

## The endogeneity of the Optimum Currency Area criteria in East Asia

### ABSTRACT

The Asian financial crisis in mid-1997 has increased interest in policies to achieve greater regional exchange rate stability in East Asia. It has renewed calls for greater monetary and exchange rate cooperation. A country's suitability to join a monetary union depends, *inter alia*, on the trade intensity and the business cycle synchronization with other potential members of the monetary union. However, these two Optimum Currency Area criteria are endogenous. Theoretically, the effect of increased trade integration (after the elimination of exchange rate fluctuations among the countries in the region) on the business cycle synchronization is ambiguous. Reduction in trade barriers can potentially increase industrial specialization by country and therefore resulting in more asymmetric business cycles from industry-specific shocks. On the other hand, increased trade integration may result in more highly correlated business cycles due to common demand shocks or intra-industry trade. If the second hypothesis is empirically verified, policy makers have little to worry about the region being unsynchronized in their business cycles as the business cycles will become more synchronized after the monetary union is formed. This paper assesses the dynamic relationships between trade, finance, specialization and business cycle synchronization for East Asian economies using a Generalized Method of Moments (GMM) approach. The dynamic panel approach improves on previous efforts to examine the business cycle correlations — trade link using panel procedures, which control for the potential endogeneity of all explanatory variables. Based on the findings on how trade, finance and sectoral specialization have effects on the size of common shocks among countries, potential policies that can help East Asian countries move closer toward a regional currency arrangement can be suggested. The empirical results of this study suggest that there exists scope for East Asia to form a monetary union.

**Keyword:** Optimum Currency Area, Monetary union, Trade integration, Business cycle synchronization