

Discussion of:  
"The Cost of Non-Europe, Revisited"

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# A Key Question

- what are the economic gains from the EU?
  - ▶ MVZ (2018): quantification of the trade-related gains relative to alternative scenarios
- two stages:
  - 1 gravity regressions
    - ★ regress bilateral trade on a number of FEs plus dummy for EU and other RTAs
    - ★ identify direct trade effect of EU
    - ★ both for goods and service
  - 2 counterfactual simulations
    - ★ use (1) + ACR (2012) formulas + estimates of trade elasticity
    - ★ evaluate trade and welfare effects of moving from EU to RTA or MFN
- additional counterfactuals
  - ▶ unilateral exit (Brexit), domino effects

# General Comments

- great paper!
  - ▶ important question
  - ▶ very clean empirical analysis
  - ▶ state-of-the-art quantitative approach
  - ▶ very elegant
- my comments
  - 1 gravity: pros and cons
  - 2 structural approach: pros and cons
  - 3 results: interpretation and beyond

# Gravity: Comments

- empirical analysis very solid and transparent
- bilateral trade explained by host of FEs
  - ▶ destination-time, origin-time, destination-origin
- and yet, EU has a large trade effect
  - ▶ *triples* trade
    - ★ effect much larger than what implied by fall in tariffs
- main advantages
  - ▶ EU dummy captures *all* aspects of integration
    - ★ can identify the effects of various EU treaties
- limits of gravity:
  - ▶ results somewhat sensitive to estimation method (OLS vs PPML)
  - ▶ once you remove the EU dummy, all the FEs will change, but how?
  - ▶ cannot be used for counterfactuals

# Counterfactuals: Pros

- structural model
  - ▶ turns the EU dummy into GE counterfactuals
    - ★ "exact hat algebra"
  - ▶ turns trade effects into welfare (GFTs)
    - ★ "trade elasticity"
- elegant
  - ▶ a microfoundation for gravity
- simple
  - ▶ low data requirement
  - ▶ just need to solve a simple system of equations
- quite general
  - ▶ holds across different workhorse trade models (ACR, 2012; Costinot & Rodriguez-Clare, 2014)

# Counterfactuals: Cons

- yet the "trade elasticity" is *not* estimated
- and model *is* restrictive
  - ▶ imports across firms/products are not Pareto
    - ★ can double the GFTs
    - ★ Head, Mayer & Thoenig (2014); Melitz & Redding (2015); Redding & Weinstein (2018)
  - ▶ distributions are not the same *across countries*
    - ★ 25% of US imports explained by differences in variances across origins
    - ★ Bonfiglioli, Crino' and Gancia (2018a,b), Redding & Weinstein (2018)
  - ▶ trade elasticity varies *across sectors*
    - ★ easy to accommodate, can triple the GFTs
    - ★ Caliendo & Parro (2015); Costinot & Rodriguez-Clare (2014), Ossa (2015)
  - ▶ some other missing factors
    - ★ pro-competitive effects, MNF and GVC, dynamic effects missing
- most likely, GFTs are a lower bound

# An Alternative Use for the Structural Model

- perhaps, there is an alternative use for the structural model
  - ▶ to *interpret the data* rather than to make quantitative predictions
- how?
  - ▶ by opening up the gravity equations
- what is inside the time-varying FEs?
  - ▶ the model can tell us:
    - ★ GDP, size, price indexes, globalization, infrastructure
- year by year, they capture all macroeconomic variables explaining trade flows
  - ▶ would be fascinating to look inside!
- can we use the model to do an ex-post quantification?
  - ▶ could be compared with observables to make it more credible

# Interpreting the Results

- welfare gain from EU over RTA
  - ▶ mean gain +6.6%
  - ▶ but large heterogeneity
- which countries gain the least?
  - ▶ GBR (2.3%), Greece (2.4%), Italy (2.8%)
    - ★ maybe the model is not so far off!!!
- lessons for Europe
  - ▶ the Euro had no trade effects → is Europe going too far?
  - ▶ 2004 enlargement → big gainers are entering countries
    - ★ Cyprus (3.5%), Czech Republic (10.8%), Estonia (10.4%), Hungary (14.2%), Latvia (8.7%), Lithuania (6.4%), Malta (8.2%), Poland (6%), Slovakia (12%), and Slovenia (10.5%)
- maybe things could have been done differently...



# The Future of the EU

- domino effects after Brexit are small
  - ▶ but what if Greece and Italy exit?
- if EU collapses, what would be the real costs of Non-Europe?
  - ▶ probably far greater than 6.6%
- globalization cannot be stopped
  - ▶ will missed GFT grow?
- maybe not: despite temporary setbacks, markets have always grown
- but how?
  - ▶ before WWII, empires made markets
  - ▶ after WWII, trade agreements replaced empires
    - ★ Findlay & O'Rourke (2007), Gancia, Ponzetto & Ventura (2018)
- if the EU collapses, could a new age of economic imperialism follow?

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