic systems of various types and levels, reflecting a new approach to the formation of non-primary economy in Russian regions in the changed external economic conditions.

Amongst them are the following principles: systematic (according to which the economy of the region is regarded as a relatively isolated system that operates according to its own logic of development determined by the regional determinants), collectivism (according to which the implementation of the strategy of import substitution of non-primary sector involves every territory without exception), scientific principle (according to which the foundation for the implementation of the import substitution strategy of non-primary sector is generated through a scientific basis), stability (according to which the key aim of the import substitution strategy is to provide/maintain regional economic system in a stable condition), focus (according to which the strategy of import substitution of non-primary sector is oriented to achieve region-wide goals, and the «embedded» goals of all regional subsystems). New guidelines of the import substitution strategy imply maximum involvement and use of cluster interactions of endogenous regional resources, and this applies not only urban «growth epicenters», but also to peripheral areas. Thus, we can conclude that modernization of regional non-primary sector in the context of development of Russian economy should facilitate the development of mechanisms for cooperation, coordination and interaction between business entities that

contribute to the reproduction of social ties rather than individual gains and competition (basis for the ultra-liberal regional policy model). This approach allows considering the specifics of the territorial organization of Russian regions, regional resource allocation, and historical system of productive force distribution, economic practices as well as the mentality of ethnic and regional elites. This principle, in our opinion, should be the basis for the formation of strategy of non-primary sector import substitution.

3. Cluster interaction of state and business structures as a tool for the implementation of non-primary model of economic development

In Russia, there is an active development of cluster policy at the level of the government level; however, the coordination of this process, both at federal and regional levels is insufficient. Despite the significant increase in investment risks caused by the implementation of economic sanctions, the course of implementation of the import substitution strategy in non-primary sectors is being actively promoted in the South of Russia. For example, cluster development principle is reflected consistently in the economy of the Rostov region, where the cluster development is recognized as one of the priorities of regional policy (Table. 2).

Table 2. Some areas of industry cluster formation in the Southern Federal District

Business Sectors	Number of clusters
Tourism and recreation	Beach, mountain, recreational, cultural, educational and ecological tourism (5)
Agriculture	Territorial agricultural cluster, focused on the market of cereals, meat and dairy products, vegetables, fishery cluster in Astrakhan region (1)
Oil and gas	South of the Astrakhan region (1)
Chemicals	Enterprises in the Astrakhan, Volgograd and Rostov regions (1)
Manufacture	Textile cluster in Volgograd Region (1)
Pharmaceuticals	Caspian biopharmaceutical cluster, pharmacological cluster in Volgograd Region (2)
Shipbuilding	Shipbuilding cluster in the Astrakhan region (1)
Transport and logistics	The transport and logistics cluster in the Astrakhan region (1)

Since 2012, «Innovative cluster of biotechnology, biomedicine and environmental safety» is operating in the region, which includes: Novocherkassk factory of synthetic products OOO NPP «Monitor», OOO NPKF «Medicom MTD», OOO

«Fitoros», ООО «Nikokhim», ООО «Pharmacevt», JSC «Priboi». At the moment the first line of machine- cluster in the city of Azov is already in operation, set up MTE KOVOSVIT MAS (Czech Republic). In 2015, the first orders for the production of components for machine tools are in process of execution. In Shachty, there is a new textiles cluster being developed in cooperation between «Don-Tech» and ООО «BTC Group», where the fabric will be made of synthetic fibers. Investment in this project totals around 1 bln RUB. The procedure of land transfer to «Rostvertol» has been completed (Memorandum on its establishment was signed in September 2014). Furthermore the tender for helicopter cluster organizations has been announced, consisting of «Rostvertol», OAO «Aviapriborny repair plant», state Corporation «Rostech», JSC «Russian Helicopters». The total volume of planned investment is 20 bln. RUB, and in 2015 alone, 600 mln. RUB have been invested in the project.

The concept of cluster development (2015-2020 years), based on the characteristics of local economy and specialization has been established in most of the Russian regions. Figure 1 shows the primary directions for the formation of regional clusters, reflecting the content side of cluster development of the Rostov region.

