



Socio-economic Development of Regions of Russia: Assessment of the State and Directions of Improvement

**Ljudmila Romanovna Slepneva¹, Dashi Dashanimaevich Tsyrenov^{2*}, Anna Andreevna Kokorina³,
Julija Valer'evna Slepneva⁴, Irina Sergeevna Munkueva⁵**

¹East Siberia State University of Technology and Management, 40V Klyuchevskaya ul, 670013 Ulan-Ude, Russia,

²Buryat State University, 24a Smolin Street, 670000 Ulan-Ude, Russia, ³East Siberia State University of Technology and Management, 40V Klyuchevskaya ul, 670013 Ulan-Ude, Russia, ⁴East Siberia State University of Technology and Management, 40V Klyuchevskaya ul, Ulan-Ude, Russia, 670013, ⁵Buryat State University, 24a Smolin Street, 670000 Ulan-Ude, Russia.

*Email: dashi555@mail.ru

ABSTRACT

The article is devoted to the development of an effective method of assessing the level of socio-economic development of regions. On the basis of generalization of existing approaches (expert assessments and rating, calculation of individual analytical and complex (generalizing) values, determination of the system of quantitative and qualitative characteristics, the calculation of integrated indicators and indices), there is suggested the authors' method of estimating the level of socio-economic development of regions. The main distinction of the refined authors' methodology is the use of a limited number of indicators (five indicators of the economic development and five indicators of the social development), objectively characterizing the state and dynamics of the economic and social processes taking place in the regions. The result of the calculation with the use of the revised methodology is the indicative assessment of the level of economic and social development, on which a matrix is constructed that allows to determine the type of the region and acceptable strategic directions for the foreseeable future. In the paper, comparative characteristic of the socio-economic development of regions of Russia on an example of the Siberian Federal District (SFD) is presented, there are identified regions - regions-leaders and "problematic" regions. Typology matrix of the regions of the SFD in terms of social and economic development is elaborated. It is shown that for each group of regions, similar directions of socio-economic development can be applied.

Keywords: Differentiation of Regions, Regional Asymmetry, Social and Economic Development

JEL Classifications: R11, O18

1. INTRODUCTION

For Russia, as for most countries of the world with numerous administrative-territorial division, it is characteristic an intrinsic property of territorial systems - The uneven socio-economic development of its member regions. On the one hand, this circumstance is predetermined by a number of objective reasons, including a unique variety of climatic and environmental conditions, a large territorial extension and a significant differentiation in the natural-resource potential, which creates prerequisites for the territorial socio-economic unevenness. On the other hand, the destructive effects of layering regional policy implemented in the past two or three decades contribute to the

strengthening of the differences in the level and quality of life, lead to the reduction of the efficiency of the production complex and under-use of the economic potential of individual regions.

The complexity of solving the problem is outlined in its internal contradiction, because disregard or a weak "alignment" of socio-economic development of the regions, in the end, leads to an increase of tension in the society (mainly in "problematic" areas); as well as excessive interference violating the principles of economic freedom and independence of the regions and negatively impacting motivation for accelerated economic growth (mainly in the leading regions). What is listed above actualizes the problem of analyzing the admissibility of uneven socio-economic

development of regions, improvement of the methodology for assessing the degree of territorial differentiation, and finding ways of effective “alignment.”

Under the current asymmetry in the socio-economic development of regions, improvement of the assessment methodology is aimed at finding an effective analytical tool of state policy, ensuring the accuracy of the analysis of the current situation, the objectivity of inter-regional comparisons, and strategic vision in determining the perspective directions of leveling regional disparities. The task is complicated by the influence of a large number of factors and conditions on the socio-economic development of the regions, the direct and indirect effects of these impacts should be taken into account. All of the above underlines the complexity and ambiguity of the identified problem and at the same time - the timeliness and relevance of its solutions.

The aim of the study is clarification of the methodology, the assessment of the level and search for directions of socio-economic development of regions in the conditions of contemporary Russia. In accordance with the aim, there are identified and addressed the following tasks:

- On the basis of generalization of existing techniques, to develop a revised methodology for assessment of socio-economic development of regions.
- To conduct a comparative analysis of Russia's regions in terms of socio-economic development.
- To elaborate the directions of socio-economic development of regions in each group.

2. METHODOLOGY

2.1. Analysis of Existing Methodologies for Assessment of the Levels of Socio-economic Development of Regions

Scientific-practical task of improving the methodology and evaluation of the level of socio-economic development of regions is not new. In modern economic literature, there is presented a variety of methodical approaches to measuring the size and assessing the dynamics of indicators characterizing socio-economic development of regions, based on the use of expert assessment and rating, calculation of the particular analytical and complex (generalizing) values, definition of the system of quantitative and qualitative characteristics, calculation of the integral indices and indicators, etc.

