

Establishment Heterogeneity, Exporter Dynamics, and the Effects of Trade Liberalization

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The contribution

- The paper quantifies the effects of a trade liberalization using **dynamic** version of a Melitz model

My discussion

- Some perspective on the paper
- Some intuition on the economics of the paper
- Quantitative results
- Welfare and relation to ACR

The starting point

- Export decision involves payment of a fixed cost today in exchange for future benefits (i.e. the possibility of exporting at a low cost, Baldwin 1986)
- Similar to an investment/option decision, hence forward looking
- Obviously in static trade models this aspect of export decision is not considered
- Does this omission matter?

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- Does this omission matter?
- **It depends on the question!**

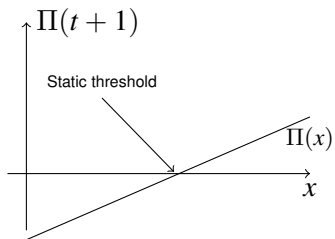
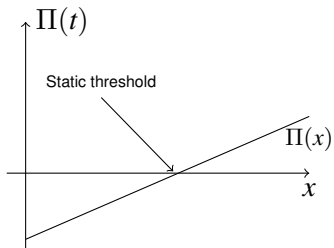
Previous research

- [Ruhl \(2003\)](#): It matters for understanding different responses of firms to temporary (Business cycles) v/s permanent shocks (trade liberalizations)
- [Das, Robert and Tybout \(2007\)](#): It matters for evaluating the effectiveness of export promoting policies
- [Alessandria and Choi \(2008\)](#): It does not matter for aggregate net export dynamics
- [Lande Schmeiser \(2009\)](#), [Morales et al. \(2011\)](#): It matters for firms decision of where to export

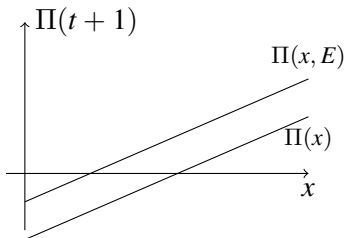
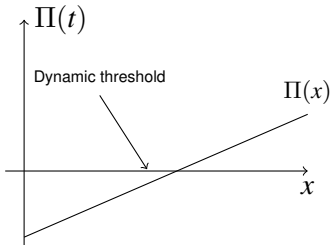
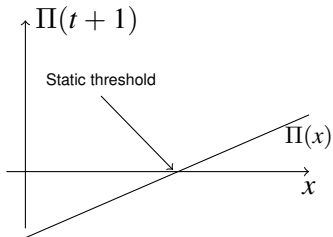
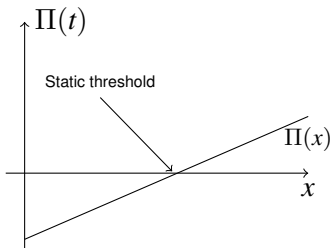
This paper

- Dynamic export responses matter for evaluating effect of trade liberalizations
 - Trade responds more (relative to a static framework) to liberalization
 - Consumption overshoots its long run level (as opposed to undershooting in a static framework)
 - Welfare benefits of liberalization larger than in static framework

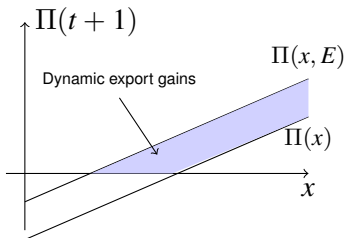
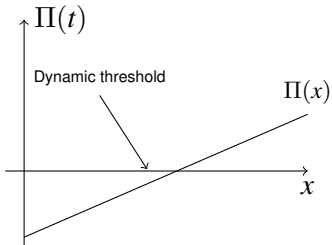
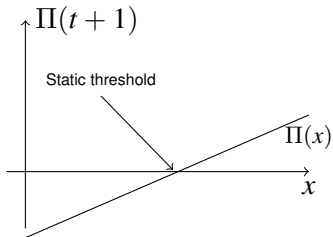
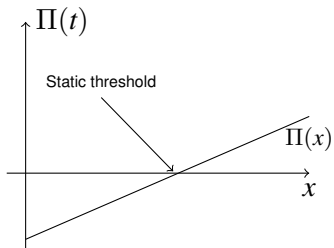
Export decisions in a two period model



