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MODELING OF REGIONAL ECONOMIC DEVELOPMENT PROCESSES

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Summary. Scientific views on the development forecasting of Ukrainian regions are studied in the article. Possibility and necessity of the development of two scenarios types concerning the description of sequence steps and possible consequences for a region was identified. Approaches to the creation of regional development scenarios from the positions of main stakeholders were grounded. Neces-

sity of scenario planning and modeling with attention to the key macroeconomic factors that influence the development of Ukraine's economy and provide forecasts, reflecting alternative development options was underlined. A scheme of the formation of crediting model for innovative-active enterprises was proposed.

Key words: *modeling, scenario planning, regional development, crediting, innovative-active enterprises.*

The uncertainty of the general economic policy of Ukrainian government for the near and the more distant future, the absence of any reliable quantitative forecasts concerning all the country make the task of developing the perspective socio-economic strategy at the regional level very difficult.

Region development modeling, usage of scenario planning, the main tool of which is scenario analysis is now dominant in economic analysis for strategic management of the processes with a high level of uncertainty. The necessity of formation of a set of detailed step-by-step description of events that with a predicted probability can lead to the desired or planned final status of economic development highlights the importance of this research.

The works of domestic and foreign researchers such as O. O. Bakaiev, Yu. M. Bazhal, V. M. Heiets, L. I. Fedulova, D. Aaker, P. Wack, J. Mercer, R. Schoemacher have made an important influence on the study of regional development processes, defining the role of innovative enterprises modeling and forecasting and application of the obtained results under conditions of Ukrainian realities.

The purpose of this article is to ground the approaches to the regional development scenarios creation and modeling of innovation-oriented enterprises crediting process with consideration of the condition of projects riskiness reduction.

Today in region development forecasting it's reasonable to develop multi-choice perspectives, that is, to use scenario forecasting, the main tool of which is

scenario analysis for the processes with a high level of uncertainty strategic management. Scenario analysis gives a possibility to generate a detailed description of events sequence that with a predicted probability can lead to the desired or planned final state or possible results in case of considered by screenwriter development options.

The approaches of D. Aaker, D. Diffenbach, J. Mercer, R. Schoemacher to the scenario analysis development, which is one of the main tools for deeper study of unpredictable environment were studied. There are several approaches to scenario development, but all of them are based on three general principles: the starting point of "scenarios of the future" development must always be an accurate assessment of current strategic situation in a region, which leads to the understanding of the dynamics of the acting factors; the value of which factors falls and grows throughout the time horizon; for acting factors with development uncertain trends specific forecasts should be done and experts rational proposals should be fulfilled; a set of alternative "scenarios of the future" should be created, but special attention must be paid to an obligatory condition – alternative scenarios should not contain contradictions, that is mutually exclusive steps and events.

A significant contribution to forecasting and modeling of economy of Ukraine and its regions was made by academician of NAS of Ukraine O. O. Bakaiev, under the leadership of whom in the International scientific and educational center of information tech-

nologies and systems, UNESCO/IIP NAS of Ukraine and Ministry of Education and Science of Ukraine the methodology of construction of models set for forecasting socio-economic development of Ukraine was developed. It takes into account influence of key macroeconomic factors on the development of Ukraine's economy and gives a possibility to get forecasts, reflecting alternative development options.

It was determined that within state macroeconomic policy of economic growth stimulation and structural reforms in regions considerable attention should be paid to forecasting and modeling of innovative-active enterprises development and to financing of innovative-oriented enterprises projects. The scheme of modeling of innovative-oriented enterprises crediting process based on conditions of projects riskiness reduction was proposed. The model is based on the following task: to develop a crediting mechanism for innovative-active enterprises by means of construction and analysis of mathematical dependences between crediting expected income at various interest rates and projects of one and the same class implementation risks.

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The characteristic feature of large investment projects realization, especially of innovative-active ones, as well as projects in high-tech industries, is the necessity of four types of interests interconnection: investor-entrepreneur' private utility (profit, income) from project realization; private utility (income) of a lender (a bank or other financial institution) from investments; branch utility (in the form of increased branch competitiveness of production); and regional utility (in the form of exports increasing, economic rates growth and so on). Situation is productive when all interest groups are realized. However, now the situation when "public" utility is not taken into account when making funding decisions is very popular.

Thereby, the use of forecasting and modeling methods enables to take into account the influence of main macroeconomic factors on economic development of Ukraine and its regions, to implement projects of innovative-active enterprises with consideration of the interests of different groups of economic entities and using of various crediting forms.