2.1.1. Methodology of comprehensive assessment of the level of socio-economic development of regions

The technique, developed by the Ministry of Economic Development of the Russian Federation, is based on the calculation of a large number of factors, including: The gross regional product per capita, the average per capita financial security in the region with consideration of the purchasing power parity, the percentage of the average number of workers employed in small enterprises, the registered unemployment rate, and many others. The main disadvantage of the methodology of the complex assessment of socio-economic development of regions is a difficulty in its practical application, due to the complexity of collecting and

processing the vast array of statistical data. However, as it is rightly pointed by Skotarenko, at a comprehensive assessment, it is necessary to take into account the fact that one part of the indicators has a direct impact on living standards and socio-economic sphere (e.g. income and expenses of consolidated budget, the value of the gross regional product, the volume of investment in fixed assets, etc.) and characterizes the current level of economic and social development; the other part - has no direct effect and does not allow to judge the overall level of socio-economic development (for example, the number of graduates from universities and secondary schools, provision of population with outpatient clinics, etc.) (Skotarenko, 2013). Ultimately, it makes the methodology of complex assessment of the level of socio-economic development of regions unnecessarily cumbersome and somewhat non-informative.

2.1.2. The modified methods of a complex assessment of the level of socio-economic development of regions

In order to eliminate mentioned above shortcomings of the methodology developed by the Ministry of Economic Development of the Russian Federation, many scholars and practitioners have suggested to reduce the number of indicators or replace (merge) part of the indicators with more informative ones, reflecting the current level of socio-economic development of the regions. So, Skuf'ina and Baranov justify the use of 9 indicators (Skuf'ina and Baranov, 2005), Samarina - 5 (Samarina, 2008), Girina limits a complex assessment of the level of socio-economic development to the three groups of indicators (Girina, 2013), etc. Of course, this simplifies the calculation, however, does not eliminate the time-consuming process of collecting and processing a large volume of statistical data. At the same time, utilization of complex assessment often does not envisage the calculation of the final synthesis or integral index, which hampers interregional comparisons.

2.1.3. Method of rating and construction of integral index

Solving the problem of reducing the system of indicators to the calculation of one generalizing indicator is facilitated by the use of rating and construction of integrated indexes.

For example, the method of calculation of the ranking of regional development, estimated on 15 statistical indicators, allows to judge the socio-economic situation and to conduct inter-regional comparisons. The model of rating assessment helps to identify objective differences between regions according to the level of development and quality of life caused by the geopolitical situation, economic and historical features (Gonova, 2012). However, it should be noted that the rating of the region depends on subjectively selected set of socio-economic indicators and may considerably vary for the same region when different sets of indicators are used.

For rapid comparative assessment of the socio-economic situation of the regions, the Council for Study of Productive Forces developed a method of integrated assessment based on the generalization of the 16 factorial characteristics, combined into four functional units: The production process; innovation and infrastructure capacity; Investment and financial capacity; the state of the social sphere. The reduction of the different-size factorial characteristics into the

integral index is suggested to conduct according to the formula of a multidimensional medium (Grishina and Polynev, 2012). A similar approach is used in the work by Pashnanova where for the evaluation of the integral coefficient there are used macroeconomic indicators characterizing socio-economic development of regions (Pashnanova, 2012). However, the main drawback of the calculation of integral index (indicator) is that the resultant value depends on the set of factor characteristics and not always objectively reflects the level of socio-economic development of regions.

Ultimately, the use of rating and construction of integrated indexes is not conducive to a simple and objective assessment of the level of socio-economic development of regions and can lead to making erroneous decisions regarding determination of directions of regional policy.

In modern literature, one can find other techniques and instruments for measurement of the level of socio-economic development of regions, which allow to assess the state, to conduct inter-regional comparisons and, in some cases, and to identify promising directions (Feraru and Orlov, 2014; Gerasimova, 2010; Zubarevich, 2007; Lavrovsky, 1999). Mentioned above and other techniques and tools, of course, represent high value, both in research and in practical terms. However, their diversity and the differing methodological approaches to the evaluation underline the fact that this problem does not have a universal and obvious solution.

2.2. The Refined Method of Assessment of the Level of Socio-economic Development of Regions

Proposed by the authors refined method of assessing the level of socio-economic development of regions, on the one hand, is oriented on the use of a limited number of indicators objectively characterizing the state and dynamics of economic and social processes taking place in the regions, and on the other hand, it takes into account the advantages and disadvantages of existing techniques.

Algorithm of phased assessment of the level of socio-economic development of regions involves the following steps.

2.2.1. Collection and analysis of indicators characterizing the level of economic and social development of regions

Indicators, quantitatively reflecting the level of economic and social development, can be applied to the dynamics of the analyzed period (for a detailed analysis of the processes, identification of the causes and factors contributing to it) as well as in the context of 1 year (for inter-regional comparisons) (Table 1).

