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# Study of Competitiveness of Belgorod Region and Potential of its Increase

IN CONTEXT OF GOVERNMENT'S PRIORITIES IN DEVELOPMENT OF RUSSIAN FEDERATION

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*Abstract*— This article analyzes the level of competitiveness of the Belgorod region - one of the developed and promising regions of the Russian Federation. The relevance of the study is justified by the government priority, associated with the development of the competitive environment of the country's territories. The study of the complex of measures taken by the Belgorod Region, aimed at developing competition, allowed the authors to determine the vectors for the development of the region's competitiveness, identified by a number of potential signs and factors, the most important of which the authors combined into five blocks: economic, investment, innovation, infrastructure and social.

In order to determine the prospects for further development of the Belgorod region's competitiveness within the framework of the article, the author's methods of assessment of the potential for increasing the competitiveness of the region were offered, based on the calculation of the composite integrated index and the determination of the significant importance of each of the indicators that form the potential. The constructed forecast model allowed extrapolating the results of the research for the next period and suggesting the dynamics of development of the region's competitiveness for the next two years.

Keywords— competitiveness, region, government program, development, factors, potential, consolidated integral index.

### I. INTRODUCTION

The heterogeneity of Russia as a territorially huge country that differs by its natural and climatic conditions, national composition, economic potential, level of social development Aleksandra V. Kovalevskaya Belgorod State University Belgorod, Russia

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makes it difficult to compare regions and identify those that have the highest level of competitiveness and those that need to develop road maps for elimination of competitive weaknesses. In this regard, to date, one of the priority tasks in the development of the country, according to the orders of the Government of the Russian Federation, is the development of competition in Russian subjects, taking into account their regional specifics. Government Decree No. 2579-r of December 28, 2012 defined the requirements of the action plan «Development of Competition and Improvement of the Antimonopoly Policy», in accordance with which all regions are in the solution the problems of competition and antimonopoly legislation in an equal position, regardless of economic and social development. In the course of the implementation of this decree by the Government of the Russian Federation on September 5, 2015, the Single Standard for the Development of Competition for All Subjects of the Russian Federation was approved, which gives more powers and opportunities to regional authorities in relation to the development of competition, taking into account regional specifics. Thus, the program for developing competition in the regions of the Russian Federation is based on local features of the economy and its potential not in Russia as a whole, but in each individual region. The work will make it possible to fulfill one of the main functions of the phenomenon of competitiveness - to create favorable conditions for doing business and improving the quality of life of the population



# II. THE PURPOSE OF THE STUDY

To investigate the level of competitiveness of the Belgorod Region within the framework of government tasks, it is necessary:

- to develop the competitive environment of the country's territories;
- to propose a methodology for assessing the potential for increasing the competitiveness of the region;
- to test it on the territory studied by the authors and using the prediction method to extrapolate the results for the future period.

#### III. MATERIALS AND METHODS

The theoretical and methodological base of the research is: the dialectical method of cognition, certain provisions of economic theory, the basic principles of competitive analysis, fundamental work of authors dealing with the problems of regional competitiveness. The analytical part of the work is based on methods of the system and situational analysis, selective observation, statistical and economic analysis, and also methods of competitive positioning and forecasting.

## IV. RESULTS AND DISCUSSION

Problems of development of competitiveness of socioeconomic systems in general are engaged and continue to be occupied by a large number of scientists, among them classics-political economists A. Smith, D. Ricardo, J.B. Sey and contemporaries of an economic thought M. Porter, R.A. Fatkhutdinov, Y.A. Fridman, A.I. Kagarmanova, N.A. Savelyeva, etc. The works of S.D. Valentya, M.A. Gusakova, V.A. Ilyin, N.M. Mezhevich, S.N. Rastvortseva, A.E. Shastitko and others are devoted to studies of the features of interregional competition and the study of the influence on the development of the competitiveness of the territories [1].

Despite the long history and a wide range of authors studying the problems of competitive relations in macro-, meso- and microeconomics, the study of the appeal of regions and methods for its evaluation requires careful attention of researchers, which special relevance has been caused after designation of the priority direction of development of Russia in the context of increase in the level of competitiveness of territories of the country.

Investigating the opinions of various scientists and summarizing their interpretations, the authors concluded that the competitiveness of territories is, first of all, the relative (or comparative) characteristics of the condition of the regions, considered through the prism of a general assessment of various factors, such as social, economic, political, investment, innovation, infrastructure. Each of the factors that have reached the preemptive indicators represents a separate competitive advantage. The problem of each region of the country is to form, achieve better results and create conditions for further increasing competitive advantages, not only to achieve worthy level of competitiveness of the region, but also to improve the quality of life of the population and create a favorable territorial business climate. The Belgorod region is one of the developed, promising and competitive regions of the Russian Federation. Its development is carried out within the framework of the Strategy of social and economic development of the Belgorod region for the period until 2025 [2]. In order to introduction the Standard for the Development of Competition in the Subjects of the Russian Federation in region, an action plan «road map» on assistance to development of the competition in the region for 2015-2017 was implemented, approved by the order of the Governor of the region of March 9, 2016, No. 125-r [3.4].

