INVESTMENT CONDITIONS OF CLUSTERING AND INNOVATIVE DEVELOPMENT REGION

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ABSTRACT

The purpose of this research is to offer a systematization of models for attracting investment in cluster development projects. The formation of intersectoral clusters (multiclusters) united by a common innovation core is becoming more important for country. The importance of the cluster model of intersectoral integration based on the formation of multicluster formations is because in most Russian regions there is no pronounced specialization of industry. At the same time, in many regions during the Soviet period, scientific and production complexes were formed, which together with scientific and educational institutions can be considered as the scientific and technological core of neoclusterization. The concept of an innovation cluster and its corresponding methodological tools are proposed as a theoretical and methodological basis for optimizing innovation processes in the context of spatial development of the Russian Federation. Questions of the influence of economic space factors on the innovative development of regions, increasing the connectivity of the economic space based on "digital proximity", as well as the prerequisites for the formation of national and local "innovation space"remain of high relevance for economic theory and management practice. Paper deals with the cluster aspect of the investment policy, problems of assessment of investment climate and investment potential rating of region is considered. The analysis of the effectiveness of the regional policy to attract investment in the Volga Federal district is carried out. The most significant investment projects for cluster development of each of the considered regions are systematized. The results of calculating the investment potential of the Volga region regions are presented.

Keywords: Investment Policy, Volga Region, Innovative Cluster, Regional Development.

INTRODUCTION & LITERATURE REVIEW

Russian regions are currently in a competitive position for attracting investment. The cluster approach is one of the ways to attract foreign investment in order to improve sustainable socio-economic development, create a favorable business environment and increase investment potential (A Report on Inequality in the World, 2018). Clusters are innovative systems with a high level of competition that can create a huge potential for sustainable growth, both for the regional economy and for the country as a whole (Dokholyan et al., 2014). A crucial role in the development of the cluster is played not only by investment, but also by the consolidation of efforts of authorities to assist potential cluster participants in state support (Porter & Ketels, 2009).

The main guidelines of cluster policy should be not only the development of regional investment projects in order to receive support from foreign investors, but also the active attraction of foreign enterprises from related sectors of the economy and services to the territory of the cluster (Abdullaeva et al., 2019). In order to support the Russian economy and develop

investment infrastructure, the strategy for innovative development of the Russian Federation for the period up to 2030 provides for the formation of innovative territorial clusters (Roscongress, 2019).

Active cluster policy in the regions contributes not only to increasing investment attractiveness, but also to mutually beneficial cooperation between cluster members, the development of related industries, and the formation of innovative infrastructure (Idziev, 2014). In addition, it should be recognized that based on the successful experience of the regions in creating and developing clusters, the principles of cluster policy are being developed in other regions of Russia. The theoretical and practical significance of the issues of assessing the innovative potential of the region as a factor of the effectiveness of economic clustering processes determined the topic of this study.

METHODOLOGY

The study is based on the dialectical method of scientific cognition, which involves the consideration of economic relations within innovative clusters in their relationship and development. In the course of the study, a systematic approach is widely used, which involves a comprehensive study and structural and logical ordering of economic systems. In the framework of the study, the methods of structural and comparative analysis are also in demand, the solution of scientific problems of the study required the use of general theoretical research methods such as abstraction and concretization, analysis and synthesis, induction and deduction, comparison and contrast.

RESULTS

Turnover of organizations located on the territory of the Volga Federal district (VFD) for all types of economic activity for 2019, it amounted to 30 trillion rubles (105 % of the level of 2018). At the same time, the index of industrial production for all enlarged types of economic activity in the VFD is 103%, the index of agricultural production compared to 2018 is 104.3%. Separately, we will highlight the decline in the aggregate level of prices for industrial goods of the VFD enterprises, so the price index of manufacturers of industrial goods in 2019 compared to 2018 was 96.8%, the price index of agricultural producers – 98.7%. The share of VFD in the national production of agricultural products is 22.3%.