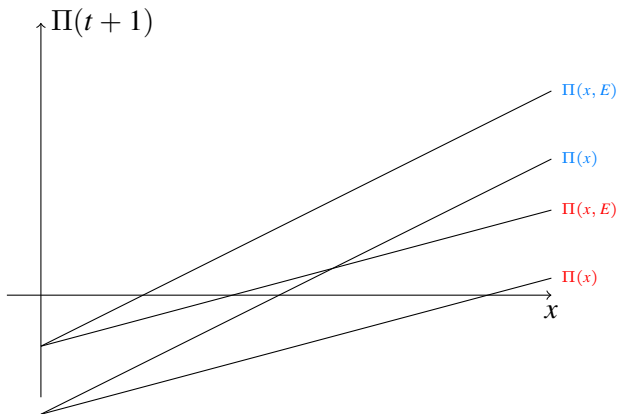
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Export decisions in a two period model

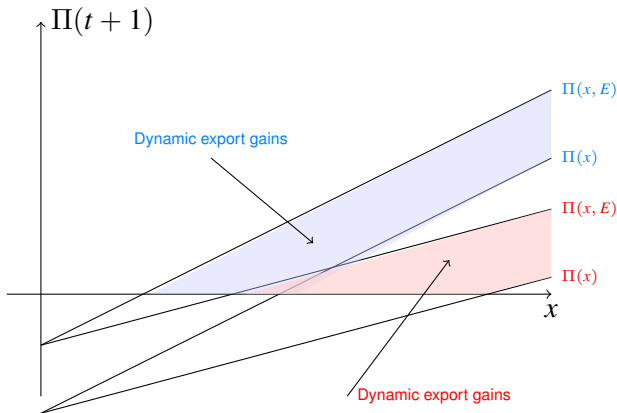


Change in tariffs and dynamic export responses



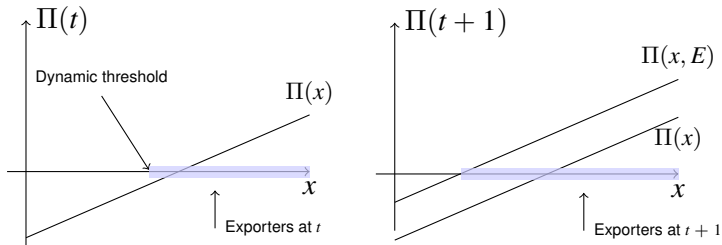
- Lower tariffs increase static entry, but also increases dynamic gains from exporting, hence export response to lower tariff is larger in the dynamic economy

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Why overshooting?



- Hysteresis implies that exporters in $t+1$ have lower productivity. Upon entry, surge in exports, later on fall in exports due to fall in TFP: overshooting

Moving to the quantitative part

- What does the papers misses?

Moving to the quantitative part

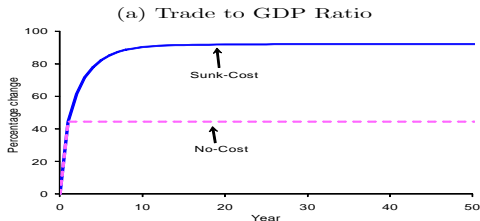
- What does the papers misses?
- Nothing!!

Moving to the quantitative part

- What does the papers misses?
- Nothing!!
- General equilibrium
- Capital accumulation
- Comprehensive calibration (matches macro and micro moments)
- Evaluation of welfare using transition
- Extensive sensitivity analysis

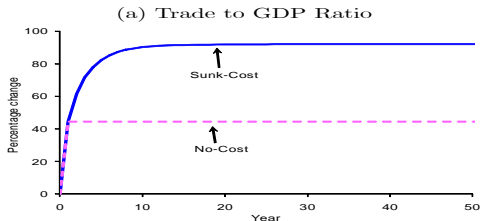
Strong (testable) aggregate implications

- Large (can get in a static model) and persistent (can't get in static model) increase in trade after liberalization

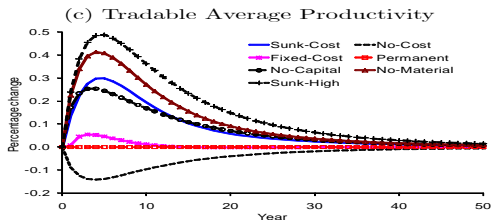


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- Overshooting in tradable TFP



Welfare evaluation

- If you simply apply ACR welfare formula to compute welfare $1 - \lambda^{-1/\epsilon}$, $\lambda = 0.96$, gains from trade in the economy you get a range [.41% – .82%] depending on elasticity
- Welfare gain in the model with dynamic export decision (No material case) you get a range [.5% – .7%] depending on whether you include transitional gains or not
- Difference in welfare gains from complete tariff elimination between static and dynamic model < 0.3%! (table 6)
- Overall: **hard to push quantitative importance of dynamic decisions for welfare**