In order to improve the competitive environment of the Belgorod region, a list of priority and socially significant markets was developed to promote competition in the Belgorod region, which allowed one to determine the vectors of competitiveness development of the region, identified by a number of potential signs. The most important of them the authors combined into five blocks: economic, investment, innovation, infrastructure and social.

The competitiveness of any region and the Belgorod region is not an exception is closely intertwined with its economic development. The ratio of these two concepts is positively interdependent: the higher the competitiveness, the faster the economic development of the region, and vice versa, the faster the economic development, the higher the competitiveness. It should be noted that the result of economic development as a process per se is economic growth, characterized by the level of the country's gross domestic product at the country level and at the regional level by the magnitude of the gross regional product. The ratio of the growth rates of these two most important economic values allows us to construct a matrix of the BKG type, which provides an opportunity to assess the strategic competitive positions of the Belgorod region (Fig. 1). The authors consider that the competitiveness in this case needs to be identified through size GRP per capita, which reflects all reached competitive advantages of the region in value terms in total.

Based on the results of the constructed matrix, it can be seen that the Belgorod region during the period under study is in the most favorable position - the leader's position - the quadrant, which characterizes both the positive growth of Russia's GDP and the positive growth of the GRP of the region. It should be noted that economic growth, identified by the authors through the GRP, has a positive trend - per capita, its size for three years increased from 368874.8 rubles up to 443086.2 rubles, or 20.12% of the increase [5].

The economic block makes it possible to use the industrial, agricultural and raw potential of the region in the forming stable trade and economic ties with producers of other regions of Russia, near and far-abroad countries and also advance of goods of regional production on the domestic and foreign markets.

In 2015, the retail trade turnover reached 275.8 billion rubles, which in the commodity weight is 108.7% compared to the level of 2014 this formation happens generally on account of turnover of the trading organizations and IE which carry out the activity in fixed trading network outside the market [6].

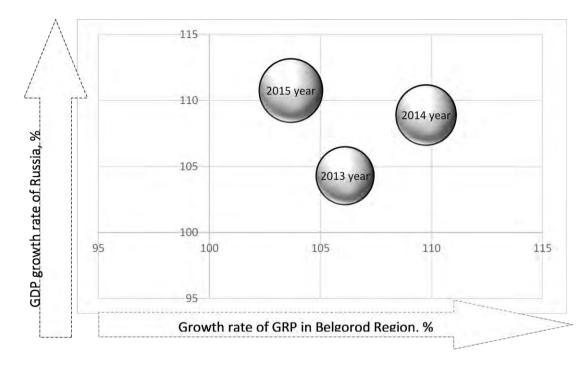


Fig. 1. Diagram of strategic competitive positions of Belgorod region for 2013-2015

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Following the results of 2015, the turnover of public catering made 6,8 billion rubles which is 108,4% more than the level of 2014. In 2015 it was rendered to the population of the area of paid services on the sum of 74,4 billion rubles that is 105,6% more than the level of 2015.

Industrial and agricultural production, the volume of paid services to the population are increasing, and the labor market situation remains stable. In the region, the active consistent economic policy on the basis of the system approach in the solution of relevant tasks and constructive cooperation with regional business structures and the population is pursued.

The basis of the innovation component of the competitiveness factors of the Belgorod region is the development of scientific and innovation activity in the region. All indicators from 2011 for 2015 have the increasing tendency that demonstrate that the government of the region pays much attention to development and activation in the region of scientific and innovative activity and also to involvement of private business in the process of technological development. In 2016 from the budgetary and non-budgetary sources of financing, 127,3 million rubles were allocated to support scientific and technical and innovative activity [7].

Improving the investment climate is a priority problem in the development of the Belgorod region, so research in this context requires special attention. The investment block of factors of the region's competitiveness implies an increase in the living standards of the population of the region through attracting investments. Based on the results of the analysis, the investment climate in the region decreases a little during the period under review. However, the measures carried out by the government of the region are aimed at increasing the indicators of this block thanks to the held events.

For the past twenty years, the Belgorod region has been included in the top ten regions of the country with the least integral investment risks. The region ranks eighth in the rating of the investment attractiveness of Russian regions [8]. The volume of investment, according to Belgorodstat in 2016, amounted to 143.8 billion rubles.

The key to success in improving the competitiveness of territories is now increasingly oriented towards a model of their development that is based on more competitive factors, such as the development of infrastructure and the quality of human resources. Infrastructural factors include information on the construction of industrial and social facilities in the region, as well as on the improvement of settlements, housing and road construction.

