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РОЛЬ ФІНАНСІВ В ЕКОНОМІЧНОМУ ЗРОСТАННІ: ФУНКЦІОНАЛЬНА ДЕТЕРМІНОВАНІСТЬ ТА МОДЕЛІ РОЗВИТКУ

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BUSINESS CYCLE SYNCHRONISATION IN EUROPE

The aim of the paper is to consider evolution of synchronisation in Europe throughout three periods determined according to integration process in the European Union and/or the euro area. Nowadays, in times of globalisation and economic integration, the synchronisation of economic cycles is highly topical. The synchronisation of cycle is important mainly from the point of view of single monetary policy. This problematic started to draw attention in the middle of 1990' when the European monetary union was founded. According to the theory of optimal currency area, common monetary policy is appropriate if countries are exposed to symmetric shocks or are able to absorb asymmetric shocks flexibly.

We tried to determinate the level of business cycles synchronisation in Europe and to regroup countries according to their similarities in cycles. Our ambition is to find how the evolution in core European countries can predict the evolution in new EU members, i.e. Central and Eastern European countries. At the same time we would like to consider validity of so called 'endogeneity argument' according to which even large initial asymmetries should be gradually narrowing in time among integrated countries.

We applied three methods: cross-correlations, Granger causality testing and cluster analysis to identify core and peripheral countries. These three alternative methodological approaches enable us to recognize synchronised countries, countries with rather asymmetric evolution, leading as well as lagging countries. Business cycle evolution is evaluated either through GDP growth or output gap indicators.

Cross-correlation analysis of output gaps revealed three groups of countries: a) leading countries, i.e. their GDP evolution leads France or Germany (mainly old EU members); b) perfectly synchronised countries, i.e. their GDP evolution is simultaneous when comparing with France or Germany; c) lagged countries (mainly new EU members), i.e. their GDP evolution is lagged when comparing with France or German.

In addition, cross-correlation analysis between an EU member and France (Germany) revealed that only two countries (Portugal and Hungary) are not synchronised (neither leading nor lagged) with France. However five countries (Portugal, Cyprus, Malta, Romania, and Slovakia) are not synchronised with Germany. It partially proves idea on two-speed Europe and particular position of Germany in the European Union.

When comparing results of Granger causality testing for France and Germany, we conclude that output gap evolution in France or Germany causes output gap evolution in 12 or 13 EU members respectively.

Cluster analysis identified two main clusters in the European Union which again confirms idea of two-speed Europe.

Our findings prove rising synchronisation among the EU member states in general in time. We identified France and Germany as core and benchmark countries. French business cycle seems to have the most crucial impact on other countries´ cycles. An endogeneity argument on decreasing asymmetries among integrated countries is gradually fulfilling over a time period.