

Spatial and sectoral features in the economic development of agro-industrial and industrial territories of the region

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Abstract. The paper confirms the importance of the development and application of modern tools for analysis and assessment of the spatial and sectoral features of regional development in the context of agro-industrial and industrial territories on the example of the Perm Region. To calculate the income distribution index of the population in the territories, we used statistical indicators of wages, the number of employees of agricultural and industrial organizations, as well as data on the incomes of the region's wealthiest citizens. Diagnostics made it possible to identify spatial and sectoral features in the economic development of agro-industrial and industrial territories of the Perm Region and group them into three types. It has been established that the lowest incomes of the population are observed in territories with a predominant agro-industrial profile. A conclusion is made about the need for regular monitoring and applying analysis results in the development and adjustment of strategies or plans for the spatial and sectoral development of a particular constituent entity of the Russian Federation.

1. Introduction

Economic conditions are constantly changing, quickly revealing the problems of spatial and sectoral development of agro-industrial and industrial territories of Russia. In recent years, one of the most important areas of economic research is finding new ways to enhance the spatial and sectoral development of territories. The importance of the problem under consideration lies in the fact that economically sustainable territories guaranty stability, independence and food security of the state. Therefore, the vector of their development should become a national policy priority.

Many authors have raised the question of studying the spatial and sectoral features in the economic development of agro-industrial and industrial territories of the region. For example, there is a research in which the authors propose methodological tools for assessing the technological potential of the Siberian Federal District territories [1]. Others focus on industrial relations between territories [2]. Detailed conclusions are drawn in the works of O.S. Sukharev, E. N. Voronchikhina [3,4], related to technological transformations of production indicators in the territories, depending on macroeconomic changes. The technologies of agricultural and industrial production are also sufficiently developed in modern science [7,8]. Thus, the question of the need to develop new tools for the analysis and assessment



of spatial and sectoral features in the economic advancement of agro-industrial and industrial territories of the region is natural [9-11].

2. Main part

Our study was carried out on the example of the territories of the Perm Region - a region with a pronounced differentiation of municipal districts, urban districts and towns in terms of economic development and production profile, environmental situation, state of social infrastructure, as well as the level of population income.

The level of income distribution among the population in the industrial and agro-industrial territories of the Perm Region is shown in figure 1.

