Discussion of

Slicing the Pie: Quantifying the Aggregate and Distributional Effects of Trade

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This paper

- The goal: develop a benchmark framework for quantifying gains and losses from trade, including distributional effects
  - Much of trade literature moved away from HO and SF models and lost focus on distributional consequences
  - In particular, the leading quantitative framework, the Ricardian EK model, does not allow for distributional effects
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- Ricardian trade model + Roy labor market sorting model
  - Country $i$ has comparative productivity advantage in industry $s$
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    \text{Frechet}(T_{is}, \theta) \rightarrow \lambda_{ijs} = \frac{T_{is}(\tau_{ij}w_{is})^{-\theta}}{\sum_{\ell} T_{\ell s}(\tau_{\ell j}w_{\ell s})^{-\theta}}
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  - Workers $g$ have comparative advantage in working in sector $s$
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    \text{Frechet}(A_{igs}, \kappa) \rightarrow \pi_{igs} = \frac{A_{igs}w_{is}^{\kappa}}{\sum_{k} A_{igk}w_{ik}^{\kappa}}
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• A very elegant and tractable formulation
  An obvious model for a textbook to teach economic intuition.
Main insights

- Sharp characterization of group-specific welfare gains:

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\Delta \log W_g = \left( -\frac{1}{\theta} \sum_s \omega_s \Delta \log \lambda_s \right) + \left( -\frac{1}{\kappa} \sum_s \omega_s \Delta \log \pi_{gs} \right)
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\[= \text{Consumer Gains} \quad \text{and} \quad = \text{Income Gains} \]

- Workers in group \(g\) lose if sectors of their comparative advantage are disadvantaged by trade, a neoclassical story.
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1. More gains than in the baseline EK model if \( \kappa < \infty \)
2. Aggregate welfare depends on group-specific income effects
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• Potentially large heterogeneity in outcomes within group \( g \)
  — How much residual inequality given estimated \( \kappa \) (dual role)
  — Adjust welfare for residual inequality
  — Are changes in residual inequality consistent with the data?
Skilled vs unskilled

- The paper finds overall gains, which however vary considerably across groups $g$
  - Groups $g$ in the paper correspond to detailed geography $\times$ two educational bins

- One surprising result is the high correlation (0.87) between the outcomes of high and low skill groups across geographies
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• One surprising result is the high correlation (0.87) between the outcomes of high and low skill groups across geographies

• This seemingly contrasts with the empirical findings of ADH:
  — higher skill workers in affected geographies experience less unemployment and income loss

• What feature of the data ensures this result?
Relationship to the real world

The paper focuses on the long-run distributional effects after the adjustment to trade is complete

— Arguably, the key disruptions empirically are transitory, along the adjustment to trade shocks
— Yet, these transitions can last very long
— What is the right model to use?
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2 What are worker groups $g$?
   — Why geography is a fixed characteristic of workers?
   — Why worker productivity is geography-specific?
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2. What are worker groups $g$?
   - Why geography is a fixed characteristic of workers?
   - Why worker productivity is geography-specific?
   - This points to the role of firms, absent in a neoclassical model. Why firms do not move towards workers? Agglomeration.
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3. The model features no unemployment and no non-employment, two important margins in the data
A frictional model

- Itskhoki and Helpman (2015): adjustment to trade in a Melitz model with DMP search and matching friction
A frictional model

- With labor search frictions alone, trade shocks create either little unemployment or little income loss.
A frictional model

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- Two counterfactual features:
  1. If search frictions are large, firms do not fire workers
  2. Free entry forces firm to enter where workers are