# **Exchange Rate Cooperation in East Asia: A Simple Solution**

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Conference on "The Global Monetary and Financial System and Its Governance"

Tokyo Club Foundation for Global Studies, November 12, 2008

#### **Current orientation**

- Two pillars
  - Asian Bond Market Initiative
    - Develop regional markets in regional currencies
  - Chiang Mai Initiative
    - BSAs and now SRPA
- Both deal indirectly with monetary cooperation
  - A defensive approach
  - Exchange rates out of the picture

## **Contrast with Europe**

- Similarity
  - European Monetary Cooperation Fund
    - Reserves pooling
    - Never worked
- Differences
  - Global integration of bonds and other financial markets
  - Direct agreement on exchange rate management
    - ERM, eventually single currency

## The difficulties of exchange rate cooperation

- Requires commitments
  - To tie down monetary policy
  - To provide mutual support
  - To choose an anchor
- The temptation of regional currency unit
  - ACU, proposed by EDB
  - ECU in Europe
    - Formal but largely useless

## A suggestion (not new, but with a twist)

- Williamson: common basket (variable) pegs
- ACU
  - a basket of regional currencies
  - evaluated vis à vis a basket of international currencies (US\$ = 65% and € = 35%)
  - basket used as divergence indicator for surveillance (soft cooperation)
- Our proposal: own basket (variable) pegs

Effective exchange rate

$$e_i^{\textit{eff}} = \sum_{j \neq i} w_{i,j} e_i^j$$
  $i \notin I = \mathsf{ASEAN} + 10$   $j \in J = I + K \longrightarrow \mathsf{Others}$   $Z = (\$, \notin, Y)$ 

Effective exchange rate

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 $Z = (\$, \leqslant Y)$ 

Own basket (in US \$)

$$h_i^{\$} = \sum_{z \in Z} h_{i,z} e_z^{\$}$$

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Own basket (in US \$)

$$h_{i}^{\$} = \sum_{z \in Z} h_{i,z} e_{z}^{\$} \longrightarrow h_{i}^{eff} = \sum_{j \in I, j \neq i} w_{i,j} h_{i}^{j} + \sum_{k \in K} w_{i,k} h_{i}^{k}$$

$$h_{i}^{j} = h_{i}^{\$} - h_{j}^{\$}$$

$$h_{i}^{k} = h_{i}^{\$} - e_{k}^{\$}$$

Effective exchange rate

$$e_i^{eff} = \sum_{j \neq i} w_{i,j} e_i^j$$
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Common basket (in US\$)

$$c^{\$} = \sum_{z \in Z} c_z e_z^{\$}$$

Effective exchange rate

$$e_i^{eff} = \sum_{j \neq i} w_{i,j} e_i^j$$
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Common basket (in US\$)

$$c^{\$} = \sum_{z \in Z} c_z e_z^{\$} \qquad \longrightarrow \qquad c_i^{eff} = \sum_{j \in I, j \neq i} w_{i,j} c_i^j + \sum_{k \in K} w_{i,k} c_i^k$$

Result

$$h_i^{eff} - c_i^{eff} = \left(\sum_{z \in Z} (h_{i,z} - c_z) e_z^{\$}\right) - \sum_{j \in I, j \neq i} \left(w_{i,j} \sum_{z} (h_{j,z} - c_z) e_z^{\$}\right)$$

Differences in home country weights

Differences in other ASEAN countries weights

Result

$$h_{i}^{eff} - c_{i}^{eff} = \left(\sum_{z \in Z} (h_{i,z} - c_{z})e_{z}^{\$}\right) - \sum_{j \in I, j \neq i} \left(w_{i,j}\sum_{z} (h_{j,z} - c_{z})e_{z}^{\$}\right)$$

$$\downarrow \qquad \qquad \downarrow \qquad \qquad \downarrow$$

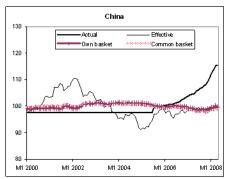
$$\operatorname{cov}(h_{i} - c, e^{\$})$$

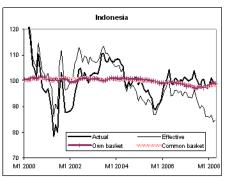
$$\operatorname{cov}(h_{i} - c, e^{\$})$$

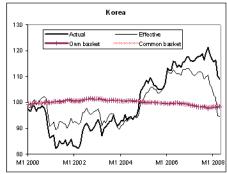
#### Counterfactuals

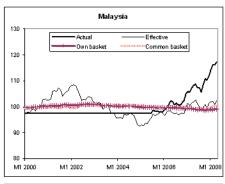
- Not all ASEAN countries
- K = 49 countries
- Trade weights: 2000-2

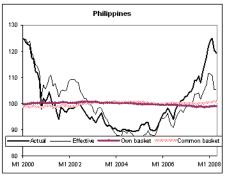
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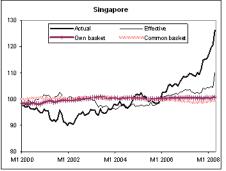


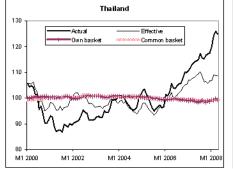


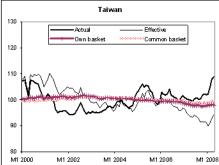




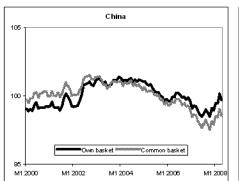




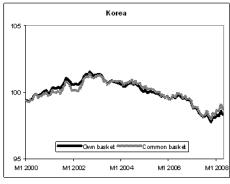


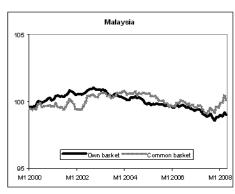


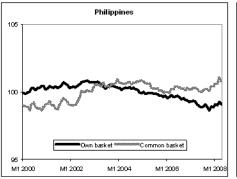
#### More details

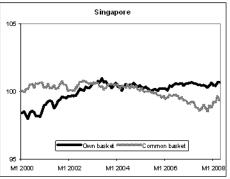


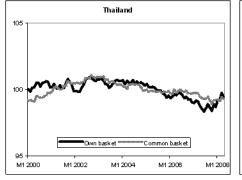


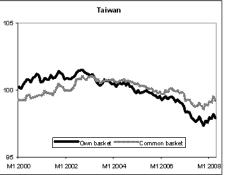












## Implications and questions

- No need to seek agreement on common baskets
- Three-currency basket pegs greatly stabilize currencies
  - But pegs must be upheld
    - Loss of policy autonomy
  - Stability may not be desirable
    - Issue of mutual surveillance
    - A positive role for CMI
  - Similar to ERM