Vertical specialization of China’s supply chains

Satoshi Inomata
Institute of Developing Economies, JETRO

Fragmentation: A definition

Deardorff (1998)

The splitting of a production process into two or more steps that can be undertaken in different locations but that lead to the same final product.
International fragmentation of tailoring process

- Designing
- Pattern-cutting
- Sewing

→ Larger opportunity for division of labour and better allocation of resources
**Tri-polar Trade through China**

**Vertical Specialization (VS)**

*Hummels, Ishii & Yi (2001)*

\[ VS_i = (\text{Imported input coefficients}) \times (\text{Export value of good } i) \]

→ *Degree of participation in vertical production networks*
Geographical decomposition of China's VS index: 2000

Geographical decomposition of China's VS index: 2008
**VS_i**: the VS index of exports for intermediate usage in foreign countries, which shows the level of participation in the production of parts and components.

**VS_f**: the VS index of exports for overseas final consumption, which indicates the degree of engagement in the final assembly process.
By comparing the values of VS_i and VS_f, the technological development of the countries can be profiled.
Tri-polar Trade through China

China's VS export to Japan: 2000

China's VS export to Japan: 2008

China's VS export to other Asian countries: 2000

China's VS export to other Asian countries: 2008
Geographical decomposition of Other Asian Countries’ VS index: 2000

Geographical decomposition of Other Asian Countries’ VS index: 2008

[China → Other Asia → China]
The formation of highly self-sufficient market among emerging economies of Asia.

Thank you!!