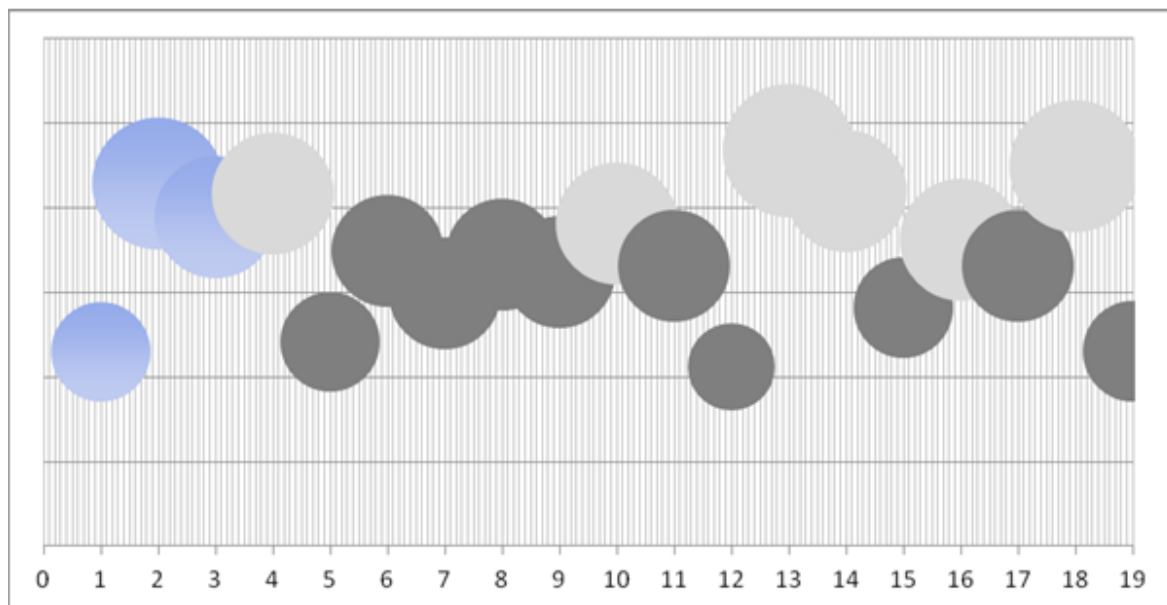


Figure 1. Income distribution among the population of the territories in the Perm Region: sectoral aspect. *Symbols. 1 - Agriculture, forestry, hunting, fishing and fish farming; 2 – Mining; 3 - Manufacturing industries; 4 - Electricity, gas and steam supply; air conditioning; 5 - Water supply; wastewater disposal, waste collection and disposal, pollution elimination; 6 – Construction; 7 – Education; 8 - Healthcare and social services; 9 - Culture, sport, leisure and entertainment; 10 - Transport and storage; 11 - Wholesale and retail trade; repair of motor vehicles and motorcycles; 12 - Hospitality and catering spheres; 13 - Information and communications; 14 - Finance and insurance; 15 - Real estate; 16 - Professional, science and technical activities; 17 - Administrative and related additional services; 18 - Public administration and military security; social Security; 19 - Provision of other types of services.

Based on the data presented, the conclusion suggests that currently the predominance of industrial or agricultural profile of the territory is the leading factor in the context of the incomes distribution among the population. By specifying these data it is necessary to assess the symmetry of this indicator in the three-dimensional angle of the region (table 1).

Table 1. Indicators of economic development of the Perm Region territories.

Territories of the Perm Region	Income of the wealthiest citizen of the territory, million rubles per month	Average salary of employees in organizations of the territory, rubles per month	Number of employees in organization, people	Payments to personnel in organizations, rub. per month	Daily income of the wealthiest citizen of the territory, rubles	Daily payments to personnel in organization, rub.	Hoover index
Perm city	12.625	44852.2	24805	69657.2	413934,4	2283.8	181
Berezinki town	37.738	45369.1	6577	51946.1	1237311,5	1703.2	726
Vereshaginsky urban district (UD)	7.283	28678.3	2327	31005.3	238797,8	1016.6	235
Gornozavodskiy urban district (UD)	10.333	33168.4	1417	34585.4	33879,8	1133.9	30
Gremyachinsky UD	0.283	30961.1	604	31565.1	9289,6	1034.9	9
Gubakha town	2.342	33508.6	1621	35129.6	76776	1151.8	67
Dobtyansky UD	2.358	41374.5	2389	43763.5	77322.4	1434.9	54
Ilyinsky	0.592	28075.9	1001	29076.9	19398.9	953.3	20
Kizel town	0.45	27150	1020	28170	14754.1	923.6	16
Krasnovyshersky UD	0.421	28748.4	1142	29890.4	13797.8	980	14
Krasnokamsky	1.908	34433.1	2852	37285.1	62568.3	1222.5	51
Kudymkar town	0.742	20627.7	1553	22180.7	24316.9	727.2	33
Kungur town	7.467	26691.8	2818	29509.8	244808.7	967.5	253
Lysvensky UD	0.392	28658.8	3046	31704.8	12841.5	1039.5	12
Nytvensky UD	2.242	28846.1	2394	31240.1	73497.3	1024.3	72
Oktyabrsky	0.775	29859.4	1735	31594.4	25409.8	1035.9	25
Osinsky UD	0.708	35019.3	1720	36739.3	23224	1204.6	19
Okhansky UD	0.708	23291.1	829	24120.1	23224	790.8	29
Ochersky UD	0.483	30479.6	1110	31589.6	15847	1035.7	15
Solikamsky UD	5.842	42384.9	3581	45965.9	191530.1	1507.1	127
Suksunsky UD	0.433	27001.9	971	27972.9	14207.7	917.1	15
Chaikovsky UD	2.275	37865.2	4639	42504.2	74590.2	1393.6	54
Cherdynsky UD	0.241	26341.9	1155	27496.9	7923.5	901.5	9
Chernushinsky UD	0.458	35045.5	3016	38061.5	15027.3	1247.9	12
Chusovskoy UD	0.775	29318.7	3350	32668.7	25409.8	1071.1	24

Based on the calculation of the population income distribution index, as well as on the data of official statistics in terms of average wages, on the number of employees of agricultural and industrial organizations, and on the information collected during the study of the wealthiest citizens of the territories, the following results were obtained (figure 2).