2.2.2. Quantitative assessment of regional asymmetries in terms of socio-economic development

Analysis of the modern economic literature has shown the variety of approaches which allow to assess the scope of regional asymmetry: The ratio of the maximum and minimum values that allows to estimate the regional unevenness only by extreme values of the interval; the standard deviation showing the magnitude of deviation of the analyzed characteristic from its simple average; coefficient of stratification and quantile scale of variations, characterized by the complexity of calculations, and measuring

Table 1: The system of indicators characterizing the level of economic and social development of the regions

| Name of the level of assessment | Name of assessment indicators |
|---------------------------------|---|
| Level of economic development | Per capita gross regional product Per capita volume of shipped goods services of own production Per capita investments in fixed capital Per capita retail trade turnover Per capita agricultural output |
| Level of social development | Level of economic activity Per capita income Per capita consumer spending The ratio of per capita income and a living wage Level of unemployment |

differentiation in dynamics (Antokhonova, 2004; Kuzyk et al., 2011).

In the revised methodology, it is proposed to use the ratio of the analyzed indicators for each region to its simple average in the group. This ratio is characterized by simplicity of calculation, it gives an objective assessment of not only the extreme values of the interval, but of each analyzed region, it is measured in fractions of a unit.

To calculate the level of economic and social development, it is applied the function of calculation of the root of the fifth degree of the product of the ratio of each indicator to its simple average in the group.

2.2.3. Typology of regions in terms of socio-economic development

Based on the quantitative assessment of the level of economic and social development, there should be built a matrix allowing to group analyzed regions into nine groups. The division of regions based on the detection of non-uniformity and cyclical development, noted by many researchers and practitioners (Fedorov and Kurakov, 1998; Klebanova and Kizim, 2012), allows to conduct more detailed differentiation (Table 2).

2.2.4. Elaboration of social and economic development, acceptable for each group of regions

For regions outside the 4, 5, 6 groups, where the socio-economic situation is characterized by a substantial backlog of economic development compared to the level of social development, it is necessary: To promote the development of small and medium-sized businesses; to provide conditions for the formation of favorable business and investment climate; to create new and develop existing institutions in the sphere of protection of property rights.

Regions, included in 7, 8, 9 groups, are characterized by a significant backlog of social development, so they need to: Ensure the availability and quality of basic social goods and services (health care, culture, sports, education); formation of economic conditions that guarantee a decent level of social consumption for population; the creation of new and expansion of existing institutions in the socio-cultural sphere. Exceptional situation

has been formed in the regions of the groups 2 and 3, where it is necessary to carry out activities simultaneously aimed at improving as economic as social development.

3. RESULTS

Siberian Federal District (SFD) is selected as the object of study since it has a large territory and plays an important role in the economy of the country; it has high industrial, scientific, technical and natural resource potential. SFD was established in May 2000, it brings together 12 subjects, including 4 republics - Altai, Buryatia, Tuva and Khakassia; 3 territories - Altai, Zabaikalsky and Krasnoyarsk; 5 regions - Irkutsk, Kemerovo, Novosibirsk, Omsk and Tomsk.

Regions of the SFD are uneven according to the occupied territory. Thus, a substantial part of the territory of the SFD (46%) is occupied by Krasnoyarsk territory, the smallest part (1.2%) - by the Republic of Khakassia. The population density is also uneven with the maximum value - of 30 people per km². (Kemerovo region) and the minimum value - 1.85 people per km². (Tyva Republic). On average, the population density in SFD is about 4 people per km², which is almost twice lower than the Russian average (8.4%).

Currently, the population of the SFD exceeds 19 million. People (about 13.5% of the country's population). Approximately 80% of

the district's population lives in the half of the regions of SFD. The highest number of population of the district (15%) is observed in Krasnoyarsk territory, the lowest (just over 1%) - in Altai Republic.

In the structure of the population according to the criterion of residence the largest share belongs to urban dwellers (72%). The highest proportion of the urban population is characteristic for Kemerovo region (more than 85% of the region's residents), the lowest - for the Republic of Altai (<28% of the region's residents).

Analysis of the dynamics of the gross regional product (GRP) shows its growth in all regions of the SFD. The regions - leaders in GRP per capita are the Krasnoyarsk territory, Tomsk and Irkutsk regions. The minimum value of GRP per capita is noted in the Republic of Tuva, the Republic of Altai and Altai territory. The discrepancy between the maximum (in Krasnoyarsk territory) and the minimum (in the Republic of Tyva) values of GRP per capita is about 3.5 times, which indicates significant regional differences in the level of economic development (Table 3).

