Productivity, (Mis)allocation and Trade

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What is the effect of trade liberalization on aggregate productivity and welfare?

- Export liberalization leads to higher productivity and reallocation of resources towards productive firms - import can reduce it
- Ambiguous effect if there is misallocation

Methodology:

- Melitz (2003) model: impact of trade on productivity and welfare
- Regressions: the impact of trade on productivity
• Goal: establish a connection between trade and productivity

• Ingredients:
  - Firms with heterogeneous productivity, entry & exit, only labor
  - Two components: underlying marginal cost $\times$ distortions
  - GE model: Wages can be fixed or flexible

• Show:
  - Gains from trade are ambiguous, especially if there is misallocation
  - OP decomposition is not indicative of allocative efficiency
Discussion of Theory

• Interpretation of "Fixed" wages - only GE is price effect
• Distortions are exogenously given and do not change \( \implies \) OP covariance?
• Why focus on OP decomposition if it is ambiguous? Or is it not?
• Why not estimate/calibrate the model directly as in Bai et. al (2018)?
• Multiple advantages:
  • Rich geographical data — Heterogeneity in misallocation across locations
  • Sharper predictions in terms of observables, can look outside OP
  • Quantitatively explain the mechanism
  • Counterfactuals are possible
Empirics

- Goal: Effect of trade on the level of labor productivity

- Ingredients:
  - Construct sector level export demand and import competition
  - Regress (parts of) productivity on exports/imports
  - Controls, IV: Bartik, Tariffs,

- Show that a 20% increase in:
  - Exports \( \Rightarrow \) Productivity \( \uparrow [7.6\%; 8.2\%] \)
  - Imports \( \Rightarrow \) Productivity \( \uparrow [1\%; 10\%] \)
  - Efficient institutions dampen the gains from exports, increase from imports
Discussion of Empirics

- Combining CompNet with WIOD is a great idea — trade for services
- Appendix Table 2 is interesting in itself — regressions on growth:
  - Exports only increases productivity through reallocation
  - Imports only through raising average productivity
- OP decomposition behaves in line with theory — but was it informative there?
- Other misallocation measures behave similarly:
  - Reinforces the empirical analysis
  - Another reason to use the theoretical model
- Identification and within EU trade - manufacturing "tariffs" in 1998?
• Interesting paper, quantifies gains from trade across different countries

• With the use of a consistent dataset

• Methodological contribution about the OP decomposition and misallocation

• How does it compare to the Arkolakis et. al (2012) result?

• What is the main difficulty in estimating the model? Multiple sectors?
Smaller Issues

- Economics of the fixed wages in this sector?

- Extensive numerical exercise: which parameters are key outside misallocation

- Mechanism after theory to prepare us for the result?

- Import/export share should be visible in the numerical analysis (not only cost)

- $R^2$ decomposition with fixed effects

- Some data ("Mean aggregate productivity") should not be in the main text