Modern Scientific and Methodological Approaches to Assessing the Competitiveness of the Region: Application Problems

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Abstract. At present, the emphasis in studies on the competitiveness of countries shifts from national to regional. Taking into account the disproportions in the development of regions, as well as the importance of inclusive development for national economy as a whole, this approach takes on special significance. Inclusive development of the territory necessarily requires an approach to ensuring competitiveness and prosperity not as inherited, but as newly created. Assessment of the territory competitiveness faces a number of problems. In this work, the author's vision of competitiveness assessment's basic stages, based on comparative analysis, is presented. The conclusion, that increasing the competitiveness of the region should be considered as an instrument for achieving the ultimate goal - inclusive development, is made. Besides, the main problems that arise in assessing the competitiveness of the territories, were determined. It is established that the GDP per capita indicator, used as one of the indicators of the socio-economic territory development, does not fully comply with the modern concept of inclusive development. It is shown that the use of the Russian regional innovation index is appropriate for assessing the innovative component of the region's competitive potential. The main shortcomings of the use of integrated indicators in assessing regional competitiveness are revealed.

1. Introduction

1.1. Actuality and scientific significance of the question

The problem of ensuring the competitiveness of national economic systems in the world economy over the past few decades acquires more and more significance in the context of intensification of globalization and regionalization trends. One of the most important consequences of modern globalization processes is an increasing differentiation of income and living standards levels in different countries. In this connection, competitive recovery of a territory should be regarded not as a goal, but as an instrument for goal achieving, and the goal at the present stage is considered to be the inclusive economic growth [1].

Besides, another important direction in modern research on the problem of assessing the competitiveness of a territory is shifting of the focus of the above mentioned studies from the national to the regional level. This is especially relevant in the conditions of remaining disproportions of Russia's territorial development.
Assessing regional competitiveness in modern environment faces lots of problems of informational and methodological nature. The methods applied in the study of the country competitiveness, in particular, are difficult to apply in analogous research at the regional level. The presence of above-mentioned problems requires the elaboration of comprehensive approach that most completely allows to take into account all factors affecting the competitiveness of a region.

1.2. Literature overview
Speaking about the assessment of regional competitiveness, it should be mentioned that, at the present moment, in the scientific world the discussions about the nature of competition and competitive advantages are in progress. Works of leading economists, such as A. Smith and D. Ricardo; E. Heckscher and B. Olin; K. Marx and M. Weber; J. Schumpeter and R. Solow, P. Krugman and M. Porter and many others [2], [3], are devoted to this issue. Over the years of research, the paradigm itself, or the approach to determining competitive advantages, has changed. That is most clearly seen in the well-known M. Porter’s statement that "National prosperity is created, not inherited. It does not grow out of a country's natural endowments, its labor pool, its interest rates, or its currency's value, as classical economics insists [4].

The works of K. Kessler [5], L. de Mello [6], I. Sachs [7], A. Filho [8], M. Buvnic [9], B. Hoekman [10], R. Ranieri [11] are devoted to the problems of inclusive development. Many fundamental provisions on this issue are stated in the reports of the UN [12], [13], the World Bank [14], the World economic forum [15], [16], the EC [17], the International Monetary Fund [18], OECD [19], and the Asian Development Bank [20].

1.3. Objective
The objective of this work is to study the existing scientific-methodical approaches for assessing the competitiveness of a region and for determining problems that hamper their effective application in conditions of implementation of inclusive growth strategy.

2. Theoretical section
2.1. Statistical studies in assessing the competitiveness of the region
In modern scientific literature, a number of approaches to the construction of the algorithm for assessing the competitiveness of the region are formed.

While analyzing given algorithms, it should be noted, on the one hand, the similarity of the basic stages of competitiveness assessment, and on the other hand, their excessive complexity. In particular, it can be necessary to assess the effectiveness of developed and made management decisions. That creates additional difficulties, as such an assessment is often difficult or impossible to conduct due to objective circumstances.

We expect, as the assessment of competitiveness is based on usage of statistical methodology, that it will be the most appropriate to bring the algorithm of competitiveness assessment to the implementation of three consecutive stages of the statistical study:

- statistical observation, when objectives of research are formulated, program of observation is formed and initial information is collected;
- formulation of classification and grouping when the collected information is structured on three main groups: indicators characterizing the territory development stability, indicators characterizing the public institutions quality, and indicators characterizing the technological development level;
- analysis of the received data on the three above mentioned groups.

