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DETERMINANTS OF SENSITIVITY OF STOCK MARKETS IN CENTRAL AND EASTERN EUROPEAN COUNTRIES TO EXTERNAL SHOCKS

Summary

In this paper sensitivity of stock markets in the countries of the Central and Eastern Europe to rates of return in major stock markets is investigated. Parameters of the VAR-GARCH-BEKK as well as Copula-GARCH model are estimated on the basis of daily data covering period 2004.01-2017.06. Next values of measures of dependence are extracted and averages for quarters are calculated. On the basis of quarterly data, the scale of propensity to external shocks is explained by categories measuring linkages among real economies as well as variables reflecting the level of the business cycle synchronicity.

Results of the empirical investigation indicate that after the EU accession significant increase of the dependence between stock markets in Central and Eastern European countries and markets in developed countries was observed. However the strongest increase in values of the measure of dependence was observed in the crisis period. After the global financial crisis, measures of dependence decreased significantly to levels lower than in the period preceding global financial crisis. This result may indicate the process of the reversion of financial integration concerned some countries of the Central and Eastern Europe as well. Moreover the results indicate that different factors led to an increase in dependence between stock markets in Central and Eastern European countries and markets in developed ones during different phases of the global financial crisis.

Keywords: Copula-GARCH, VAR-GARCH-BEKK, comovements of stock markets