Dependencies Occurring Between the Basic Macroeconomic Indicators in Eurozone

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Abstract

The article is of a theoretical and empirical nature. The main purpose of the article was to verify the existence of dependencies between selected basic macroeconomic indicators. The following were adopted for the study: unemployment rate, inflation rate, Gross Domestic Product, interest rate, exchange rate, value of exports and imports. An attempt was made to obtain an answer to the question whether there is a causal relationship between macroeconomic indicators characterizing the economic situation. The hypothesis was adopted that the interest rate is the strongest determinant of basic macroeconomic values. Pearson's linear correlation coefficient was used to determine the direction and strength of interdependencies between the analysedcategories. Using the auto regression vector model, the apparent correlation was eliminated and the influence of delays of explanatory (exogenous) variables on the explained (endogenous) was presented. The final stage of the analysis was the Granger causality test showing cause-and-effect dependencies occurring between the examined indicators. The empirical part uses the World Bank resources on the basic annual average macroeconomic measures characterizing the euro area from 1999-2016. The most important sources of information in the theoretical part were economic literature, supplementary use of normative documents, publications in serial publications and magazines as well as Internet resources.

Keywords: Causation, connections, GDP, Granger test, macroeconomic indicators