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**INTERREGIONAL DIFFERENTIATION OF SPATIAL
DEVELOPMENT**

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Abstract

The regional development of Russian regions is characterized by heterogeneity of all economic and social indicators. The uneven economic growth of the regions is a result of the ongoing economic reforms and economic changes. The economic and social potential allows the regions to develop economic sectors and has an important impact on interregional differentiation. The production component which forms an economic potential of the territory and can be assessed by the level of GRP per capita has a particular impact on spatial development. The social indicator differentiating the regions is the income level. An important factor of the economic and social development is the level of development of human capital which forms the economic potential of regions. The level of human capital development can be assessed by various methods using various indicators. In this article, the level of human capital development is assessed by the level of education. Interregional differentiation of the Russian regions is observed by most economic indicators. An array of Russian regions was formed. It allows for identification of the levels of inter-regional differentiation. The article determines regional heterogeneity and analyzes its dynamics.

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1. Introduction

At the present stage, the economic development of regions is characterized by high unevenness. Identification of factors and economic processes affecting regional stratification is an important research problem.

The study of the dynamics of interregional differentiation is a crucial issue. The article analyzes the level of development of Russian regions using various socio-economic indicators. Calculated coefficients of differentiation for a number of social and economic indicators evaluate regional development using different methods and approaches. The article analyzes the impact of GRP per capita, income level of the population and the educational potential of young people.

2. Problem Statement

The main problem of the study is differentiation of the Russian regions using economic and social indicators. The process of regional heterogeneity depends on the economic growth and institutional transformations of the economy which have a significant impact on the level of regional development and changes in interregional differentiation.

3. Research Questions

According to the official statistical data, there are significant differences in the level of socio-economic development, quality of life and welfare (Wei, 2015).

Transition to the market economy influenced the level of differentiation of the Russian regions. The result of market transformations was an increase in heterogeneity of the socio-economic development of the regions, observed in almost all statistical, economic and social indicators. The problem of regional differentiation existed before, however, the level of heterogeneity was smoothed out with the help of administrative levers (Alexeev & Chernyavskiy, 2018).

The uneven economic development of Russia has a pronounced regional focus: along with economically developed regions (Moscow, Tyumen Oblast, St. Petersburg) there are a large number of underdeveloped (depressed) territories (Chechen Republic, ...). In the Soviet era, there were interregional differences as well. The regional policies were aimed at gradual convergence of the levels of economic development of the regions and living standards of the population. In the post-reform period, the regulatory function of the state weakened which intensified interregional differentiation (Druzhinin, 2013; Tambovtsev, 2018).

Social and economic inequality of the Russian regions is determined by a number of objective factors: the uneven level of regional development during the period of structural transformations, the different level of investment attractiveness, differences in the institutional component of the territory, differences in the economic and geographical location and innovation potential. These and many other factors influence the dynamics of development of the Russian regions and affect the level of interregional differentiation (Glinskiy, Serga, Novikov, Litvintseva, & Bulkina, 2017).

These factors have an impact on the regional development, its dynamics and the degree of stratification. For example, infrastructural problems increase the number of regions which are remote from the economic centers which reduces growth opportunities.

4. Purpose of the Study

The main purpose of the study is to analyze differentiation of the regions of Russia. The research object is the Russian regions, and the research subject is interregional differentiation.

The goal involves a number of tasks. The dynamics of development of the Russian regions and their differences are determined using the entropy coefficients.

5. Research Methods

The statistical base is the data provided by the Russian Statistics Agency. The source of statistical information was the collection “Regions of Russia” for a ten-year period. The sample consists of Russian regions, and economic and social indicators for 1990–2015. To solve the problems, a database of statistical data on Russian regions for the period under study was formed. The statistical database is also a database of economic and social indicators created by the authors. The indicators are estimated at current prices 1994–2015 in million rubles. The study will help understand how the level of interregional differentiation has changed over 15 years, and what factors have influenced this process (Moroshkina, 2016).

The period under study is 15 years. It is a long period during which the economic processes and the system of statistical have changed. These processes affect the quality of statistical information. The problem of reliability of statistical data exists at the level of the Russian Federation and at the level of Russian regions. The authors used the statistics provided by the State Statistics Committee.

6. Findings

As part of the study, changes in the GRP per capita were analyzed. The groups of leading and lagging regions were identified. The ranking of regions allowed us to determine those ones which have advantages in economic development (Table 01).

