**Business cycle synchronization and its determinants in the OECD countries: Evidence from panel data analysis**

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**Abstract**

This study sets to examine the possible interactions of trade, industrial dissimilarity (ID), FDI and monetary policy with the business cycle co-movements of 30 OECD countries using a panel dataset from 1990 to 2021. The analysis is carried out using both the single-equation (SE) and the simultaneous equations model (SEM) estimation techniques. The error component three-stage least squares (EC3SLS) estimates from SEM with panel data generate more robust results as compared to the estimates of SE model with panel data or SEM with cross-sectional data, simply because EC3SLS can control the problem of endogeneity. The results reveal that bilateral trade intensity, ID (i. e., specialization-in-production), FDI, and monetary policy closeness play a powerful role in the business cycle synchronization of sample economies. However, the results report the dwindling role of industry-specific shocks towards the output correlation of OECD countries. Also, while trade and ID have both the direct and indirect impact, FDI exhibits only an indirect impact on the output correlation of sample economies via trade and similarity in industrial structure. The findings also indicate that trade and FDI complement each other. Besides, the estimates suggest that FDI in these sample countries promotes similar industrial structures in a strong sense. Furthermore, the results reveal that monetary policy serves as an essential and independent source of shock transmission across these OECD countries.

**Keywords:** Business cycle movements; bilateral trade; industrial dissimilarity; FDI; monetary policy closeness; OECD countries

**JEL Classifications:** E32; F02; F10; C23; C33

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