

55. DEVELOPMENT TRENDS AND RISK FACTORS OF MEAT GLOBAL EXPORTS**Ekaterina Pozdniakova, Vladimir Pozdniakov, Andrey Brench***Belarusian State Agrarian Technical University, Minsk, Belarus*

Introduction. The global market of meat and meat products functions and develops under conditions of fierce competition [3], in which economic risk factors encourage investment [10], optimization [1], restructuring [2] and expansion of the meat industry, thereby increasing its importance among other sectors of the global economy.

The aim of the research was to identify and analyze the most significant factors of economic risk and to build an adequate mathematical model describing their impact on the volume of meat products exports.

Materials and methods. The object of the research was the world market of meat and meat products. The subject of the research was the factors of economic risk arising in the sphere of export relations. The assessment of risk factors impact is made on the basis of correlation and regression analysis.

Results and discussion. The volume of world exports of meat and meat products from 2013 to 2017 increased by 3.16 million tons. The increase in export volumes occurred mainly due to the main exporting regions: USA, Brazil, EU countries, Canada, Thailand and New Zealand. At the same time, there was a decrease in exports from Australia, India, China, Argentina. World pork exports in 2017 amounted to 8.23 million tons, which was 1.1 million tons, or 15.59%, higher than the level of 2013.

The growth of beef's export meat was established by 22.6% during the analyzed period. The world export volume of poultry meat increased, which over the analyzed period increased from 12.4 million tons in 2013 to 13.13 million tons in 2017 (an increase of 105.9%). Global volumes of mutton exports increased slightly from 2013 to 2017 by only 1.0%.

The main risk-forming factors limiting export volumes were identified and quantified: changes in animal feed prices, the spread of various epidemiological

diseases in the territory of exporting countries, the level of state support for agriculture, and exchange rate volatility.

A correlation analysis of export volumes of the European Union showed its strong dependence on the average feed cost per 1 kg of slaughter weight (correlation coefficient value -0.87) and the level of state support for agriculture (correlation coefficient value 0.56). These factors of variation are defined as significant and used for regression analysis.

The constructed regression model describes the dependence of meat's export volumes on changes in the most significant factors of variation as follows: an increase in the average feed cost (per 1 kg of slaughter weight) by \$ 1 will reduce the export volume of European Union countries by 2.52 million tons; 1% increase in the level of state support for agriculture (% of GDP) will ensure the growth of export volume by 3.85 million tons.

Conclusions. The impact of risk factors on the export volume of the European Union countries has been assessed on the basis of the correlation and regression analysis, which allows to determine the variable factors having the greatest impact on the resulting indicator and to make an objective quantitative assessment of their impact.

References

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