The balance of foreign trade turnover of the regions of the Volga Federal district in January-September is 18.8 billion USD. The volume of exports for 2019 amounted to 28.9 billion USD, imports – 10.2 USD, the share of the regions of the Volga Federal district is 8.1% of the national foreign trade turnover of the Russian Federation.

Retail trade turnover in the regions of the Volga Federal district in 2019 amounted to 5.83 trillion rubles (an increase of 1.1% compared to 2018), the volume of services rendered amounted to 1.65 trillion rubles. The consumer price index for 2019 in the Volga Federal district is 102.7%. The average monthly cash income per capita in the regions of the VFD is 28,222 rubles (in the Russian Federation – 35,188 rubles). We note an increase in the average monthly real wages for VFD organizations (34,395 rubles) by 2.6%.

In 2019, 1,605 billion rubles of investment in fixed assets (102.8% compared to 2018) were allocated for the socio-economic development of the regions of the VFD. Share of the VFD in the national investment volume of the Russian Federation is 14.0%. Own funds – 67.0%, attracted funds – 33.0%, including 3.7% – Federal budget funds. The total amount of financial

investments amounted to 6,203. 5 billion rubles. The consolidated budget of the regions of the Volga Federal district for 2019. It was executed with a surplus of 19.4 billion rubles, and expenses of the consolidated budget of the VFD amounted to 1863.1 billion rubles. Receipts of taxes, fees and other mandatory payments in 2019 increased by 4.8% to 3.64 trillion rubles.

Table 1
NUMBER OF ECONOMIC ENTITIES IN THE CLUSTERS OF THE VOLGA FEDERAL DISTRICT

Regions of the Volga Federal district	Number of organizations, units	Number of individual entrepreneurs, people
Russian Federation	4001579	4068317
Volga federal district	696071	723445
Bashkortostan Republic	80966	88846
Mari El Republic	11956	13736
Mordovia Republic	14739	16337
Tatarstan Republic	114460	98180
Udmurt Republic	35628	37781
Chuvash Republic	22662	34103
Perm region	64887	74398
Kirov region	31540	32890
Nizhny Novgorod region	86094	81856
Orenburg region	35372	45666
Penza region	23965	35409
Samara region	102964	77682
Saratov region	44651	56379
Ulyanovsk region	26187	30182

Source: Federal state statistics service of the Russian Federation

Table 2
INVESTMENTS IN FIXED ASSETS IN THE REGIONS OF THE VOLGA FEDERAL DISTRICT IN 2019

Regions of the Volga Federal district	Millions of rubles	In % to 2018
Russian Federation	6695.9	100.6
Volga federal district	905830.1	97.3
Bashkortostan Republic	105574.6	113.6
Mari El Republic	8937.7	79.3
Mordovia Republic	15399.1	90.2
Tatarstan Republic	221262.1	95.0
Udmurt Republic	34704.7	97.0
Chuvash Republic	18082.5	92.8
Perm region	103069.6	106.9
Kirov region	23940.8	107.9
Nizhny Novgorod region	95876	90.3
Orenburg region	75818.5	90.6
Penza region	35229.8	101.3
Samara region	93051.0	99.5
Saratov region	50247.5	86.6
Ulyanovsk region	24636.1	90.4

Source: Federal state statistics service of the Russian Federation

Based on the analysis, it was concluded that the Volga region as a macroregion has sufficient conditions for further implementation of cluster policy. We will conduct a comparative

analysis of the regions of the Volga Federal district in terms of conditions for clustering the economy.

The share of profitable organizations in the VFD as a whole is 69.8%, the leading positions in this indicator are occupied by the republics of Tatarstan, Bashkortostan and Chuvashia, the largest share of unprofitable enterprises in the Penza, Orenburg and Ulyanovsk regions. The total number of economic entities of clusters in the regions of the VFD is shown in Table 1.