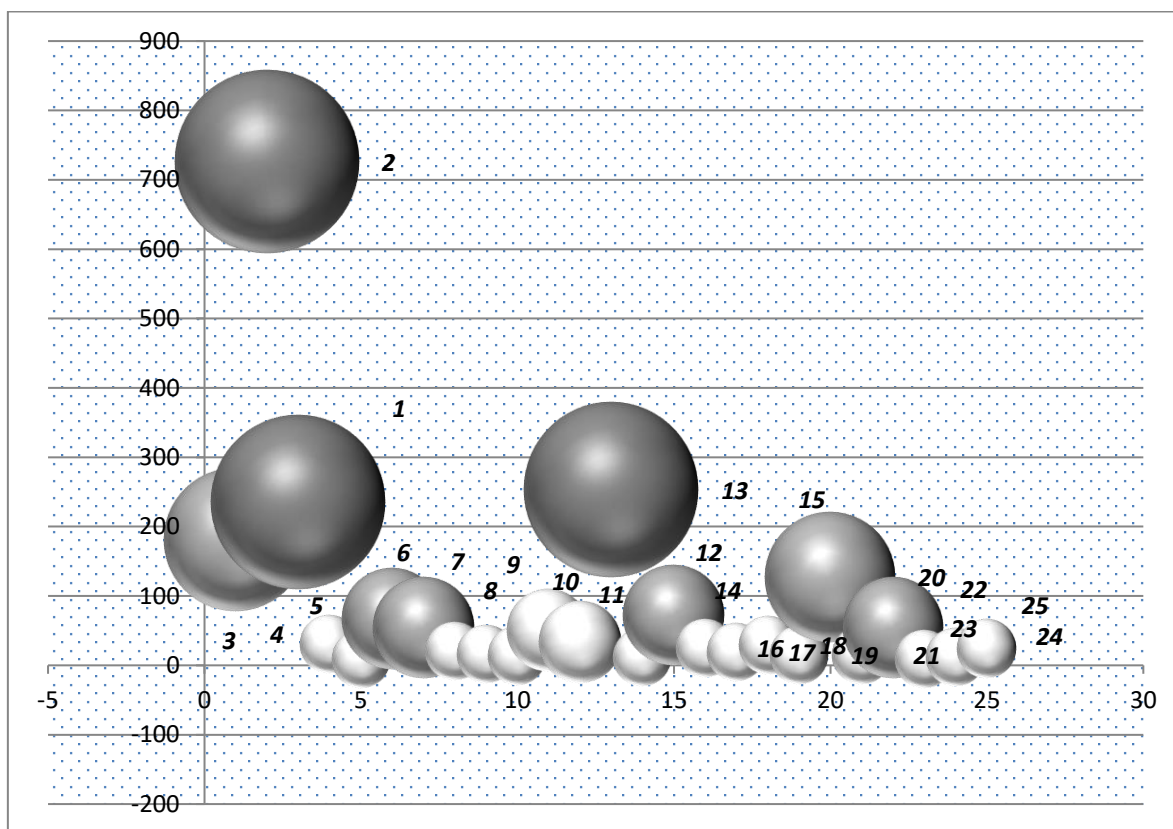


Figure 2. Inequality in the income distribution among the population the Perm Region territories. *Labelling. 1 - Perm city; 2 - Berezniki town; 3 - Vereshaginsky UD; 4 - Gornozavodsky UD; 5 - Gremyachinsky UD; 6 - Gubakha town; 7 - Dobryansky UD; 8 - Ilyinsky UD; 9 - Kizel town; 10 - Krasnovyshersky UD; 11 - Krasnokamsky UD; 12 - Kudymkar town; 13 - Kungur town; 14 - Lysvensky UD; 15- Nytvensky UD; 16 – Oktyabrsky; 17 - Osinsky UD; 18 - Okhansky UD; 19 - Ochersky UD; 20 - Solikamsky UD; 21 - Soksunsky UD; 22 - Chaikovsky UD; 23 - Chardynsky UD; 24 - Chernushinsky UD; 25 - Chusovskoy UD.

The following spatial and sectoral features in the economic development of agro-industrial and industrial territories of the Perm Region were diagnosed:

- asymmetry in favor of several industrialized territories (Perm, Berezniki, etc.);
- relatively even distribution of income in mono-industrial cities (Gubakha, urban districts of Nytva, Ocher, etc.);
- low incomes of the population in the territories of agro-industrial profile (Osinsky and Okhansky districts, etc.).

3. Conclusion

As a result of the analysis, it should be noted that for the most effective assessment of the economic development of the agro-industrial and industrial territories of the region it is necessary to use unallocated data in addition to statistical data, which ensures the integrity of the results of the procedures performed. In this regard, as a proposal, the thesis can be put forward about the need for regular monitoring of the following indicators: the income of the wealthiest citizens of the territories, the income of certain categories of the population (self-employed, registered with the employment services, etc.) and the use of the analysis results in the development and adjustment of strategies and plans for spatial and sectoral development of a specific constituent entity of the Russian Federation.

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