Exchange Rate Cooperation in East Asia: A Simple Solution

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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
Arithmetics of basket pegs

• Effective exchange rate

\[ e_{i}^{eff} = \sum_{j \neq i} w_{i,j} e_{i}^{j} \]

\( i \notin I = \text{ASEAN + 10} \)

\( j \in J = I + K \rightarrow \text{Others} \)

\[ Z = (\$, €, ¥) \]
Arithmetics of basket pegs

- Effective exchange rate

\[ e_i^{\text{eff}} = \sum_{j \neq i} w_{i,j} e_i^j \quad i \notin I = \text{ASEAN + 10} \]

\[ j \in J = I + K \rightarrow \text{Others} \]

\[ Z = (\$,€,Y) \]

- Own basket (in US $)

\[ h_i^\$ = \sum_{z \in Z} h_{i,z} e_z^\$ \]
Arithmetics of basket pegs

• Effective exchange rate

\[ e_{i}^{\text{eff}} = \sum_{j \neq i} w_{i,j} e_{i}^{j} \quad i \not\in I = \text{ASEAN + 10} \]
\[ e_{i}^{\text{eff}} = \sum_{j \in J = I + K} w_{i,j} e_{i}^{j} \quad \text{Others} \]
\[ Z = (\$, \€, Y) \]

• Own basket (in US $)

\[ h_{i}^{\$} = \sum_{z \in Z} h_{i,z} e_{z}^{\$} \quad \rightarrow \quad h_{i}^{\text{eff}} = \sum_{j \in I, j \neq i} w_{i,j} h_{i}^{j} + \sum_{k \in K} w_{i,k} h_{i}^{k} \]
\[ h_{i}^{j} = h_{i}^{\$} - h_{j}^{\$} \]
\[ h_{i}^{k} = h_{i}^{\$} - e_{k}^{\$} \]
Arithmetics of basket pegs

• Effective exchange rate

\[ e_{i}^{\text{eff}} = \sum_{j \neq i} w_{i,j} e_{i}^{j} \quad i \notin I = \text{ASEAN + 10} \]

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• Own basket (in US $)

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

• Common basket (in US$)
Arithmetics of basket pegs

• Effective exchange rate

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\[ Z = (\$, \€, Y) \]

• Own basket (in US $)

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

• Common basket (in US$)

\[ c^{\$} = \sum_{z \in Z} c_{z} e_{z}^{\$} \rightarrow c_{i}^{\text{eff}} = \sum_{j \in I, j \neq i} w_{i,j} c_{j}^{i} + \sum_{k \in K} w_{i,k} c_{k}^{i} \]
Arithmetics of basket pegs

• Result

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

Differences in home country weights

Differences in other ASEAN countries weights
Arithmetics of basket pegs

- Result

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

\[\text{cov}(h_i - c, e^\$)\]

\[\text{cov}(h_j - c, e^\$)\]
Counterfactuals

- Not all ASEAN countries
- \( K = 49 \) countries
- Trade weights: 2000-2
Counterfactuals
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