Table 01. Polar groups of regions by GRP per capita in 1995-2016

Regions	1995	1998	2002	2006	2010	2014	2016
Leading group							
Tyumen Oblast	34421,4	63325,5	275623	773076	973333	1453073	1627945,9
Sakhalin Oblast	10490,5	21328	85927,4	321109	977256	1620313	1575642,6
Moscow	16611,7	42944,6	171128	477873	730774	1053950	1157373,0
Lagging group							
Karachay-Cherkessia	3903	6525,1	23297,3	50778,7	91782,3	147396,9	156 602,4
Kabardino-Balkaria	3325,8	7952,4	25369,9	50225,2	89668,3	137437,3	153 710,9
Ingushetia	1940,4	3435,8	7751,7	21922,4	48239,2	113791,2	106 756,6

Note: * Source: State Statistics Committee of, compiled by the authors

* The data are presented at an intervals of 4 years, 1995, 2016

Moscow is in the leading group of regions due to a high rate of adaptation to market conditions. Moscow formed market institutions very quickly. Due to availability of basic business tools, the highest growth rates of most economic indicators are observed in large industrial and financial centers. The capital has adapted to the new conditions which allowed it to develop at a higher rate. Another advantage of the metropolis is the level of development of the infrastructure component, which is significantly higher than in other regions (Zubarevich & Safronov, 2013).

Changes in the economic situation modify the composition of the leading group. During this period, foreign economic cooperation is of particular importance for regional development which allows the regions to use available natural and production resources to form cross-border relations. As a result, the favorable location turns out to be a factor contributing to economic growth, and regions with a favorable geographical position are among the leading regions by most economic indicators (for example, Murmansk Oblast and the Republic of Karelia).

For lagging regions, the situation does not change. Regions with a low level of regional development are those where there is no industrial, competitive production, and existing enterprises produce low-quality products. These regions are “subsidized”, they require special measures for economic development (Dagestan, Adygea, Kabardino-Balkaria, etc.).

The study of the dynamics of GRP in the Russian regions revealed a significant development gap between the regions with the raw material structure of the economy and the regions focused on light industry and agriculture (Druzhinin, 2013).

We can conclude that the raw material producing regions have higher rates of growth of GRP per capita. Unlike the regions that have no raw materials and specialized in mechanical engineering, instrument engineering and other industries with long technological cycles and complex economic interconnections, these regions are characterized by high growth rates. The dynamics of changes in the volume of GRP per capita is significantly affected by the structure of the regional economy. This is due to the fact that transformation of the economic system had a negative effect on the competitiveness of Russian producers in the domestic and foreign markets and decreased the volume of production of goods and services. It caused the heterogeneous development of Russian regions (Alexeev & Chernyavskiy, 2018).

Social differentiation of Russian regions can be measured (Zubarevich & Safronov, 2013; Lyytikäinen & Kempainen, 2016). Regional differences in birth and death rates, population aging, migration outflow from peripheral regions into economic centers are measured (Karachurina, 2006; Tolstoguzov & Pitukhina, 2018). However, the results of these studies do not reveal differences in the age structure of the population, levels of educational and professional competence of the working population.

To assess the differentiation of Russian regions by demographic and educational factors, we used the data of the All-Russian population census whose method represents a regional slice of the data on the age structure of the population by the level of education. These indicators show the number of groups of peers, help compare and identify regions with different levels of educational potential of the population. Using age characteristics for 83 regions of the Russian Federation, three generation groups of young people were selected - Next (15-24 years old), Actor (25-34 years old) and Creator (35-44 years old). According to the number of young generation with a certain level of education per 10,000 people and the change in the number of young generation during the period between population censuses (in 2010 compared to

2002), the growth rate of educational potential was calculated; the regions were ranked by the degree of concentration of generation groups of young people with a certain level of education (Potasheva & Moroshkina, 2018).

By the differences in the level of educational potential, we identified uneven spatial concentration of different generation youth groups and the vector of interregional migration directed towards the economic centers. Let us consider some differences in the educational potential of young people between the regions of the Russian Federation:

- numerical superiority of the generation group Actor (25-34 years old) in 55 regions, and the share of young people with academic degrees increases - in St. Petersburg, 41 people in 2010 against 25 in 2002;
- regions leading by the rate of growth of the educational potential of young people are Leningrad and Moscow regions, Moscow and St. Petersburg, and Karachay-Cherkessia and Dagestan (the growth rate is 20%);
- outsiders where there is a catastrophic outflow of young people: Volgograd region (in 2010, the number of young people leaving the region increased by 70% compared to 2002); Rostov region and North Ossetia (the number of young people leaving the region increased by 40%);
- territorial clusters of concentration of young people with medium and high levels of educational potential are agglomerations of large cities (some regions of the North Caucasus, the Urals, Eastern Siberia and the Far East (Potasheva & Moroshkina, 2018).

7. Conclusion

The Russian regions were classified and ranked. In 1990, at the initial stage of the market reforms, the regions specialized in raw materials production (Tyumen Oblast, Sakhalin Oblast, etc.) had a high level of GRP per capita. Liberalization of the economy and development of market institutions changed the composition of the leading group: not only regions with raw materials production appeared in this group. Economic development was influenced by a favorable geographical position (Murmansk region), government support of entrepreneurship, etc.

Differentiation of regions by the level of educational potential of young people may have a negative impact on regional labor markets, since interregional migration of young people to the economically active centers of the country will cause a disastrous outflow of the working population. The accumulated educational potential of young people is not sufficiently transformed into the welfare and competitiveness of regional economies, higher education is underused.

Contrary to global trends, the growth of the educational potential is accompanied by an increase in regional differentiation.

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