Economic Dynamics and Integration in Eastern Europe and Asia

Lecture
Winter semester 2017/18

Chair for Macroeconomic Theory and Politics
Schumpeter School of Business and Economics
Bergische Universität Wuppertal
Prof. Paul J.J. Welfens

• Office: M-12.08
• Email: welfens@wiwi.uni-wuppertal.de
• Office hours: Monday 12:00-13:00 (During Semester)
  Thursday 11:00-12:00 (During Semester break) at EIIW
• Chair for Macroeconomic Theory and Politics:
  https://welfens.wiwi.uni-wuppertal.de/index.php?id=3314&L=0
David Hanrahan

- Office: M-12.10
- Email: hanrahan@wiwi.uni-wupperlal.de
- Office hours: by appointment
- Chair for Macroeconomic Theory and Politics:

  https://welfens.wiwi.uni-wuppertal.de/index.php?id=6194
Tian Xiong

- Office: M-12.11
- Email: xiong@wiwi.uni-wuppertal.de
- Office hours: Tuesday 14:00-15:00
- Chair for Macroeconomic Theory and Politics:
  
  https://welfens.wiwi.uni-wuppertal.de/index.php?id=6011
Asia’s Cross-border Assets

Source: ADB calculations using data from IMF
Money and Finance

Asia’s Cross-border Liabilities

Source: ADB calculations using data from IMF
Asia’s Inward Portfolio Debt Investment

Asia’s Outward Portfolio Debt Investment

Source: ADB calculations using data from IMF
Asia’s Intraregional Portfolio Debt Investment by Sub-regions (%)

Notes: Numbers in parentheses are total investments (in $ billion) from the respective subregions. Source: ADB calculations using data from IMF.
Inward Portfolio Equity Investment—Asia

Outward Portfolio Equity Investment—Asia

Source: ADB calculations using data from IMF
Asia’s Intraregional Portfolio Equity Investment by Sub-region (%)

Notes: Numbers in parentheses are total investments (in $ billion) from the respective subregions.
Source: ADB calculations using data from IMF
Asian integration can still be best described as **market-driven integration**. Whereas the benefits of political integration in Asia are not yet fully acknowledged, economic integration is perceived as beneficial when it yields economic benefits for all parties involved.

**Illustration**

- Regional cooperation is a process in which a group of countries (generally in the same region) with common interests cooperate to solve tasks and create improved conditions in order to maximise economic, political, social, and cultural benefits for all the participating countries (Lee 2003).

- Economic integration, on the other hand, is a process which aligns disparate national markets more closely. This integration can be policy induced, that is, integration can be market driven or state or institution driven (Bisley 2007).
Economic Integration of Asia

- Asia has been a latecomer in terms of this phenomenon. Regionalism began to emerge there mainly after the 1992 signing of the Association of Southeast Asian Nations Free Trade Agreement (AFTA), which became operational in 2002.

- However, since the Asian financial crisis in 1997 there has been rapid growth in various regional economic arrangements, both within and outside of the region.

- Although formal regional economic cooperation in Asia started later, economic integration among the Asian countries, especially in East Asia, began as early as 1950s with the rapid industrial growth in Japan, which was later followed by the newly industrialized economies (NIEs) or Asian tigers. This integration started with the “flying geese effect” (Akamatsu, 1962) and was followed by unilateral and plurilateral trade and investment liberalization, which coincided with the increasing fragmentation of production processes and technological change.
Economic Integration of Asia

- The growing economic regionalism/cooperation among Asian countries has been encouraged by various factors:
  
  (i) recognition of the need to further strengthen economic ties;
  
  (ii) increasing regionalism in Europe and North America; the perceived success of economic integration in other regions, especially in the European Union (EU) (Kawai and Wignaraja 2009);

  (iii) the slow progress of multilateral negotiations at the World Trade Organization (WTO);

  (iv) the 1997/98 financial crisis underscored Asian interdependence and shared interests and provided the impetus for major intergovernmental engagements and initiatives striving for Asian regionalism.
• IT share is the percentage of intraregional trade to the total trade of the region, calculated using export data.

\[ \frac{X_{ii}}{\left(\frac{(X_{iw} + X_{wi})}{2}\right)} \]

where \( X_{ii} \) is exports from region \( i \) to region \( I \), \( X_{iw} \) is exports from region \( i \) to the world, and \( X_{wi} \) is exports from the world to region \( i \).