Such an approach does not contradict the established practice of assessing the competitiveness of territories, but, as we think, will allow to regulate existing approaches significantly, as well as to avoid excessive complication of the methodology. The selection of these three groups is based on three fundamentals of economic growth, mentioned in works of many foreign authors. The ultimate goal will be this economical growth, and one of the instruments to achieve it will be the competitive recovery.
Thus, we try to avoid the widespread "substitution of concepts", when competitiveness is viewed as the ultimate goal of the development of territories, and not as an instrument.

2.2. Integral indicators for assessing competitiveness: limitations and possible applications

In fact, when constructing composite indices, in many studies, for obtaining the integral index, simple average values are used. At that, as a rule, choice of the type of means, among which the arithmetic mean simple and the geometric mean simple are mainly used, is no how justified. Here, choice of the simple arithmetic mean can be logically understandable, but the choice of the geometric mean does not always seem appropriate or grounded for such calculations. Another problem, which is pointed out by many specialists, is usage the coefficients characterizing the significance of the influence of a factor on competitiveness, in calculations. As a rule, such coefficients are formed on the basis of expert polls and cannot always be objective.

Another important aspect of the problem at issue is that GRP and its derivatives serve as one of the basic instruments in assessing competitiveness. However, the use of GDP and GRP as key development indicators is exposed to reasonable criticism. In particular, during the world economic forum in Davos, the Inclusive development Index, which is the alternative system of assessing the level of economic development, was discussed. This indicator is used at a country level and is already calculated for the second consecutive year. We think that the alternative parameters within this index are important for assessing competitiveness at regional level. Table 1 shows the top ten countries by GDP per capita and by the Inclusive development Index.

| Rank | GDP per capita | IDI      |
|------|---------------|----------|
| 1    | Luxembourg    | Norway   |
| 2    | Norway        | Luxembourg |
| 3    | Switzerland   | Switzerland |
| 4    | Denmark       | Iceland  |
| 5    | Ireland       | Denmark  |
| 6    | Sweden        | Sweden   |
| 7    | Australia     | The Netherlands |
| 8    | Singapore     | Australia |
| 9    | USA           | New Zealand |
| 10   | The Netherlands | Austria |

As it follows from the data analysis of Table 1, the positions of many countries by the level of GDP per capita and the Inclusive development Index as a whole coincide, what witnesses to the possibility of using the Inclusive development Index in assessing the level of development and competitiveness of territories. The set of indicators included in the inclusive development Index is shown in figure 1.

2.3. Specifics of the region competitiveness assessment

At the present stage, when assessing the competitiveness of the region, a number of approaches are used. Their application faces some objective difficulties. It is necessary to highlight some common features for the most of methods used for assessing the region competitiveness in Russia:

- for the most part, as it was mentioned above, these methods are based on use of integral indicators;
- according to the theory of competitiveness offered by the World economic forum, three stages of development are distinguished: factorial, investment and innovative stages[1]. Most of the indicators used to analyze the competitiveness of the region in our country correlate with the first two stages, but often quite poorly characterize the third one. In the conditions of Russian economy, different branches belong to different stages of development, what creates additional difficulties in assessing the competitiveness,

- quantitative assessment methods used in the analysis of the competitiveness of Russian regions are often used in conditions of a lack of enough complete and reliable statistical data, what determines the importance of combining of quantitative and qualitative methods.

In our view, when assessing the competitiveness of regions, it is very important to pay attention to the innovative stage of development. From this point, the so-called Russian regional innovation index, or, to be more exact, its components, is significant. Mentioned indicators, in many respects, reflect the authors’ vision of the algorithm for assessing the competitiveness of the region, stated above.

3. Results and conclusions
To sum up all the above, it should be noted that assessing the competitiveness of regions in modern Russian conditions is a complex multi-aspect objective, the solution of which faces difficulties of both methodological and applied nature. Many approaches developed in modern foreign and domestic practice do not reflect the specifics of the development of the economy of our country. In this context, it will be specially significant to elaborate an effective and enough simple assessment algorithm that takes into account both modern global trends and the specifics of the economical development of our country, as well as the level of regional and branch development’s differentiation, which continues to be quite high.

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