

# Analysis on $\beta$ and $\sigma$ Convergences of East Asian Currencies<sup>\*</sup>

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Abstract

This paper investigates recent diverging trends among East Asian currencies as well as recent movements of the weighted average value of them (Asian Monetary Unit: AMU) and deviations (AMU Deviation Indicators) of them from the average values by  $\beta$  and  $\sigma$  convergence methods. Our empirical analysis shows that the monetary authority of China continues stabilizing the exchange rate of the Chinese yuan against the US dollar even though it announced its adoption of a currency basket system. It is found that the weighted average of East Asian currencies has been appreciating against the US dollar while depreciating against the currency basket of the US dollar and the euro until the global financial crisis in 2008. Also, the analytical results on  $\beta$  and  $\sigma$  Convergences show that deviations among the East Asian currencies have been widening in recent years, reflecting the fact that these countries' monetary authorities are adopting a variety of exchange rate systems. In other words, a coordination failure in adopting exchange rate systems among these monetary authorities increases volatility and misalignment of intra-regional exchange rates in East Asia.

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