• IT intensity is the ratio of intraregional trade share to the share of world trade with the region, calculated using export data.

\[ \frac{\left\{ \left[ \frac{X_{ii}}{\left(\frac{(X_{iw} + X_{wi})}{2}\right)} \right] \right\} \left\{ \left[ \frac{(X_{iw} + X_{wi})}{2} \right] / X_{ww} \right\} } \]

where \( X_{ii} \) is exports from region \( i \) to region \( I \), \( X_{iw} \) is exports from region \( i \) to the world, \( X_{wi} \) is exports from world to region \( I \), and \( X_{ww} \) is total world exports.

Trade integration is the most commonly used and most important measure of economic integration.

The two most vital measures used to examine the degree regional interdependence are intraregional trade share and intraregional trade intensity.
• **Intra-regional trade share** - calculated using trade data.

\[
\frac{T_{ii}}{T_i}
\]

where \(T_{ii}\) is exports of region i to region i plus imports of region i from region i, \(T_i\) is total exports of region i to the world plus total imports of region i from the world. A higher share indicates a higher degree of dependency on regional trade.

• **Intra-regional trade intensity index** - calculated using trade data.

\[
\frac{T_{ii}/T_i}{T_i/T_w}
\]

where \(T_{ii}\) is exports of region i to region i plus imports of region i from region i; \(T_i\) is total exports of region i to the world plus total imports of region i from the world; and \(T_w\) is total world exports plus imports. An index of more than one indicates that trade flow within the region is larger than expected given the importance of the region in world trade.
FDI Integration

- The AFDI share is the percentage of annual regional FDI inflows to the total FDI from the investing region.
  - A higher share indicates a stronger preference for the region and a higher degree of integration between the economies of the region/subregion in terms of investment.

- CFDI share is the percentage of cumulated regional FDI inflows to total FDI from the investing region.
  - A higher share indicates a stronger preference for the receiving region and a higher degree of integration.

**FDI integration** is one of the major indicators of economic integration.

There are many measurements, such as annual FDI share (AFDI), cumulative FDI share (CFDI),...
Finance is one of the most vital sectors of any economic system, it is expected that when the real sectors of different economies become interconnected the financial sector will also follow in the same direction. Various tools are used to examine financial integration between the economies of a region. **Asia Regional Integration Center** used 17 indicators to measure financial integration integration

**E.g.**

The intraregional portfolio share is used in examining the trends in and extent of financial integration. The portfolio share is the percentage of intraregional portfolio assets to total portfolio assets held by countries in a particular region or sub-region. A higher share indicates a higher degree of integration in the financial sector.
Cooperation Groups in Asia
The major economic cooperation groups

- The Association of Southeast Asian Nations (ASEAN); 1967
- The South Asian Association for Regional Cooperation (SAARC); 1985
- East ASEAN Growth Area (EAGA); 1994
- Central Asia Regional Economic Cooperation (CAREC); 1997
- ASEAN+3; 1997
- East Asia Summit (EAS or ASEAN+6); 2004
- Asian Cooperation Dialogue (ACD); 2002
- Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC); 1997
- Mekong-Ganga Cooperation (MGC) 1992
- ...
The major economic cooperation groups

Source: https://www.cogitasia.com/a-new-paradigm-for-apec/
The major economic cooperation groups

Source: http://en.reingex.com/Master-International-Relations.shtml
Key Challenges

- Developing a shared vision and leadership
- Developing an Asian consciousness
- Avoiding the “Spaghetti bowl” effects
- Consolidating the FTAs, PTAs, RTAs, and CEPAs
- Strengthening the domestic financial sectors and regional financial cooperation
- Enhancing cooperation and coordination among Asian Institutions and Think Tanks
- Bridging the infrastructure gap
As opposed to cooperation among a very small group of countries at different subregional levels. It is also anticipated that the overlapping of trade agreements could lead to a "spaghetti-bowl effect". It is due to the overlapping of rules and the complicated rules of origin provisions that would be detrimental to enhancing trade volume.
• Economic integration is a multidimensional process that encompasses deepening interdependence in various spheres of economic activity among the various economies in a particular region. Technological advances in transportation and telecommunications along with reduced trade and investment barriers have resulted in two contradictory processes: globalization and regionalization (regional integration).

