Comments on "Multinational Corporations, FDI and the East Asian Economic Integration" presented by Tzu-Han Yang

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Overview of this study

- This study is an exploratory analysis of major MNCs activities, FDI and East Asian economic integration.

More specifically,

- MNCs → Descriptive analysis by data of The Forbes Global 2000 firms.

"The titans listed here get a composite ranking from four metrics: sales, profits, assets, market value" from the Forbes website

- FDI, EA-EI→ Hierarchical cluster analysis in terms of FDI intensity and Trade intensity, and index of revealed comparative advantage (RCA) analysis for EA region.

Main Findings

- Complementarities among major MNCs, FDI and trade, especially for manufacturing in EA region.

- Regional concentration of bilateral FDI intensity and Trade intensity is significant in EA region.

- Association btw the emerging of China and the flying geese pattern in EA region (China passed over ASEAN4, inherited from JPN/US and NIEs).

Feature of this study

- Provide informative fact that a few "titans" MNCs have grown and expanded, and the presence is positively correlated with total FDI.

- Identify economic integration using *hierarchical cluster analysis* (HCA) rather than gravity model with regional dummy.

  ➢ It has been argued that the coefficients of regional dummy is often unstable and biased.

  ➢ HCA does not need a priori assumption for grouping countries in EI.

  ➢ HCA can show visible internal structure of each cluster (i.e., EI) by tree diagram.

Comment and Question (1)

- In HCA, Trade or FDI intensity defined as bilateral flow btw country i and j to total volume of world trade→

$$T_{ij} = \frac{\left(X_{ij} + X_{ji} \right)}{\sum_{i}^{N} \sum_{j}^{N} X_{ij}}$$

- Inverted T→ "Distance"

→Is standardization of T to account change in the composition of sample unnecessary?

→Is FDI intensity also computed by "Flow" data? In case of FDI, "Stock" may be better.

Comment and Question (2)

- Tree diagram show that EI has been developed over year.
- How is the growth of EA-EI different from other blocs (e.g. EU bloc)?

→Simple descriptive examination within cluster and comparison over 2000-2004-2008 year may be feasible in slide 14-16.

Relative intensity: $t_k = \dfrac{\overline{T_{k,C}} - \overline{T_k}}{s_k}$

T: averaged intensity

C: group within cluster

s: Standard deviation

t > 0 ➜ countries within C indeed realized high trade intensity to k.

Homogeneity test in a cluster: $f_k = \dfrac{s_{k,C}^2}{s_k^2}$

F < 1 ➜ Export behavior of the countries in cluster C for country k is similar (homogenous). F > 1➜not similar (heterogeneous)

Comment and Question (3)

- Robustness check for relation btw trade and EI can be achieved by estimating gravity equation with "cluster category dummy" based on HCA result.

- Analysis on differences in magnitude btw *institutional* regional dummy (e.g. RTA) and cluster category dummy ("*actual*"economic integration) may be interesting issue.

→Which explanatory power is high?

→Causality issue: RTA → EI ? Or EI → RTA?

Minor comments

- Size of MNCs in the Forbes global 2000 data seems to potentially contain domestic size in home country. Therefore, home market size possible affects on selection of "titans".

- In the RCA analysis for EA region, the definition of "inherited" is a little bit ambiguous. Is there any statistical benchmark?