INTEGRATED RISK ASSESSMENT IN AGRICULTURE

Summary of the Doctoral Dissertation (Social Sciences, Economics)

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The completed analysis of scientific literature on integrated risk assessment in agriculture leads to a conclusion that the assessment of separate risk types is extensively analysed. The problems to be addressed include: how business entities assess and manage different risk types; how to assess natural disaster risks; what risk management characteristics are typical to the banking sector; what problems small enterprises face in risk assessment; how risk management affects cash flows in organisations; what integrated risk assessment advantages are and what their impact on decision-making quality is; what types of risk are typical of the agricultural sector; how to assess diversified risks and to expose the advantages of integrated assessment. The research did not address the interrelation between different risk types neither sought their integrated assessment.

Integrated assessment enables to identify several types of risks at a time, and, thus, improves the efficiency of economic decisions. For the purpose of an integrated assessment of several types of risk in agriculture, the assessment methodology shall include aspects that are inherent in agricultural sector and not typical of other business areas. Integrated risk assessment in agriculture and its relevant interpretation contribute to the achievement of desired performance results and minimisation of potential failures.

Typically scientific literature focuses on integrated assessment of two risk types and limit the area of research to the banking sector. The dissertation reports on general research into risk assessment in the world. As a result of the research, financial, business, credit, and currency risk models were created and adapted to the various countries conditions. It should be noted that investigations in the field of risk assessment are not associated with integrated risk assessment. Furthermore, there is lack of research related with agricultural activities and their specific features. Integrated risk assessment in agriculture is relevant on both the theoretical and practical level.

Meanwhile, the methodology of integrated risk assessment in agriculture created in this dissertation enables to 1) identify the key risk factors in agriculture with regard of the political, economic, natural, and internal farm situation in a country; 2) design dynamic indices for an integrated assessment of production and financial risks aimed at more efficient decision-making in agriculture; 3) create structural risk indices which allow to rank countries according to economic and political risk in agriculture. Created indexes can be used for making decisions in the field of insurance, subsidisation, investment, trade of export, and import contracts; 4) construct and simulate indicators of agricultural risk based on real statistically valid data.

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