• Due to the increasing unilateral and multilateral liberalization of its trade and investment sectors, Asia has had the fastest rate of economic growth during the last few decades and has become the center of the world economy’s economic activities. As the Asian economies have grown larger and become more complex, they have also become more integrated through trade, foreign investment, financial transactions and other forms of economic exchange, and peoples’ movement.
Conclusion

• It will be necessary to show more institutional innovation to ensure that existing institutions are more cohesive and effective. This could take place at four levels: sub-regional, Asia-wide, inter-regional and globally:

• At the sub-regional level, the examples of GMS and CAREC can serve as models for other sub-regions.

• At the Asia-wide level, a gradual expansion and deepening of the ASEAN+ approach provides the best institutional prospects.

• At the inter-regional level APEC and ASEM are good starting points for greater engagement with the neighbouring regions, with a focus on improvements in physical connectivity, in trade Long-Term Strategic Framework.

• At the global level, Asia could pursue a stronger regional stance within global international institutions. The ADB in its recent flagship publication proposed a number of specific institutional innovations that deserve careful consideration.
### Design of the Asia-Pacific Regional Cooperation and Integration Index

<table>
<thead>
<tr>
<th>R1. Trade and Investment</th>
<th>R11</th>
<th>Proportion of intraregional goods exports to total goods exports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R12</td>
<td>Proportion of intraregional goods imports to total goods imports</td>
</tr>
<tr>
<td></td>
<td>R13</td>
<td>Intraregional trade intensity index</td>
</tr>
<tr>
<td></td>
<td>R14</td>
<td>Proportion of intraregional foreign direct investment (FDI) inflows to total FDI inflows</td>
</tr>
<tr>
<td></td>
<td>R15</td>
<td>Proportion of intraregional FDI inflows plus outflows to total FDI inflows plus outflows</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>R2. Money and Finance</th>
<th>R21</th>
<th>Proportion of intraregional cross-border equity liabilities to total cross-border equity liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R22</td>
<td>Proportion of intraregional cross-border bond liabilities to total cross-border bond liabilities</td>
</tr>
<tr>
<td></td>
<td>R23</td>
<td>Pairwise dispersion of deposit rates average regionally relative to that averaged globally</td>
</tr>
<tr>
<td></td>
<td>R24</td>
<td>Pairwise correlation of equity returns average regionally minus that averaged globally</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>R3. Regional Value Chain</th>
<th>R31</th>
<th>Ratio between the average trade complementarity index over regional trading partners and the averaged trade complementarity index over all trading partners</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R32</td>
<td>Ratio between the average trade concentration index over regional trading partners and the averaged trade concentration index over all trading partners</td>
</tr>
<tr>
<td></td>
<td>R33</td>
<td>Proportion of intraregional intermediate goods exports to total intraregional goods exports</td>
</tr>
<tr>
<td></td>
<td>R34</td>
<td>Proportion of intraregional intermediate goods imports to total intraregional goods imports</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>R4. Infrastructure and Connectivity</th>
<th>R41</th>
<th>Ratio between the average trade cost over regional trading partners and the average trade cost over all trading partners</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R42</td>
<td>Ratio between the average liner shipping connectivity index over regional trading partners and the average liner shipping connectivity index over all trading partners</td>
</tr>
<tr>
<td></td>
<td>R43</td>
<td>Logistics performance index (overall)</td>
</tr>
<tr>
<td></td>
<td>R44</td>
<td>Doing Business Index (overall)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>R5. Movement of People</th>
<th>R51</th>
<th>Proportion of intraregional outbound migration to total outbound migration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R52</td>
<td>Proportion of intraregional tourists to total tourists (inbound plus outbound)</td>
</tr>
<tr>
<td></td>
<td>R53</td>
<td>Proportion of intraregional remittances to total remittances</td>
</tr>
<tr>
<td></td>
<td>R54</td>
<td>Proportion of other Asian economies that do not require an entry visa</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>R6. Institutional and Social Integration</th>
<th>R61</th>
<th>Proportion of other Asian economies with which there is a signed free trade agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R62</td>
<td>Proportion of other Asian economies that have an embassy</td>
</tr>
<tr>
<td></td>
<td>R63</td>
<td>Proportion of other Asian economies with which there is a signed business investment treaty</td>
</tr>
<tr>
<td></td>
<td>R64</td>
<td>Proportion of other Asian economies with which there is a signed double taxation treaty</td>
</tr>
<tr>
<td></td>
<td>R65</td>
<td>Cultural proximity with other Asian economies relative to that with all other economies</td>
</tr>
</tbody>
</table>

Thank You for Your Attention!