Discussion of

Redistributing the Gains From Trade through Progressive Taxation

by Spencer Lyon and Michael Waugh

Oleg Itskhoki
Princeton University

Trade and Labor Markets Conference
NBER, October 2017

Motivation

- Trade is a positive productivity shock
  - better global allocation results in aggregate gains from trade
  - comparative advantage is sufficient for this result

Motivation

- Trade is a positive productivity shock
  - better global allocation results in aggregate gains from trade
  - comparative advantage is sufficient for this result

- Why then so much opposition to trade?

Motivation

- Trade is a positive productivity shock
  — better global allocation results in aggregate gains from trade
  — comparative advantage is sufficient for this result

- Why then so much opposition to trade?

- This productivity shock is not uniform in the cross-section
  — of industries
  — of occupations and skills
  — of firms
  — of geographies

Motivation

- Trade is a positive productivity shock
  — better global allocation results in aggregate gains from trade
  — comparative advantage is sufficient for this result

- Why then so much opposition to trade?

- This productivity shock is not uniform in the cross-section
  — of industries
  — of occupations and skills
  — of firms
  — of geographies

- Heterogeneity can be in the:
  — Short run (transitory)
  — Long run steady state (permanent)
  — Long run stationary equilibrium (permanent volatility)

This paper

- Dynamic DFS model with:
    1. spacial production and mobility costs
    2. incomplete asset markets (as in Bewley-Aiyagari model)
        — natural benchmark: complete markets and mobility costs
    3. dynamics of (idiosyncratic) comparative advantage
        — allows to study ADH identification strategy
    4. cross-section income inequality and a redistributive tax system

- Dynamic DFS model with:
  1. spacial production and mobility costs
  2. incomplete asset markets (as in Bewley-Aiyagari model)
     — natural benchmark: complete markets and mobility costs
  3. dynamics of (idiosyncratic) comparative advantage
     — allows to study ADH identification strategy
  4. cross-section income inequality and a redistributive tax system

- Very large state space!
  — Each location (island) ω characterized by productivity $p_w(\omega)z_h(\omega)$, number of workers $\mu_h(\omega)$ and distribution of their wealth $\lambda(a; \omega)$

This paper

- Dynamic DFS model with:
    1. spacial production and mobility costs
    2. incomplete asset markets (as in Bewley-Aiyagari model)
        — natural benchmark: complete markets and mobility costs
    3. dynamics of (idiosyncratic) comparative advantage
        — allows to study ADH identification strategy
    4. cross-section income inequality and a redistributive tax system

- Very large state space!
    — Each location (island) ω characterized by productivity $p_w(\omega)z_h(\omega)$, number of workers $\mu_h(\omega)$ and distribution of their wealth $\lambda(a; \omega)$

- Comparison across steady states with different trade costs
    — Long-run gains for everyone, but with more volatility
      (Cosar, Guner and Tybout 16)
    — Less terms-of-trade insurance in the open economy
      (Stiglitz 82, Spector 01, Rodrik 98, Epifani and Gancia 08)
    — Transitory inequality and permanent losses from misallocation
      (Hopenhayn and Rogerson 93, Hornstein, Krusell and Violante 11)

Goal of the paper

- Study the optimal degree of progressivity of the tax system
  - — insurance benefit vs misallocation cost
    (reduces incentive to reallocate towards high productivity islands)
  - — the model designed to have a small intensive margin response
    question: why at all?

Goal of the paper

- Study the optimal degree of progressivity of the tax system
  - insurance benefit vs misallocation cost
    (reduces incentive to reallocate towards high productivity islands)

  - the model designed to have a small intensive margin response
    question: why at all?

- Redistribution is not a direct policy instrument
  - creates a tradeoff between equity and efficiency
  - but this tradeoff is not unavoidable

Goal of the paper

- Study the optimal degree of progressivity of the tax system

  — insurance benefit vs misallocation cost
  (reduces incentive to reallocate towards high productivity islands)

  — the model designed to have a small intensive margin response
  question: why at all?

- Redistribution is not a direct policy instrument

  — creates a tradeoff between equity and efficiency
  — but this tradeoff is not unavoidable

- Indeed, subsidy to mobility cost is a direct policy instrument

  — results in no tradeoff
  — lower trade costs justify a greater subsidy?
  — why this subsidy is not possible? information cost? lack of
 lump-sum tax to support it?

