Approaches to Distribution of Territories by the Level of Development of Creative Potential

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Abstract: Concept of creative potential considers the possibility of socio-economic system to perceive changes. Creative potential of a territory contains elements which characterize the level of development of human capital, creative economy and the component which describes network character of interactions. Main approaches to analysis of creative potential are considered in the article. The key criteria of indicators’ choice is their accessibility.

Key words: Creative potential • Creative industries • Network approach • Cluster analysis

INTRODUCTION

Studies of regional development consider not only dynamics of indicators of socio-economic development of the territory but provide foundation for comparative analysis of regions. In order to solve this problem scientists have tried to develop different indicators, indictors systems, rankings which allow to judge about the position of specific territory. In the same time a set of unified indicators does not always reflect the level of regional development adequately and can not be a base for comparison. In this context indicators of regional development, in conditions of reinforcement of the role of human capital, must be supplemented by indicators describing network character of interaction in socio-economic system. This indicator in our opinion is creative potential.

Creative potential is understood as complex characteristic of territory, showing the potentialities (opportunities) of human capital and infrastructure in very broad interpretations. This category is intended for evaluation of not only innovative development or innovation activity of a territory, but allows to assess the opportunities of a region in regard to adaptation of innovations, potential of human capital, the level of development of network structures. Creative potential consists of 3 key components: innovative capital (to characterize level of development of innovation sphere); human capital. (to characterize demographic situation, level of life, education) and creative industries (as additional indicator of innovative development and as characteristic of development of social and/or network potential). It must be specified that for simplification we shall use terms "capital" and "potential" as similar to each other. Terminological differences must be considered as meaningless for such level of generalization and we shall consider capital and potential as some potentiality of socio-economic system to undertake certain processes, potentiality, first of all, in resource terms.

Innovative potential in the system of indicators of socio-economic system is of primary importance. Innovation potential in Russian and world practice is assessed by numerous methods: E.S. Goryachevskaya and V.A. Tsukerman give the following set of key world methods of assessment: "Index of high-tech potential as a component of integral indicator of the competitiveness level of the country; system of evaluation of innovation activity of the country by European scale indicators of innovations (EIS), system of indicators for evaluation of innovation activity by the method of OECD (Organization for Economic Cooperation and Development), KAM (Knowledge Assessment Methodology) method; global innovation index (GII); ranking of countries by the level of innovation [1]. Common features of all types of complex evaluation of
economic potential of the regions were formulated by A. Polynev [2]:

- Method of establishing relationship between basic indicators;
- Method of summarizing indices;
- Method of interval evaluation by points;
- Method of building of integral indicator after ranking all regions by every of basic indicators;
- Method of interval-free factorial ranking of regions tied up to the method of evaluation by points [3].

Ranking on the base of integrated indicators in chosen sphere of socio-economic development is one of the most common way of ranking. Calculation of integral indicator as a rule includes evaluation by points. In Russian practice innovative potential is assessed by various set of indicators. Goryachevskaya points out to terminological incompliance and contradictions in the set of indicators which is determined by high diversity of phenomena needed for evaluation of innovative potential [1]. In spite of this we can define the foundation for potential’s assessment, by the following indicators: number of personnel performing research work, for 1000 employed in economy; share of population which has higher and secondary professional education in total number of employed; internal expenditure for research and development (for 1000 roubles of GRP); number of advanced production technologies that were created; number of advanced production technologies that have been used; specific weight of the organizations which invest in technologies in total number of organizations; volume of innovation goods (works, services) of total number of delivered goods (works, services); ration of university students to the number of employees; number of personal computers etc. Various methods exist, which allow to take into consideration some key, in the author’s opinion, category included in innovative potential. This can be scientific component, or financial, or educational, or technical. We propose to orientate to general for all regions indicators, accessible for the bodies of official statistics.

Human potential must be assessed by complex indicator of index of human potential development. It includes the indicators of literacy, education level, level of life and average length of life at this territory. It is possible to include immediately calculated indicator, or separate indicators, by each component.