The largest per capita volumes of shipped goods and services of own production are marked in Krasnoyarsk, Omsk and Kemerovo regions, where there are well-developed industries such as mining, manufacturing, production and distribution of electricity, gas and water; the lowest - in the Republic of Altai and the Republic of Tyva, where these industries are poorly developed. The ratio

Table 2: Matrix of typology of regions in terms of economic and social development

| | Level of economic development | | |
|-----------------------------|---|---|--|
| | High | High | Low |
| Level of social development | | | |
| High | 1 Regions with high economic and social development | 4 Regions with medium economic and high social development | 6 Regions with low economic and high social development |
| High | 7 Regions with high economic and medium social development | 2 Regions with medium economic and social development | 5 Regions with low economic and medium social development |
| Low | 9 Regions with high economic and low social development | 8 Regions with medium economic and low social development | 3 Regions with low economic and social development |

Table 3: Area of the territory and the population of regions of the SFD

| Name of the region | Area of the territory | | Population on January 1, 2014 | | GRP in 2013 | |
|------------------------|-----------------------|---------------------------|-------------------------------|---------------------------|----------------|---------------------------|
| | Th. km ² | Specific weight in SFD, % | Th. people | Specific weight in SFD, % | Million rubles | Specific weight in SFD, % |
| SFD | 5145.0 | 100 | 19292.7 | 100 | 5147402.3 | 100 |
| Republic of Altai | 92.9 | 1.81 | 211.6 | 1.09 | 29615.9 | 0.58 |
| Republic of Buryatia | 351.3 | 6.83 | 973.9 | 5.05 | 167038.1 | 3.25 |
| Republic of Tyva | 168.6 | 3.28 | 311.7 | 1.62 | 37653.0 | 0.73 |
| Republic of Khakassiya | 61.6 | 1.20 | 534.1 | 2.77 | 130685.7 | 2.54 |
| Altai territory | 168.0 | 3.26 | 2390.6 | 12.39 | 370554.7 | 7.20 |
| Zabaikalsky territory | 431.9 | 8.39 | 1090.4 | 5.66 | 225504.2 | 4.38 |
| Krasnoyarsk territory | 2366.8 | 46.00 | 2852.8 | 14.79 | 1192648.5 | 23.17 |
| Irkutsk region | 774.8 | 15.06 | 2418.3 | 12.53 | 743764.1 | 14.45 |
| Kemerovo region | 95.7 | 1.86 | 2734.1 | 14.17 | 717700.0 | 13.94 |
| Novosibirsk region | 177.8 | 3.46 | 2731.2 | 14.16 | 659543.7 | 12.81 |
| Omsk region | 141.1 | 2.74 | 1973.9 | 10.23 | 498522.8 | 9.68 |
| Tomsk region | 314.4 | 6.11 | 1070.1 | 5.54 | 374171.6 | 7.27 |

SFD: Siberian Federal District

between the maximum (in the Krasnoyarsk Territory) and the minimum (in the Altai Republic) value of the analyzed indicator is about 1.5, which indicates a significant regional differentiation.

High volume of investments in fixed capital indicates the investment directivity, frequent technical and technological re-equipment of enterprises and is marked in Krasnoyarsk, Tomsk and Kemerovo regions. Low investment in fixed capital is an indicator of weak investment activity, and it is noted in Altai territory, the Republic of Tyva and the Republic of Buryatia. The maximum value of the analyzed indicators (in the Krasnoyarsk Territory) more than three times is higher than the minimum value (in the Republic of Tyva) in the analyzed range. The latter circumstance confirms the significant differentiation of the regions of the SFD according to the achieved level of economic development (Table 4).

For regions with developed commodity markets and relatively high incomes of the population it is characteristic significant per capita retail trade turnover. Regions - leaders of per capita retail trade turnover are the Krasnoyarsk territory, Novosibirsk and Omsk regions. The lowest per capita retail trade turnover is registered in the Republic of Tyva (less than half compared with the average

value of the SFD) and in the Republic of Altai (about 1.5 times less than the average of the SFO). This fact is an evidence of significant regional differences in the level of economic development.

In terms of per capita agricultural production, traditionally, the leading regions are the regions with agricultural focus, including the Altai territory, the Republic of Altai and Omsk region. The lowest per capita volume of agricultural products is registered in the Republic of Buryatia, Kemerovo region and the Zabaikalsky territory. The discrepancy between the maximum (in Altai territory) and minimum (in the Republic of Buryatia) value is more than 3 times, which confirms the significant regional differences in the level of economic development.

Calculation of the ratio of the analyzed indicators to their average in the regions of the SFD allowed to identify regions with high levels of economic development, including Krasnoyarsk territory, Omsk and Kemerovo regions, where on the four of the five indicators it is observed an excess. In three regions on the three indicators it is observed an excess over the average value (Tomsk, Novosibirsk and Irkutsk regions). In two regions (the Republic of Tyva and Zabaikalsky territory), the value of all indicators is below the average for the SFD (Table 5).

