

ABSTRACTS

УДК 327:510.63 E. Kholod, V. Myachin

POLITICAL RISK ASSESSMENT WITH FUZZY-LOGIC APPROACH FOR DEVELOPING STRATEGIES OF INDUSTRIAL ENTERPRISES INNOVATIVE DEVELOPMENT

The innovative activity of the enterprise, like any other economic activity, is associated with a certain risk level. This notion usually refers to the probability or likelihood of additional costs profit shortfall that occurs when innovative projects are implemented. The risk underestimation or overestimation is inhibiting factor for the formation of innovative enterprise development strategy.

Political factors are macro factors that significantly affect enterprise innovative activity. Existing methods of enterprise political risks assessment are mainly qualitative (subjective) methods. They don't use modern mathematical tools.

This paper presents a new methodological approach to the quantitative assessment of political risks. Fuzzy expert system that allows using the algorithm-fuzzy inference in order to quantify the aggregated political risk index was built. Fuzzy output was implemented with Mamdani algorithm in the MATLAB Fuzzy Logic Toolbox software (version R2014b).

The proposed approach takes into account a lot of environmental political factors and, thus, enhances the intellectual support of management activities in the development of innovative business strategy.