We note a significant differentiation of the regions of the Volga Federal district in terms of saturation of their economic systems with subjects of economic activity. The leaders in this indicator are the Tatarstan, the Samara region and the Bashkortostan. There is also a significant differentiation of the PFD regions in terms of attracted investment (Table 2).

However, considering the overall structure of investment in each of the regions, we can talk about different investment models (Table 3).

Regions of the Volga Federal district	Own funds	Attracted funds						Bank credits	funds for shared-equity construction
		Total	including budget funds	from them					
				the Federal budget	Budget of region	local budget			
Russian Federation	60.2	39.8	10.6	5.1	4.8	0.7		10.5	3.8
Volga federal district	68.6	31.4	6.6	2.9	3.1	0.6		8.9	2.8
Bashkortostan Republic	63.3	36.7	11.1	3.9	6.3	0.9		14.8	4.6
Mari El Republic	64.9	35.1	11.4	6.1	4.6	0.7		4.5	12.2
Mordovia Republic	60.7	39.3	8.7	4.9	1.8	2.1		22.8	4.9
Tatarstan Republic	67.5	32.5	5.2	1	4.1	0.1		8.7	1.5
Udmurt Republic	81.8	18.2	54	3.6	1.3	0.5		7.5	-
Chuvash Republic	50.1	49.9	18	10.2	5	2.9		4	18.5
Perm region	74.3	25.7	3.4	0.9	1.6	0.8		7.3	1.5
Kirov region	52.5	47.5	6.3	3.9	1.6	0.8		6.4	10.3
Nizhny Novgorod region	80.1	19.9	10.7	6.5	3.6	0.6		2.2	1.6
Orenburg region	79.3	20.7	1.2	0.6	0.4	0.2		6.1	3.4
Penza region	35.7	64.3	6.9	3.8	1.8	1.3		39.9	0.7
Samara region	68.8	31.2	6.8	2.3	4.2	0.4		7.8	-
Saratov region	69.9	30.1	5.2	3.6	0.8	0.8		4.6	5.7
Ulyanovsk region	35.1	64.9	9.4	6.8	2	0.6		6.1	-

Table 3
STRUCTURE OF INVESTMENT IN FIXED ASSETS BY SOURCES OF FINANCING IN 2019 (% OF TOTAL INVESTMENT IN FIXED ASSETS)

Source: Federal state statistics service of the Russian Federation

A high share of own funds in the total investment volume is typical for the economic systems of such regions as the Udmurt Republic, Orenburg and Perm regions. A high share of Federal budget funds is typical for the economic systems of such regions as the Chuvash Republic, Ulyanovsk and Nizhny Novgorod regions, and the Republic of Mari El. A high share of attracted funds from regional budgets is typical for such regions as the republics of Bashkortostan, Chuvashia, Mari El, Tatarstan, as well as for the Samara region. A high share of Bank loans in the investment structure of the Penza region and the Republic of Mordovia.

Table 4 shows the dynamics of assessing the investment attractiveness of the Volga Federal district (VFD) regions. The data indicate significant changes in the investment climate in the regions of the Volga Federal district.

Table 4
RATING OF THE INVESTMENT CLIMATE OF THE VFD REGIONS

№ п\п	Regions of the Volga Federal district	The group of investment attractiveness					
		2014	2015	2016	2017	2018	2019
1	Bashkortostan Republic	2B	2B	2B	2B	2A	2B
2	Mari El Republic	2B	3C2	3B2	3B2	3B2	3B2
3	Mordovia Republic	2B	3B2	3B2	3B2	3B2	3B2
4	Tatarstan Republic	2B	2B	1A	1A	2A	2A
5	Udmurt Republic	2B	3B1	3B1	3B1	3B1	3B1
6	Chuvash Republic	2B	3B1	3B1	3B1	3B1	3B1
7	Perm region	2B	2B	2B	2B	2B	2B
8	Kirov region	3B2	3B1	3B1	3B1	3B1	3B1
9	Nizhny Novgorod region	2B	2B	2B	2B	2B	2B
10	Orenburg region	2B	3B1	3B1	3B1	3B1	3B1
11	Penza region	2B	3B1	3B1	3B1	3B1	3B1
12	Samara region	2B	2B	2B	2B	2B	2B
13	Saratov region	2B	3B1	3B1	3B1	3B1	3B1
14	Ulyanovsk region	2B	3B1	3B1	3B1	3B1	3B1

