

Discussion of “Trade from Space: Shipping Networks and The Global Implications of Local Shocks”

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This paper

- Large fraction of international trade through container shipping
→ Key role of ports and their connections
- It's not about A to B (direct routes), it's 94% about A to B through C (e.g. Panama) and more than 50% through 2 ports: role of local shocks in these “sail-through” places.
- Contributions:
 - Shipping network
 - Diff-in-diff analysis reveals crucial role of sail-through places (relative growth effect) / quantitative GE calibrated to Diff-in-Diff
 - Propagation of local shock (expansion of Panama Canal): widespread gains, concentrated costs
- In short: a beautiful paper!

New quantitative framework

- Previously (out of memory) traditional Eaton-Kortum model vs. Allen-Arkolakis (2022)
- Why the change? How does it impact your results?

1. New feature, endogenous trade costs: trade-cost shock leads to “new” routes (from close-to-0 probability to higher vs. routes getting close to 0 probability) → shipping network stability?

- Tension(?) with your diff-in-diff exercise: is the calibrated model consistent with those 2+2% of observed changes?
- Related desc. statistics: does the network get more dense over time(?), do new routes matter?
- Characteristics of those routes that are dropped/added following the Panama canal expansion?

2. What are the observables that you need to calibrate the model? How are these different from a standard trade model?

- Frequency? Capacity?
- Utilization variable? Do ships operate at full capacity on the whole route? Do they cumulate loads/unloads?
- Do ports characteristics (e.g. capacity) matter?

Quantifying international externalities

- Any exposed route face lower transport costs → positive international externalities
 - “using the structure of the model (...) we conclude that the expansion was associated with positive international externalities.”
 - \neq ACR formula relies on macro-restriction of the “IIA-type” (GE effects are distributed proportionally to all non-shocked countries)
 - What are negative international externalities?
 - Opportunity cost of taking the cheaper route?
 - GE? maybe non-exposed routes hurt through increased traffic between richer pairs?
- Can you decompose these channels?
- International externalities absent from the canonical model of trade(?)
 - reinterpret a local shock as a common-shock in all exposed pairs?

Distributional gains

- Concentrated costs / widespread gains?
 - Matter of incidence... gravity framework not necessarily suited
 - surplus from lower trade costs could be extracted locally (tolls)
 - raises questions about the market structure in the transport sector market structure (concentration would probably restore concentrated gains?)

Misc

- Empirics: directional bilateral fixed effects?
- Model
 - idiosyncratic route-specific shocks $\varepsilon_{i,j,r}(\nu)$ (nests?)
 - Global change in real income: not a welfare measure(?)
- Future research:
 - Supply-chain disruptions?
 - Geopolitical economy of a sparse shipping network?