

A New Approach to the Estimation of Equilibrium Real Exchange Rates among East-Asian Economies

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Summary

The East Asian currency crisis of 1997-98 fueled widespread interest towards the creation of some system of collective defense and mutual assistance in the region. The gradual strengthening of monetary cooperation among ASEAN+3 member countries is highlighted by the gradual evolution of the Chiang Mai Initiative (CMI) in 2000 into the CMI Multilateralization (CMIM) in 2009, a reinforcement of the system of bilateral currency swaps into reserve pooling. Following mainstream debate on how to enhance monetary cooperation at a regional level, the ASEAN+3 countries agreed in 2006 to explore the possibility of a move in the direction of an Asian currency unit (ACU).

Past and present experiences in exchange rate stabilization within a multi-country region suggest that, when defining a common currency basket for participating currencies, the determination of appropriate reference values for members' exchange rates is a crucial step for the mechanism to be successful. However, for such values to be credible, they must be set as close as possible to their equilibrium level. In this vein, the calculation of equilibrium real

exchange rate (ERER) is of crucial importance if speculative attacks triggered by a perception that exchange rate levels are unsustainable are to be prevented.

This paper introduces a new and original approach to the determination of equilibrium real exchange rates across ASEAN+3. Existing literature usually computes a country's ERER as the real exchange rate that brings the balance of payments of that country into equilibrium with respect to the rest of the world, following a partial equilibrium approach. For a set of countries belonging to a highly integrated area, separately computing ERERs for each country may lead to undesirable mutual inconsistencies. The methodology in this paper is aimed at a simultaneous determination of the ERERs of all countries in the region within a general equilibrium framework. The trade balance of each individual country is therefore in equilibrium with respect to the rest of the region. Numerical simulations conducted for ASEAN+3 show that such a methodology produces consistent results and is therefore a useful way of evaluating exchange rate deviations from equilibrium within the area.

The method is used to assess the ERER deviation of each single ASEAN+3 currency vis-à-vis the Chinese yuan and the Japanese yen. The results provide a helpful insight on the potential ability of each of these currencies to play a benchmark role in an exchange rate system for the region.