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 $s$
    \[ F_{i,s}(T_{is}, \theta) \rightarrow \lambda_{ijs} = \frac{T_{is}(\tau_{ij} w_{is})^{-\theta}}{\sum_\ell T_{\ell,s}(\tau_{\ell j} w_{\ell s})^{-\theta}} \]
  — Workers $g$ have comparative advantage in working in sector $s$
    \[ F_{i,g}(A_{igs}, \kappa) \rightarrow \pi_{igs} = \frac{A_{igs} w_{is}^{\kappa}}{\sum_k A_{igk} w_{ik}^{\kappa}} \]
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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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= Consumer Gains

= Income Gains

— Workers in group \( g \) lose if sectors of their comparative advantage are disadvantaged by trade, a neoclassical story.
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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

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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?
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?
Relationship to the real world

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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