Table 5
DISTRIBUTION OF VFD REGIONS BY INVESTMENT POTENTIAL RATING IN 2019

Regions of the Volga Federal district	Potential ranks		Ranks of investment potential components in 2019								
	2019	2018	1	2	3	4	5	6	7	8	9
Bashkortostan Republic	11	11	11	7	9	8	12	18	47	21	8
Mari El Republic	73	72	67	72	63	72	67	68	62	44	73
Mordovia Republic	67	66	48	70	60	66	66	52	38	65	67
Tatarstan Republic	6	6	5	6	6	5	7	5	21	41	6
Udmurt Republic	44	41	32	32	34	33	37	31	42	64	52
Chuvash Republic	56	54	35	56	53	56	43	43	22	80	48
Perm region	13	13	23	13	14	14	16	17	63	6	14
Kirov region	59	59	43	42	45	46	39	50	66	52	41
Nizhny Novgorod region	8	9	10	9	10	10	10	4	31	57	12
Orenburg region	28	30	27	25	27	21	32	62	40	20	31
Penza region	41	23	33	37	46	43	44	23	36	55	58
Samara region	12	10	8	10	12	9	8	11	17	47	16
Saratov region	24	25	16	22	29	25	24	24	30	39	28
Ulyanovsk region	45	44	38	41	48	42	40	19	41	54	62

Source: Developed by the author
Note: Ranks of investment potential components: 1 - labor, 2 - consumer, 3-production, 4 - financial, 5 - institutional, 6 - innovation, 7 - infrastructure, 8-natural resource, 9-tourism.

Homogeneous characteristics of regions in 2014 (only the Kirov region stands out with a rating of 3B2) changed in the following years: 1) for the first time there was a region with the highest level of investment attractiveness 1A (maximum potential – minimum risk) – the Tatarstan Republic; 2) the situation of eight regions has worsened, as groups 3B1 and 3B2 are characterized by reduced and insignificant investment potential; 3) four regions (Bashkortostan, Perm, Nizhny Novgorod and Samara regions) are characterized by stability and maintain their position in group 2B (medium potential – moderate risk). It should be noted that the investment climate deteriorated in the *"investment potential"* parameter, while the *"investment risk"* parameter remained at the *"moderate"* value for all regions. The Republic of Mari El belongs to the 3B2 group with little potential and moderate risk. The distribution of VFD regions by investment potential rating in 2019 is shown in Table 5.

CONCLUSION

The Volga Federal district has a huge investment potential. The economy is developing rapidly, and domestic and foreign investment is increasing every year. The most attractive industries for investors are instrument-making and mechanical engineering, chemical, textile production, consumer goods, and the chemical and pharmaceutical industry. In the VFD industry, the leading role is mainly played by mechanical engineering and the fuel and energy complex. Chemical industry enterprises are also highly developed. The main production capacities of the region are concentrated in the Republics of Bashkortostan and Tatarstan, in Perm and Samara and Nizhny Novgorod regions.

At the same time, the Volga regions demonstrate various models for attracting investment in cluster development projects. The author identified the following basic model of investment policy for the considered clusters: cluster development at the expense of own funds of enterprises (Respublika Udmurtia, Nizhny Novgorod and Orenburg region); cluster development at the expense of the state budget (Republic of Chuvashia); investment by bank loans (Republic of Mordovia). Other regions have a mixed model for financing cluster development projects.

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