In 2016 there were built premises for the development of the livestock industry, storage of crop production, refrigeration equipment, an elevator. Six television stations with a capacity of 1 kW and above, a 1 satellite ground station, 6 mobile communication towers, commercial enterprises with a sales area of 35.7 thousand square meters were put into operation, public catering enterprises for 150 seats, hotels for 113 places, 12 gas stations, 6 capital box-type garages for 81 cars. By the volume of housing introduced per 1000 inhabitants, the region ranks third among the regions of the Central Federal District. For the construction of the road network in 2016 under this program within «Improvement and development of the transport system and the road network of the Belgorod region



for 2014-2020», the subprogram «Improvement and development of the road network», 8.4 billion rubles were allocated.

The development of factors in the social sphere implies ensuring a decent quality of life for the population of the region. Per capita incomes for the period are increasing every year and in 2015 amounted to 25372 rubles, which is 7% higher than in the previous year. The population also grows annually; if in 2011 there were 1536.1 thousand people, then in 2015 - 1547.9 thousand people; however, the share of the working age population is declining. The unemployed population is decreasing [7,5].

The competitiveness of the Belgorod region can be explored through the prism of a generalized implicit estimate made with the help of rating results carried out by well-known agencies and research institutes, for example, RA «RIA Rating», Institute for statistical research and economy of knowledge of HSE, Agency for strategic initiatives, Analytical center SME's Bank, etc. According to the selective author's research, the Belgorod region in the ratings among 85 regions of Russia occupies very worthy positions (Fig. 2). So, for example, in the rating of the general socio-economic situation of the constituent entities of the Russian Federation, based on the assessment of four groups of indicators: the scale of the budgetary and social sphere and the state of the social sphere, Belgorod Region is on the 18th place. The region ranks first in rating by efficiency of political, social and financial and economic management.

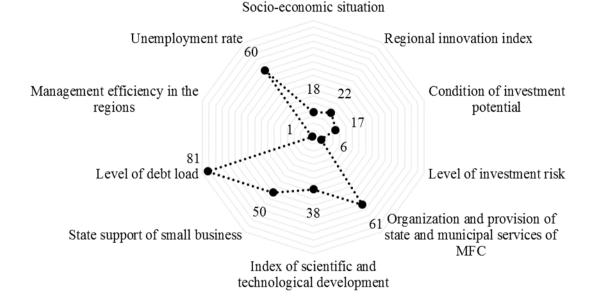


Fig. 2. Polygon of competitiveness of the Belgorod region according to results of National ratings for 2015 (places in rating tables)

When considering the competitiveness of the Belgorod region, in view of its multidimensional and differential characteristics, the authors consider that it is necessary to focus attention on such important component of the competitive environment as the potential for increasing the competitiveness of the region and its assessment.

The potential for increasing the competitiveness of the region according to the authors of this study is a combination of the opportunities available to the region and creating favorable conditions for the creation and development of its competitive advantages [9.10].

A competitive region in the modern conditions of Russia should combine the most diverse characteristics respectively, and the vectors of the competitiveness development potential should be directed in the same directions.

Within the framework of the present study, an author's methodology for assessing the potential for increasing the competitiveness of the Belgorod region is proposed. Its peculiarity and uniqueness is in the fact that the blocks selected in its algorithm are generally public, and the principle of calculation is dynamic. Also, it would be desirable to note that within the framework of the government priority of developing the competitive environment of the country's territories, this method can provide a unified approach to exploring the potential for increasing the competitiveness of different regions, not taking into account their geographical, national and other specifics. This is because indicators, recommended by the authors, are common and traditional for all without exception of the corners of the Russian Federation, characterizing the socio-economic sphere of its activity. A reliable and complete information base for calculating the necessary indicators of the consolidated index can serve as a statistical compendium «Regions of Russia. The main characteristics of the subjects of the Russian Federation» [5], in which there is a sufficient number of indicators that allow one in quantitative measure to study the development of various aspects of the investigated territorial space.

Considering the methods for calculating the proposed consolidated integral index of the potential of increasing of competitiveness of the region, we will note that it is based on calculation of individual indexes, sub-indexes and the consolidated integrated index. The basis for this method was developed by co-author Savenkova I.V., the algorithm for assessing the potential for increasing the competitive advantages of market subjects [11]:

$$I_{\text{int}} = \sum_{i=1}^{5} I_i \times W_i . \tag{1}$$

where  $I_{int}$  - consolidated integrated index of the potential of accumulation of competitiveness of the region; 5 - number of analyzed sub-indices of the consolidated integrated index of the potential of accumulation of competitiveness of the region;  $I_i$  - the value of the i-th sub-index;  $W_i$  - the weight of importance of the i-th sub-index.

$$I_{i} = \sum_{j=1}^{j} \frac{P_{j1}}{P_{j0}} \times w_{j} , \qquad (2$$

where j – the number of analyzed parameters of individual sub-index consolidated integrated index of the potential of accumulation of competitiveness of the region;  $\frac{P_{j1}}{P_{j0}}$  - the individual index of the *j*-th parameter in the *i*-th sub-index;

 $w_i$  - the weight of importance of the i-th individual index.

