

On Determinants of the Yen Weight in the Implicit Basket System in East Asia

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Abstract

The recent de facto exchange rate regimes in East Asia are examined with the aim of examining the implicit basket system and its stability. The ultimate purpose is to explore how to organize the most appropriate system of basket currency in order to avoid an extensive misalignment of the real exchange rates among Asian currencies. We examine how the yen weight among the East Asian currencies has changed since the Asian currency crisis and explore determinants of the yen weight among economic indicators.

After expressing the above motive in the introductory section, Section 2 reviews the literature. Three literature groups are esteemed for our analysis: the recently developed taxonomy of de facto exchange regime, the analysis of Asian exchange rate regime after Asian crisis, and the traditional method of measuring yen weights in the implicit basket system.

Section 3 calculates the implicit yen weights among nine Asian economies. They are regrouped into three types: one that still maintains the rigid dollar peg system, one where exchange rate management is unstable due mainly to weaker external balances, and one which re-attempts the implicit basket system by lessening the dollar weights. A stylized picture of the resurrected dollar peg à la McKinnon seems to have receded to some extent: they do explore another possibility.

The determinants of yen weights are examined in Section 4 among major macro economic indicators. Three countries which typically attempt the basket system are targeted. Among the candidate regressors, changes in the yen-dollar rates and the short-term interest rate spread vis-à-vis the US proved to play leading roles, while the domestic activity proxied by industrial production has not exerted a significant affect.

Section 5 extends the previous framework to explore if determinants of the yen weights should remain symmetrically potent both in the higher yen and lower yen stages. We found that, while they remain sensitive to the changes in yen-dollar rates and short-term interest rate spread in higher yen rates, other factors such as changes in CPI, industrial production and export growth play more significant role in lower yen periods. The similar asymmetry can be confirmed in the higher dollar stages compared to the bearish dollar periods.

The implication of these results is obvious. If asymmetry is severe, we cannot expect the yen weight in the implicit basket to be sufficiently stable. In that case, the yen might well be an insider of the common basket: It should participate as a composing currency of a basket.