Table 4: Indicators of the level of economic development (for the year of 2013)

| Name of the region | Per capita GRP, rubles | The volume of shipped goods and services of own production, rubles | Per capita investments in fixed capital, rubles | Retail trade turnover per capita, rubles | Per capita agricultural output, rubles |
|------------------------|------------------------|--|---|--|--|
| Republic of Altai | 139961.7 | 22991.5 | 55682 | 83988 | 41625.7 |
| Republic of Buryatia | 171514.6 | 100767 | 40712 | 134060 | 14579.5 |
| Republic of Tyva | 120798.8 | 24828.4 | 40665 | 54096 | 17398.1 |
| Republic of Khakassiya | 244684 | 230559.8 | 57067 | 113937 | 21089.7 |
| Altai territory | 155004.9 | 103496.6 | 38807 | 118096 | 47997.6 |
| Zabaikalsky territory | 206808.7 | 86059.2 | 48452 | 116140 | 16413.2 |
| Krasnoyarsk territory | 418062.4 | 371736.2 | 129594 | 162148 | 24597.2 |
| Irkutsk region | 307556.6 | 263382.1 | 70587 | 110126 | 20719.5 |
| Kemerovo region | 262499.5 | 332846.6 | 78751 | 125935 | 16224.7 |
| Novosibirsk region | 241485 | 143653.3 | 64182 | 159368 | 24302.1 |
| Omsk region | 252557.3 | 338071.3 | 53175 | 149230 | 38635.7 |
| Tomsk region | 349660.4 | 275677 | 95612 | 110583 | 21534.4 |
| Average value SFD | 239216.2 | 191172.4 | 64440.5 | 119808.9 | 25426.45 |

SFD: Siberian Federal District

Table 5: The level of economic development of regions of the SFD

| Name of the region | The ratio of the analyzed index to its average value for the SFD | | | | | The level of economic development |
|------------------------|--|--|---|----------------------------------|--------------------------------|-----------------------------------|
| | Per capita GRP | The volume of shipped goods and services of own production | Per capita investments in fixed capital | Retail trade turnover per capita | Per capita agricultural output | |
| Republic of Altai | 0.585085 | 0.120266 | 0.864084 | 0.701016 | 1.637102 | 0.59 |
| Republic of Buryatia | 0.716986 | 0.5271 | 0.631777 | 1.118948 | 0.573399 | 0.69 |
| Republic of Tyva | 0.504978 | 0.129874 | 0.631047 | 0.451519 | 0.684252 | 0.42 |
| Republic of Khakassiya | 1.022857 | 1.206031 | 0.885577 | 0.950989 | 0.829439 | 0.97 |
| Altai territory | 0.64797 | 0.541378 | 0.602214 | 0.985703 | 1.887704 | 0.83 |
| Zabaikalsky territory | 0.864526 | 0.450165 | 0.751887 | 0.969377 | 0.645517 | 0.71 |
| Krasnoyarsk territory | 1.747634 | 1.944508 | 2.011064 | 1.353388 | 0.967386 | 1.55 |
| Irkutsk region | 1.285685 | 1.37772 | 1.095383 | 0.91918 | 0.81488 | 1.08 |
| Kemerovo region | 1.097332 | 1.741081 | 1.222073 | 1.051132 | 0.638103 | 1.09 |
| Novosibirsk region | 1.009484 | 0.751433 | 0.995989 | 1.330185 | 0.95578 | 0.99 |
| Omsk region | 1.05577 | 1.76841 | 0.82518 | 1.245567 | 1.519508 | 1.24 |
| Tomsk region | 1.461692 | 1.442033 | 1.483725 | 0.922995 | 0.846929 | 1.20 |

SFD: Siberian Federal District

Analysis of indicators characterizing the level of social development also shows significant regional differentiation. So, the highest value in economic activity observed in the Omsk region (over 69%), the lowest - in the Republic of Tyva (almost 58%). The discrepancy is about 12 percentage points, which is significant because it reflects the share of economically active population and, finally, describes the tension on the labor market of regions.

Average monthly per capita incomes vary by regions of SFD almost 1.85 times with the maximum in the Krasnoyarsk region and the minimum - in the Republic of Tyva.

High per capita consumer spending is observed in Krasnoyarsk territory, Novosibirsk and Omsk regions; lowest - in the Republic of Tyva and Altai. The ratio of the highest and least per capita consumer spending is more than three times.

In almost all regions of the SFD there is a significant excess of the per capita income over per capita cost of living, while in the Omsk region it exceeds 400%, in the Republic of Tyva - slightly below 200%.

