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THE DYNAMICS OF DEPENDENCIES BETWEEN THE WORLD GRAIN AND OILSEED MARKETS

Abstract:

The paper analyses relations between world grain and oilseed markets in the period from the beginning of 2000 to the middle of 2018. The study covered the period of drastic hikes and drops of cereal grain and oilseed prices during the economic and financial crisis. The study assessed the strength and dynamics of dependencies between rates of return from grain and oilseed sub-Indexes of the International Grains Council. For this purpose copula-based multivariate GARCH models were used, and dynamic Kendall's tau coefficients and dynamic tail dependence coefficients were calculated. Among the analysed markets the strongest (weak or moderate) relationships were found between the maize and soybean markets, and between the wheat and maize markets, with the linkages changing in time. The greatest probabilities of extreme events transfer were recorded for the maize and soybean markets.

Keywords:

agricultural raw materials, copula-GARCH model, dynamic dependencies, Kendall's tau coefficient, tail dependence

JEL Classification: C58, Q11, Q13