

Productivity, (Mis)allocation and Trade

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October 7, 2019

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Introduction

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

Theory

- 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 \implies Productivity \uparrow [7.6%; 8.2%]
 - Imports \implies 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?

Conclusion

- 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