The registered unemployment rate is usually higher in the areas where low indicators and undesirable tendencies in the social sphere

are recorded (the Republic of Altai and Tyva), and lower in those regions where the social situation is characterized as relatively prosperous (Novosibirsk region, Republic of Buryatia and Omsk region). Considering this fact, in calculating the level of social development, this indicator is used as a reverse one (Table 6).

Calculation of the level of social development suggests a relatively stable and prosperous social environment in Novosibirsk and Omsk regions, Krasnoyarsk territory, where almost all the indicators characterizing social development exceed the average value of the SFD.

Somewhat tense social situation is in Irkutsk, Kemerovo and Tomsk regions, Republics of Khakassia and Buryatia. For these regions, it is inherent equality or excess of the majority of indicators characterizing social development over its average value across the SFD (Table 7).

Difficult, but not a crisis social situation, is in the Republic of Tyva, where all indicators characterizing social development, are substantially smaller than the average value across of the SFD. The situation is especially complicated by the superimposition of two negative trends: A relatively high level of unemployment and its

Table 6: Indicators of the level of social development (for 2013)

| Name of the region | Level of economic activity, % | Per capita income per month, ruble | Consumer spending on average per capita per month, ruble | The ratio of per capita income and per capita living wage, % | The level of unemployment (at the end of year), % |
|---------------------------|-------------------------------|------------------------------------|--|--|---|
| Republic of Altai | 67.7 | 14752 | 8764 | 241.8 | 2.4 |
| Republic of Buryatia | 63.8 | 20785 | 15058 | 324.7 | 1.1 |
| Republic of Tyva | 57.7 | 13472 | 6090 | 199.2 | 4.9 |
| Republic of Khakassiya | 65.8 | 17876 | 12408 | 295.8 | 1.5 |
| Altai territory | 62.6 | 15979 | 12546 | 312.2 | 2.0 |
| Zabaikalsky territory | 64.8 | 19886 | 13128 | 310.4 | 1.9 |
| Krasnoyarsk territory | 68.8 | 24922 | 18202 | 351.3 | 1.3 |
| Irkutsk region | 68.5 | 19425 | 12674 | 307.2 | 1.4 |
| Kemerovo region | 67.7 | 19697 | 13892 | 332.1 | 1.7 |
| Novosibirsk region | 68.7 | 22597 | 18051 | 342.6 | 1.1 |
| Omsk region | 69.3 | 21364 | 16223 | 411.5 | 1.2 |
| Tomsk region | 62.6 | 20430 | 13285 | 311.5 | 1.7 |
| Average value for the SFD | 65.67 | 19265.42 | 13360.08 | 311.69 | 1.85 |

SFD: Siberian Federal District

Table 7: The level of social development of the regions of the SFD

| Name of region | The ratio of the analyzed indicator to the average across the SFD | | | | | Level of social development |
|------------------------|---|---------------------------|--------------------------------------|--|-----------------------|-----------------------------|
| | The level of economic activity | Per capita monthly income | Per capita monthly consumer spending | Ratio of per capita income and living wage | Level of unemployment | |
| Republic of Altai | 1.030912 | 0.765724 | 0.655984 | 0.775771 | 0.770834 | 0.79 |
| Republic of Buryatia | 0.971524 | 1.078876 | 1.127089 | 1.04174 | 1.681817 | 1.16 |
| Republic of Tyva | 0.878636 | 0.699284 | 0.455836 | 0.639097 | 0.377551 | 0.58 |
| Republic of Khakassiya | 1.00198 | 0.92788 | 0.928737 | 0.94902 | 1.233333 | 1.00 |
| Altai territory | 0.953251 | 0.829414 | 0.939066 | 1.001636 | 0.925 | 0.93 |
| Zabaikalsky territory | 0.986752 | 1.032212 | 0.982629 | 0.995861 | 0.973684 | 0.99 |
| Krasnoyarsk territory | 1.047663 | 1.293613 | 1.362417 | 1.127081 | 1.423076 | 1.24 |
| Irkutsk region | 1.043094 | 1.008283 | 0.948647 | 0.985595 | 1.321428 | 1.05 |
| Kemerovo region | 1.030912 | 1.022402 | 1.039814 | 1.065482 | 1.088235 | 1.05 |
| Novosibirsk region | 1.04614 | 1.172931 | 1.351115 | 1.099169 | 1.681817 | 1.25 |
| Omsk region | 1.055276 | 1.10893 | 1.214289 | 1.320222 | 1.541666 | 1.24 |
| Tomsk region | 0.953251 | 1.060449 | 0.99438 | 0.99939 | 1.088235 | 1.02 |

SFD: Siberian Federal District

growth in recent years; a high proportion of consumer spending and its steady rise.

The level of social development in the Republic of Altai, Altai and Zabaikalsky territories is slightly higher compared with the Republic of Tyva, but also requires the adoption of measures to improve the social situation.