In the course of constructing a common integral index and sub-indices, in order to determine the significance of the investigated parameters, the authors guess that the expedient basis for calculating the weight coefficients (the weights of the importance of the i-th sub-indices and the weights of the i-th individual indices) will be the method of paired comparisons by T. Saaty.

Approbation of this method was carried out on materials of the Belgorod region for the period of 2012-2015. The results of the calculations showed that, in general, the region under study has a sufficient potential for developing competitiveness, because in 2012, 2014 and 2015, the calculation of the consolidated integral index showed a positive trend: its growth ranged from 107% (in 2012) to 116% (in 2014) and 108% (in 2015). In 2013, compared to 2012, there was a slight decrease of -0.01%, which is due to the manifestation of the crisis realities, primarily the reduction of investment, the decline in innovation activity and infrastructure transformations.

The construction of the forecasted model of the consolidated integrated index made it possible to establish the trajectory of its trend line for the first three years, namely, for 2016-2018 [13]. Thus, according to the forecast, abstracting from the impact of various factors that are not dependent on

the regional development process, in 2016 the potential for increasing competitiveness will be 1.13, in 2017 - 1.15, in 2018 - 1.17. It means that in each subsequent year in the Belgorod region there are opportunities for 13%, 15% and 8% to increase the already high level of competitiveness.

Considering in the context of sub-indices of the composite integral index, we can say that the percentage of their importance for all block indicators as a whole ranges from 17% to 24% (table 1).

 TABLE I.
 Specific gravities of the importance of block factors

 INFLUENCING THE POTENTIAL OF INCREASING THE COMPETITIVENESS OF THE
 BELGOROD REGION FOR THE PERIOD OF 2012-2015

Blocks of factorial indicators of competitiveness of the region	2012	2013	2014	2015
Innovation block	17,45	20,59	9,30	19,00
Investment block	22,41	21,79	24,18	18,59
Infrastructure block	20,20	20,59	23,34	21,30
Social block	21,30	19,65	22,02	21,19
Economic block	18,63	17,38	21,17	19,92

Nevertheless, along with it, it would be desirable to note that distinctive from others, the greatest ponderability in development of competitiveness is the sphere of investments that contributes to the effective functioning of the business environment and, as a consequence, to the improvement of the quality of life of the population.

The obtained results show that the Belgorod region is working within the framework of the implementation of the Standard for the development of competition in accordance with the goals and specific directions. The accent in the development of the competitive environment of the region under study along with the improvement of the investment climate was found both in the calculated coefficients of the ponderability of competitiveness factors of the region and in the national ratings, characterizing the state of the business environment. In 2016, based on the results of the second National Rating of the Investment Climate in Subjects of the Russian Federation, the Belgorod region took the second place.

#### V. CONCLUSIONS

Thus, the article outlines the relevance of the competitiveness of the regions reasonable for the government's priority of the country's development. The condition of competitiveness of the region by the example of the Belgorod region is investigated and the authors identified the main vector of its development, identified by a number of potential signs, the most important of which the authors combined into five main blocks: economic, investment, innovative, infrastructural and social. The analysis of each block showed that the Belgorod region has a high regional level of competitiveness, which was achieved through

measures to implement the Standard for the Development of Competition in the Subjects of the Russian Federation and within the framework of the roadmap for the promotion of competition in the Belgorod Region for 2015-2017. A confirmation of the high level of competitiveness of the Belgorod region was the construction of a matrix of strategic competitive positions and a polygon of competitiveness, created based on the results of a general implicit evaluation carried out on the basis of National ratings.

In order to predict the level of competitiveness of the Belgorod Region for the future, the authors proposed an algorithm for calculating the potential for increasing competitiveness. This algorithm provides a unified approach to the study of various regions of the Russian Federation and has no limitations in use because the recommended statistical indicators for calculating the consolidated integrated index for increasing the competitiveness of the territory are common for all regions. It is important to note that this multifactor index model allows estimating the effect of each indicator taken during the research of increase in the competitiveness of the region. Approbation of this method showed that in a retrospective analysis in 2012, 2014 and 2015, in the Belgorod region there was a positive dynamics in the development of the potential for increasing competitiveness, which made it possible to determine the same trend for the future. According to the forecast, in 2018 in the Belgorod region there is an opportunity to raise the level of competitiveness by 17%, and the most significant factor in increasing the competitiveness of this region is innovation activity in the explored territory.

# References

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