The Priority Choice in the Process of Strategy Working-out of the Social Economic Micro Region Development

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Abstract:

The development of the social economic strategies progress of the micro region namely the choice of priority industries which progress is to be supported by the authorities.

The given article provides detailed description of a special authors’ approach how to analyze of perceptivity investment level into different sectors in frames of strategies working-out of the social economic development of the micro region.

This approach is based on the creation of a special scale within its formation special attention is paid to the identification of the life cycle stage of the industry under analyses besides the potential development possibility of industries available for resources usage.

Keywords: Social economic development, micro region, strategy, choice of priorities, industry development cycle, industry development, matrices, investments.

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1. Introduction

Different aspects of the social economic development of micro regions are actively studied by a number of specialists (Buyanova, 2013; Konstantinidi, 2013; Musaev, 2011; Seliverstov, 2009; Seluitin, 2013; Mitrofanova, 2010; Suslov, 2009). Some of the studies are devoted to the strategic development of the macro region progress. Strategic development is a multiple staged process that particularly includes analyses of the external and internal media, existing restrictions and the most promising strategic alternative choices (Boev, 2011; Ivanov, 2014; Ilinykh, 2004; Mosunova, 2016; Bondarenko et al., 2017; Khusainova and Bakhvalov, 2018).

The complex of promising / priority sectors is considered as the main component of each estimated alternative of the economic strategy block, which happens to be developed with great care and attention (Kuznetsov, 2015; Mitrofanova, 2010). The most promising industries identification can be made on the basis of models studying their innovative development (Chernikova, 2017). Key industries play a significant role that has a significant impact on related ones (industries) (Pustylnik, 2011; Juarez, 2015; He, 2016; Kosinova et al., 2016).

When carrying out the analyses of perceptiveness of the strategic alternatives (Erygina, 2014; Natalina, 2017), different methods of multi-criteria evaluation can be used (Lapaev, 2014; Lomazov, 2013; Smirnov, 2016), which includes the dynamic study of the main indicators of the functioning enterprises as well as industries in general (Gumba, 2004). Within such assessment, it is reasonable to consider the cyclicity of the industries development (Porter, 1980; 1985), also specificity and resources amount needed to overcome entry barriers with a possible start of work in a new industry (Dimitriadi, 2016; Mikhailova et al., 2017).

Currently most studies include approaches that research significantly improved industries (within either a specific region or macro region) as the basis for further social economic micro region progress. The given feature of the approaches being studied is definitely beneficial due to the usage of the developed strategy of the existing regions / micro regions of quite developed industries that already generate substantial part of GRP as a starting point. However potential drawback of such approach is its chaotic and cyclical industries development both within the micro regions and the Russian Federation generally at the world economy level. Together with that sufficiently developed industries within specific micro regions (as well as those ones viewed as key industries) may face their reduction stage (explained by the industry passing its relevant stage of the life cycle), that might cause significant change in the micro region's economy and a possible GRP reduction (Chernysheva and Shepelenko, 2017).

At the same time investment in newly appearing industries (which are hardly developed within the micro region) may cause capacity growth of the corresponding markets thousands times or more; the beginning of investment activity in such
industries (in case of availability of the necessary resources and emerging / forming sales markets) that can provide the micro region with intensive development opportunities, steady economic growth and logically GRP volume.

The given research is aimed at analyzing the possibilities of developing approaches to choice within the process of social economic strategy of a micro region in priority industries taking into account the analysis of trends in the development of the national and global economy, also resources availability obligatory for some industries development.

2. Research methods

The identification of the main criteria priorities choice to be used as guidelines while strategy developing of social economic micro region progress, this identification was carried out with the help of co-called expert survey (EA). 11 specialists in the development of regional strategies (5 women and 6 men aged from 34 up to 47) have been interviewed in the frame of this survey, all of them have professional experience in the research area from 12 up to 25 years. The experts had a task to identify the main criteria for industries evaluation that might be used to choose priority sectors in the process of strategy development a for the social economic progress of the micro region.

3. Research results

The experts have figured out the following criteria to choose priority sectors:

1. The development level of the industry in the region under the study.
2. The development level of the industry in the Russian Federation.
3. The availability of federal programs focused on the development of a particular industry.
4. The development level of the industry in the world.
5. The availability of resources necessary for the industry development.
6. Expected «capacity» of the industry (according to the years of process development), expressed in financial indicators of the generated revenue.
7. The expected industry contribution (expressed in %) within the planned GRP.

