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PROBLEMS AND PROSPECTS OF USING DATA SCIENCE IN DOMESTIC FINANCIAL AND ECONOMIC RESEARCHES

Introduction. Currently, domestic financial and economic studies have clearly traced the tendency to actively use of mathematical tools in response to the growth of amounts of data characterizing processes and phenomena in society, as well as the necessary for their analysis of the power of computer technology, which, in turn, requires knowledge of scientists not only in the subject field, but also in information technology. Given the particular relevance of using the possibilities of data science in the research of domestic scientists in accordance with global trends.

Purpose. The purpose of the article is to determine the problems and prospects of using data science in domestic financial and economic research.

Results. The article deals with the content of data science, its connection with programming, mathematics and statistics, as well as its distinction from traditional research. In addition, the problems of using data science in domestic financial and economic researches were identified, including the excessive mathematical formalization of the relationship

between financial indicators, the risk of erroneous specification of econometric models, the absence of clear boundaries of the application of the revealed patterns and the area of responsibility for the results obtained, as well as insufficient level of qualification of scientists in interdisciplinary research. Appropriate recommendations have been made to address some of them.

An overview of software used by domestic scientists, from the point of view of their convenience and functionality, is not left out of consideration.

Conclusions. Prospects for the development of domestic financial science are inextricably linked with the level of professional training of scientists, especially young ones, and the system of stimulation of their activities. That is why the strategic priority in the conduct of financial and economic research should be the introduction of information technology in scientific activities, in accordance with the world trends, promotion of academic mobility, as well as the existence of appropriate material and technical base.

Keywords: *data science, finance, research, quantitative approaches in economics.*

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