Optimal Exchange Rate System in Two Countries with the Rest of the World
(A comparative Analysis of the Fixed Exchange Rate, Basket Peg and Flexible Exchange Rate Systems)

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The purpose of this paper is to analyze the common currency in the region. Eiji Ogawa and Takatoshi Ito (November, 2000) and Masahiro Kawai (2002) proposed the common basket in the region in order to achieve the common currency union in Asia.

The followings are major findings in the paper.

(Ⅰ) It is not optimal for both countries to adopt a common basket for their currency basket. It leads to an increase in the value of loss function since the goods and monetary markets are different in two countries.

(Ⅱ) The optimal weights for the basket for each country are obtained and it is found that the optimal weights are different in each country when the economic structures are different in two countries. It is shown that the common weight for the currency basket leads to higher value of the loss function, i.e. the common baskets are not optimal.

(Ⅲ) Even if two countries adopt the same policy objectives such as to attain stable economic growth, the optimal weights for the basket differ from country to country.

(Ⅳ) In order to attain the common basket weights for the currencies, two countries must show the identical economic structure. It not, each country should use different weight.

(Ⅴ) Adoption of the fixed exchange rate leads to higher value of loss function, i.e. the fixed exchange rate policy is not good for the country.

(Ⅵ) Two steps are required to attain the currency union in Asian Region. One is to co-ordinate the policy objectives and adopt the same currency baskets with different weights. When their economic structures resembles as they grow further, the optimal weight for the basket converge each other.

(Ⅶ) Free floating is another way to minimize their policy loss function as shown in this paper when the optimal monetary policy is used. However, as Yoshino, Kaji and Ibuka (2004) shows that too much fluctuation of the exchange rates would suffer small country where their external factors are large relative to their domestic economy.