In this study, a territorial production cluster should be understood as the actual association of business entities engaged in economic activities within the boundaries of one or more administrative-territorial units, and related within the spheres of production and sales via functional or contractual relationship. Because of this relationship average profit is positive and is generally greater than the average profit for the respective administrative-territorial formations. On this basis, cluster must be an informal association of business entities, concentrated in a particular area.

When forming the vector of regional cluster interaction between state and business structures in the context of import substitution strategy of non-primary sector, it should one hand, improve the balance of reproductive system of the region, and on the other - ensure compliance with regional guidelines of national strategic priorities. This includes: compliance with the strategic orientations of the national economy, including those related to the implementation of non-primary model, focused on import substitution; purposeful concentration of the economic potential of the region in the development of those interactions that allow to fully extract all the potential of (resource, infrastructure and other) the region; focus on the development of different forms of associated businesses in those areas specific to the region, to ensure competitive advantage; to ensure the modernization of lagging sectors. The goals should more fully reflect the results (effects), which are expected to be achieved in the merger of non-primary potential of different sectors.

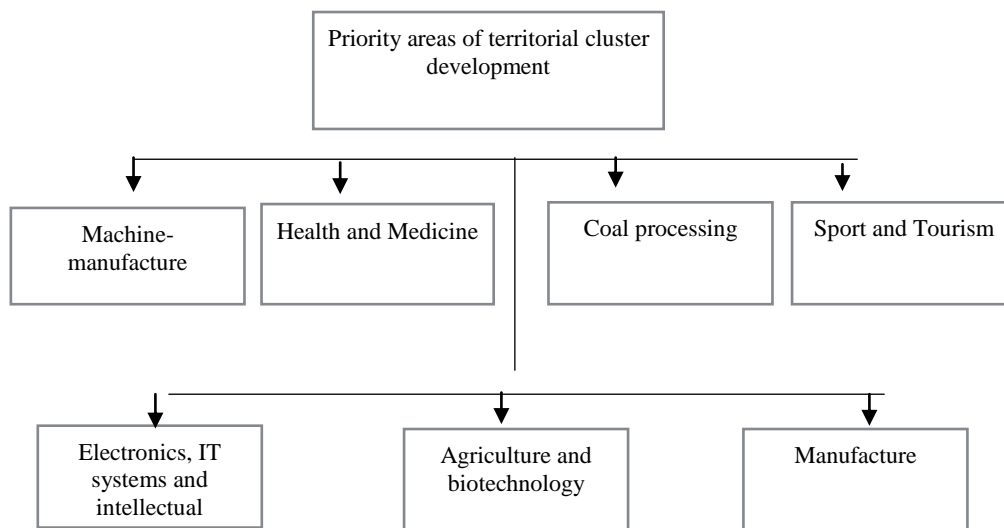


Figure 1. Priority areas for the formation of regional clusters

4. The result of the study - the mechanism of realization of cluster interaction of state and business structures in the implementation of the import substitution policy

As a result of the study, we have proposed - the mechanism for the implementation realization of cluster interaction between state and business structures in the context of import substitution strategy of the non-primary sector of the economy (see Figure 2). This mechanism will allow us to form the development of cluster interaction between state and business structures in the context of the strategy of import substitution of non-primary sector. The first stage of the mechanism involves determining import substitution trends in the industrial sector of the region, namely searching for types of export products, that can be replaced with domestic alternatives; determining the conditions, resources and economic actors of import-substitution procedures; definition of technical, technological, human and other requirements for implementation of import-substituting projects; selection of the «first-priority» investment projects in the region (which can be implemented instantly or in the short time frame); institutional, project and tool maintenance support of selected projects.

The second stage, is the formation of the cluster system of interaction between state and private business structures in the implementation of import substitution projects in the region, which allows us to develop institutions and instruments of public participation and interaction in the implementation of selected projects; evolvement of cluster type structures that unite real economic actors for completion of selected

projects. With such approach, implementation of cluster cooperation in the industrial sector will effectively help to accomplish large-scale programs and projects.