By the method of equal interval division, the SFD regions are allocated into nine groups. The group of high level socio-economic development includes Krasnoyarsk territory and Omsk region; the group of low level development - the Republic of Tyva (Table 8).

The most numerous was the group of regions with an average level of socio-economic development, including the 7 regions (or almost 58% of the total number of the analyzed regions).

4. DISCUSSION

The SFD is a large territorial unit, which includes the regions differing significantly in the economic structure, and the standard and quality of life. For this reason, the SFD regions strongly differentiate in terms of economic and social development. It should be noted that according to many experts Zencheva and Gerasimov, 2005) significant socio-economic differentiation is inherent to other regions of the country.

Analysis of the socio-economic development of regions of the SFD allowed to identify general and specific problems and threats, priorities and perspectives.

The main common challenges and threats include: A significant lag of economic growth in the most regions behind the national average; narrow diversification of the economy of several regions that promotes resource orientation; a significant distance from the economically developed western regions and the harsh climatic conditions which conduce an increase of the cost of living, of the costs of ongoing economic activity, of the construction costs; low transport development and the underdevelopment of domestic linkages, which conduce orientation of the economy in most regions on the external markets; low investment attractiveness and unfavorable institutional environment promoting the export of capital to the developed western regions of Russia and abroad. This fact leads to a shortage of financial resources, limited investment opportunities for economic development and improvement of the social conditions (Table 9).

Specific problems and threats are similar to regions belonging to the same group that gives ground to the formation of unidirectional priorities and prospects (Slepneva and Chebunina, 2012; Slepneva and Chebunina, 2013). The proposed priorities and perspectives should be focused on the better utilization of

Table 8: Typology of the SFD regions in terms of economic and social development

| | Level of economic development | | |
|-----------------------------|---|---|------------------------|
| | High (1.21-1.8) | Average (0.61-1.2) | Low (0.0-0.6) |
| Level of social development | | | |
| High (1.21-1.8) | 1 Krasnoyarsk territory Omsk region | 4 Novosibirsk region | 6 |
| Average (0.61-1.2) | 7 | 2 Republic of Buryatia Republic of Khakassia Altai territory Zabaikalsky territory Irkutsk region Kemerovo region Tomsk region | 5 Republic of Altai |
| Low (0.0-0.6) | 9 | 8 | 3 Republic of Tyva |

SFD: Siberian Federal District

Table 9: Specific problems and threats to individual groups of regions

| Problems and threats | 1 Group | 2 Group | 3 Group | 4 Group | 5 Group |
|---|-----------|---------|---------|---------|---------|
| Low GRP per capita | No | No | Yes | No | Yes |
| Not high volume of shipped goods and services of own production | No | No | Yes | Yes | Yes |
| Small investments in fixed assets | No | Yes | Yes | Yes | Yes |
| Weak retail trade turnover per capita | No | Yes | Yes | No | Yes |
| The volume of agricultural production not sufficient for self-provision | Partially | Yes | Yes | Yes | No |
| Insufficient levels of economic activity | No | Yes | Yes | No | No |
| Low per capita cash income | No | No | Yes | No | Yes |
| High consumer spending | No | Yes | Yes | No | Yes |
| Low per capita income relative to the per capita subsistence minimum | No | Yes | Yes | No | Yes |
| The high level of unemployment | No | No | Yes | No | Yes |

GRP: Gross regional product

Table 10: Key priorities and perspectives that are acceptable for each group of groups of the SFD regions

| Priorities and perspectives | Group 1 | Group 2 | Group 3 | Group 4 | Group 5 |
|-----------------------------|--|--|--|---|--|
| Main strategic aim | Increase of the standard and quality of life on the basis of the balanced socio-economic system of innovative type with the aim of dynamic development of the economy and implementation of the strategic interests of the country in the global community | | | | |
| Main priority directions | Promotion of the development of agricultural production, solution of the problem of food independence | The adoption of measures that enhance the investment attractiveness; strengthening social protection of poorly protected citizens; monitoring of prices on the commodity markets | The adoption of anti-crisis measures aimed at improvement of the socio-economic development | Acceleration of the pace of economic development, promotion of the development of small and medium-sized businesses; provision of conditions for the formation of a favorable business and investment climate | The adoption of programs promoting the better business and investment climate; extension of measures to increase employment; monitoring of prices on the commodity markets |
| Perspectives | Maintain the current level of socio-economic development | Increase the level of economic development and access the Group 7 or increase the level of social development and access the Group 4 | Get out of the crisis; increase the level of economic development and access the Group 8 or raise the level of social development and access the Group 5 | Prevent the transition to the Group 2; increase the level of economic development and access the Group 1 | Prevent the transition to the Group 3; increase the level of economic development and access the Group 2 or raise the level of social development and access the Group 6 |

SFD: Siberian Federal District

available economic capacity and involvement of all regional resources.

