

## ABSTRACT

This research aims to identify factors affecting 10 selected<sup>1</sup> Asian countries' business cycles synchronizations with reference countries (China, Japan, and the United States) over the period 1990-2018. In the first part for this purpose, calculated 3-year moving correlation of all selected Asian countries with China, Japan, and the US over the period 1989-2018, after de-trending these 3-year moving correlation with the application of HP Filter converted de-trended quarterly correlation into annual output correlation. We employed panel OLS regression then used panel fixed and random effect models. Based on the Hausman test suggestions Fixed effect is the best fit in the case of business cycles co-movement between China and selected Asian countries because of the common factors influence. While the random effect model is better in both Japan and US cases because of the random effect influence, the US is outside the region. To check the stationarity, used two-unit root tests (Levin, Lin, and Chu  $t^*$ , Im Pesaran and Shin W) and the results rejected the null hypotheses (non-stationary). To check the long-run co-integration among variables Pedroni cointegration test has been implemented, and found that 5 out of 7 statistics are significant for the case: selected Asian countries business cycles synchronization with China, similarly, 5 out of 7 statistics are significant for the case (selected Asian business cycles synchronization countries with Japan), while 6 out of 7 statistics are significant in the case of the US business cycles synchronization with selected Asian countries. It has been confirmed in all cases that the alternative hypothesis (co-integration) is accepted that variables are cointegrated, which means these countries have long-run economic relations with selected Asian countries. We used the Panel Fully Modified Ordinary least squares (FMOLS) to get proper results. The results of FMOLS denotes those variables including bilateral trade intensity (BTI), Fiscal policy similarity (FIS), and Monetary policy similarity (MPC) significantly enhance the business cycles convergence between selected Asian countries and China, while factors: MPC and Corr US (correlation between Asian countries and the US) significantly increase the business cycles co-movements between selected Asian countries and Japan. On the other side selected Asian countries' business cycles convergence with the US accelerated by BTI, FIS, and MPC. The study suggests that China is playing a major role in the region, after crises, its economic influence spreads throughout Asia. It also grows towards the size of the US. They can also formulate OCA, but the anchor country should be China.