Actually the experts pointed out that the relative importance criteria should be formed separately for every case of strategy development of social economic development in each micro region.

Based on the criteria analysis offered by the experts, the authors have developed a methodology to rank industries by level of their priority within the social economic strategy development process in the micro region; this methodology can be shown as gradual steps described below:
1. Formation of the of analyzed industries list (it is reasonable to avoid standard limits during the list formation, including not only well-developed in this micro region industries but also developing ones or those functioning in other regions / macro regions of the Russian Federation as well as in other countries).

2. Determination of the current development stage of every industry included in the list.

3. Identification of the industry development level in a particular micro region and the Russian Federation generally.

4. Estimation of each industry development level in the world and forecasting of its development perspectives in Russia.

5. Estimation of existing federal programs focused on the development of a particular industry or a group of industries.

6. Estimation of the predicted industry «capacity» (according to the years of process development) shown by the financial indicators of the generated revenue.

7. Estimation of the expected industry contribution (expressed in %) to the planned GRP.

8. Estimation of the resources provision necessary for each industry development (which quantity should correspond the expecting «capacity»).

9. Distribution of weigh coefficients characterizing the relative importance level of the indicators described in paragraphs from 2 to 8 above.

10. Determination of the ranges of the points placement which characterize indicators according to paragraphs from 2 to 8 (1, 2, 3 points).

11. Development of the unified formula to calculate the level of industries priority.

12. Calculation of the total indicator of the industry priority (according to the formula) and final scale formation.

While calculating the potential priority level of the industries it is possible to use the system of weights and score the industries’ attractiveness followed by the formula application:

\[ Po=\sum_{i=1}^{n} k_i S_i , \]

where \( P \) means the level of potential industry priority on the appropriate scale, \( k \) means the weighting coefficient (for every characteristic under analyses), \( S \) means the score of the analyzed characteristics state of the industry, \( i \) means the industry number in the group of industries being analyzed.

The given approach presupposes highly professional experts participation who form the list industries being analyzed (paragraph 1 of the methodology), establish weights coefficients that characterize the relative importance level of the indicators described in paragraphs from 2 to 8 (paragraph 9 of the methodology), and determine the placement ranges of the score characterizing the value of the studied parameters (paragraph 10 of the methodology). Information for scoring of each indicator is obtained from the available professional databases of economic data. In case of practical usage of the proposed methodology, the scores for every
characteristic (Industry development stage, Industry development level in the micro region / in the RF, Industry development level in the world, Available federal programs to support industry, Expected industry «capacity» (billion rubles), Expected industry contribution to GRP in %, Availability of resources necessary the industry development), they are multiplied by the corresponding weighting factors, the final indicators are added up and the total amount is placed in the corresponding column «Aggregate indicator of the industry priority», by its value industry priority.

This algorithm can be modified and presented in the form of a matrix «The choice of priority industries» (Figure 1). The matrix is formed with the help of multi-criteria indicator aggregate indicator of industry attractiveness», which is formed on the basis of the industry development stage characteristics, the level of industry development in the macro region / in the Russian Federation, the level of industry development in the world, available federal programs to support industry, the expected industry «capacity», the expected industry contribution to GRP in % with updated weight coefficients (thanks to the specification of the indicator resources availability for the industry separation into a different axis). The given multi-criteria indicator forms Y axis. X axis is formed on the basis of the indicator resources availability for the industry development which can be equally represented as a multi-criteria value formed on the basis of financial, human, technological assessment and other types of resources with an appropriate system of weights5.

Figure 1. Matrix «The choice of the priority industries»

The aggregate indicator of the sector attractiveness

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
<td>Resources availability</td>
</tr>
</tbody>
</table>

It should be mentioned that the most perspectives industries must be estimated which belong to the squares 3 and 2.

5The characteristic «The federal program availability» can also be relocated to the «Resources availability for the industry development» (in case if the micro region receives the corresponding financing).
4. Conclusion

In such a way, there has been proposed the method to choose priority sectors in the process of strategy studying for the social economic region development, taking into account the life cycle stages that include the analyzed industries. The implementation of the given approach may allow the analysis to include perspective industries that seemed to be underdeveloped in a particular macro region.

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