In general, the proposed by authors priorities and perspectives should be formed and implemented as a basis for regional economic and social policy, allowing fully take into account the interests and needs of the population (Table 10).

5. CONCLUSION

In the article, it is suggested the authors' method of assessing the level of socio-economic development of regions, developed on the basis of the analysis and generalization of the advantages and disadvantages of methodological approaches cited in the modern economic literature: Expert assessment and rating, calculation of the particular analytical and complex (generalizing) values, determination of the system of quantitative and qualitative characteristics, calculation of integral indicators and indices. The main difference between the proposed method is the use of a limited number of indicators which objectively characterize the state and dynamics of economic and social processes taking place in the regions.

Based on the statistical data, it was conducted comparative analysis of the socio-economic development of regions of Russia (case study of the SFD). It was revealed that the group of regions with high levels of socio-economic development includes Krasnoyarsk and Omsk regions; the group of regions with low (crisis) level of socio-economic development include the Republic of Tyva. Other regions of the SFD take middle position in the matrix of typology of regions in terms of social and economic development.

It is shown that for each group of regions within the matrix of the typology, there are identical or similar specific problems and

threats, that gives ground for the formation of unidirectional priorities and prospects of socio-economic development.

REFERENCES

- Antokhonova, I.V. (2004), Socioeconomic Processes Forecasting Methods. Ulan-Ude: Eastern-Siberian State University of Technology and Management.
- Fedorov, N.V., Kurakov, L.P. (1998), Forecasting of Socioeconomic Development of the Russian Federation Regions. Moscow: Press Service.
- Feraru, G.S., Orlov, A.V. (2014), Methodology for estimating the level of sustainable socioeconomic development of regions. Contemporary Problems of Science and Education, 1(51). Available from: <http://www.science-education.ru/115-12151>.
- Gerasimova, I.A. (2010), On the tendencies of subjects differentiation of the Russian federation in terms of socioeconomic development. Statistics Issues, 2, 56-64.
- Girina, A.N. (2013), The methodology for assessing the socioeconomic development of the region. Bulletin of the Orenburg State University, 8(157), 82-87.
- Gonova, V.O. (2012), Socioeconomic development of the region: The model of rating assessment. Modern High Technologies, Regional Application, 3(23), 40-46.
- Grishina, I.V., Polynov, A.O. (2012), Socioeconomic situation in Russian regions: Methodological approaches and results of the comprehensive assessment. Modern Productive Power, 1, 34-48.
- Klebanova, T.S., Kizim, N.A. (2012), Irregularity and Cyclical Dynamic Pattern of the Socioeconomic Development of the Regions: Evaluation, Analysis, Forecasting. Kharkov: FOP Alexandrov K.M., Publishing House "INZHEK."
- Kuzyk, B.N., Kushlin, V.I., Yakovets, Y.V. (2011), Forecasting, Strategic Planning and National Programming. Moscow: Economy.
- Lavrovsky, B.L. (1999), The measurement of regional asymmetry evidence from Russia. Economy Issues, 3, 42-52.
- Pashnanov, E.L. (2012), Methodology for assessment of regional socioeconomic systems development. Economic Systems Management, Electronic Scientific Journal, 6. Available from: <http://>

www.uecs.ru/logistika/item/1401-2012-06-14-08-44-22.

- Samarina, V.P. (2008), Assessment features of unevenness of socioeconomic development of the regions. *Modern Economy Problems*, 1(25), 300-304.
- Skotareno, O.V. (2013), The Russian experience of assessing the level of socioeconomic development of the region. *Fundamental Research*, 1(3), 823-829.
- Skuf'ina, T.P., Baranov, S.V. (2005), Socioeconomic forecasting: Scientific and teaching issues. *Economy Issues*, 3, 41-48.
- Slepneva, L.R., Chebunina, N.M. (2012), Trends and leveling-off mechanism of the spatial polarization of the Russian economic space. *Ulan-Ude, Eastern-Siberian State University of Technology and Management*, 2(37), 112-116.
- Slepneva, L.R., Chebunina, N.M. (2013), Preconditions of the Polarization of Regions in the Contemporary Economy, *Proceedings of the II International Scientific-Practical Conference Economical and Statistical Methods of Research Focused on Potential Capacity of the Territories in Modern Society*. Ulan-Ude: Eastern-Siberian State University of Technology and Management. p148-152.
- Zencheva, N.V., Gerasimov, B.I. (2005), *Economic Analysis of Differentiation of Socioeconomic Development of Russian Regions*. Tambov: Tambov State University.
- Zubarevich, N.V. (2007), *Social Development of Russian Regions: Problems and Trends in Transition Period*. 3rd ed. Moscow: LKI Publishing House.