Conclusions of the paper

① US has too little redistribution given its trade openness

— PF literature emphasizing too little redistribution in the US

— interesting, in view that in this model inequality is transitory, while misallocation has a long-run cost

Conclusions of the paper

1 US has too little redistribution given its trade openness

— PF literature emphasizing too little redistribution in the US

— interesting, in view that in this model inequality is transitory, while misallocation has a long-run cost

2 More trade openness would justify more redistribution

— Different conclusion from papers with long-run heterogenous outcomes and extensive margin of trade (Itskhoki 08, AGI 17)

— Why? Trade has a direct effect on volatility. Mobility costs create misallocation wedge, which is not very sensitive to trade.

— Interesting to decompose these effects

Trade and Optimal Progressivity
in Antràs, De Gortari and Itshoki (2017)
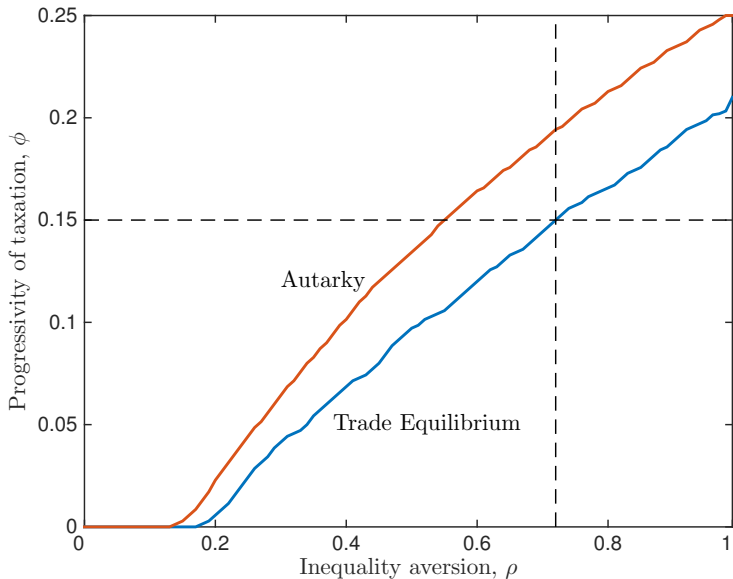
What is not in the model?

1. No non-tradables, housing, local amenities and congestion
   — important for quantitative conclusions
   — partial eqm approach to home production and mobility costs

What is not in the model?

1 No non-tradables, housing, local amenities and congestion
— important for quantitative conclusions
— partial eqm approach to home production and mobility costs

2 No permanently displaced workers
— all are ex-ante and long-term identical
— only transitory losses
— rest unemployment? (Alvarez and Shimer 2011)

What is not in the model?

1. No non-tradables, housing, local amenities and congestion
   - important for quantitative conclusions
   - partial eqm approach to home production and mobility costs

2. No permanently displaced workers
   - all are ex-ante and long-term identical
   - only transitory losses
   - rest unemployment? (Alvarez and Shimer 2011)

3. No trends in comparative advantage
   - stationary distribution and mean reversion of CA
   - is this the right way to think about the China shock?

What is not in the model?

1. No non-tradables, housing, local amenities and congestion
   - important for quantitative conclusions
   - partial eqm approach to home production and mobility costs

2. No permanently displaced workers
   - all are ex-ante and long-term identical
   - only transitory losses
   - rest unemployment? (Alvarez and Shimer 2011)

3. No trends in comparative advantage
   - stationary distribution and mean reversion of CA
   - is this the right way to think about the China shock?

4. Technology is not mobile
   - but firms and technology can move

What is not in the model?

1 No non-tradables, housing, local amenities and congestion
   — important for quantitative conclusions
   — partial eqm approach to home production and mobility costs

2 No permanently displaced workers
   — all are ex-ante and long-term identical
   — only transitory losses
   — rest unemployment? (Alvarez and Shimer 2011)

3 No trends in comparative advantage
   — stationary distribution and mean reversion of CA
   — is this the right way to think about the China shock?

4 Technology is not mobile
   — but firms and technology can move

5 A puzzle of the rust belt!

What are the islands?

- Islands are an abstraction. Do they correspond to geographies, industries, occupation or firms?

- Comparative advantage $p_w(\omega)z_h(\omega)$ is calibrated to individual income process, and the role of trade is recovered structurally
  But one could use direct data on comparative advantage (e.g., Hanson, Lind and Muendler 16)

- Without mobility costs, all agents would go to a single island
  How large are the mobility costs relative to CA reversion?
  Large gross flows and insufficient net flows?