Key characteristic of creative potential as desired category will be creativity indicator developed by method of Richard Florida [4]. Florida believed that in geographical distribution of talent (as special manifestation of human potential, connected with availability of creative class) is determined not only by universities, developed infrastructure, but tolerance and openness of regional community. Florida proposes to introduce the idea of creative class. He also introduces definition of "super-creative nucleus"-programmers and mathematicians, architects and engineers, specialists engaged in education and science, design and arts, entertainment, sports and media-those who are called "creative professionals".

Florida developed main model of talent and regional development which engages structural equations and analytical models to check the independence of effects of human capital, creative class, technologies of regional development. The model allowed to make 3 discoveries. Firstly, it allowed to compare the impact of professional indicators of human capital or talent on development of education. Secondly, the model includes technologies side by side with talent which allows to analyze the impact of each on economic development. Thirdly, the model checks the impact of regional culture and institutional factors-infrastructure, universities, openness-on talent and includes economic development [5].

Florida rejects direct dependency between concentration of universities and concentration of human capital. He points out that such dependency is temporal because highly-educated people migrate to other regions and countries taking with them his human capital. That is why availability of universities is necessary but insufficient condition for concentration of talent.

Florida refers infrastructure to the factors which positively influence quantity and quality of talent, in particular, the entertainment industry. Florida introduces the notion "bohemia index"-indicator which shows availability of artistic infrastructure and points out to relationship between this index and concentration of talent and innovations [6].

Another factor influencing the economy of the region is tolerance and openness to diversity. To prove the necessity of consideration of this category Florida refers to his own study in 2001 [7] which showed the existence of positive correlation between economic development of the region and tolerance of its inhabitants to different social minorities.
Florida’s model includes talent, creativity and their influence on regional development [8]. This model allows first of all to compare classical ways of measurement of human capital and the indicators based on professionalism and creativity. Secondly, it allows to exclude the influence of talent and technologies. This model is useful for identification of regional cultural and institutional factors, namely: universities, suitability and diversity of services and tolerance and also their influence on geographic distribution of talent.

Florida’s method can not be used in Russian conditions in its pure form because there are spheres which are not included so far into sphere of statistics interests. A. Pilyasov and O. Kolesnikova tried to use this model in Russia. They substituted the indicators which can not be evaluated from regional reports for available indicators which describe the same or almost the same sphere. For example, Florida index of tolerance reflects tolerant attitude of regional community to sexual minorities and in Russian variant-to national minorities [9].

Florida’s creativity index, as a rule, consists of the innovation index, high-tech index, creative class and tolerance index [10]. In Russian interpretation creative class index is calculated by statistics on directors and specialists of high qualification, tolerance index-as a proportion of inhabitants living at this territory since their birth.

Creative potential shows not only innovative, technological and human resources of the territory. Creative industries have potential for adaptation of innovations at the territory. Creative industries are not only creative in its character, but can be used as a adaptation tool. That it is why the availability and the level of development of creative industries in the region must be taken into consideration.

Indicators which allow to evaluate such potential are as follows: the number of universities, chairs or graduates of creative specialities; availability of non-state institutional units in this sphere (private galleries, museums, professional courses); availability of events of inter-regional character in the sphere of culture, arts, science and education, etc.

Creative potential includes big number of diversified indicators which characterize any sphere. In order to analyze such massive you can use different models, but we find it appropriate to use cluster analysis as a method with the biggest, for such approach, explanatory force. By means of cluster analysis the territories can be divided into targeted number of clusters, clusterization can be made by nearness of parameters in order to interpret the groups obtained. Besides that cluster analysis allows to compare the obtained classification with targeted, for example, ranking by the level of economic development.

**CONCLUSION**

Creative potential includes a set of indicators, such as number of personnel performing research work, for 1000 employed in economy; share of population which has higher and secondary professional education in total number of employed; internal expenditure for research and development (for 1000 roubles of GRP); number of advanced production technologies that were created; indicators of life level, literacy, education of population; indicators of creative class, level of technologies, innovations acceptance, level of cultural development and others.

Creative potential as a complex category which characterizes innovative sphere, human potential and creative potential allows not only classify the territories, compare them by the level of development, but has a potential to find out “growth points” inside the region.

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