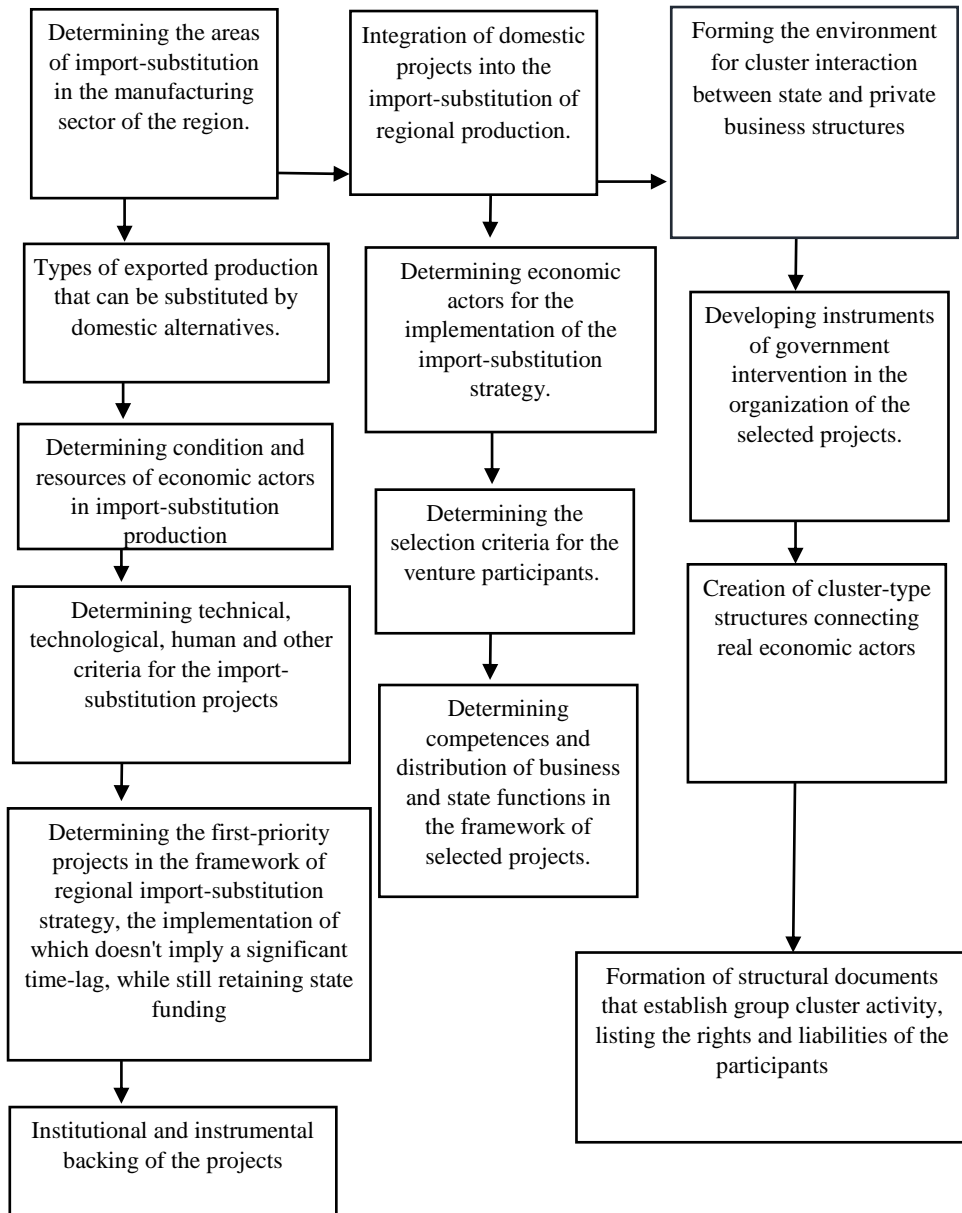


Figure 2. The mechanism of cluster interaction between state and private business structures in the framework of implementation of the policy of import substitution in non-primary sector of the economy

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