

# Trade Agreements and Trade Performance

## Discussant's Comments

**Bob Rijkers**

*Trade and International Integration Unit*

*Development Economics Research Group, the World Bank*

# Trade Agreements and Trade Performance

- Three **Very** Nice Papers – with **clear policy relevance**
- **Common theme:** enabling (more) efficient production by engendering trade
  - **Paper 1:** expanding the set of feasible contracts catalyzes trade and impacts its modality
  - **Paper 2:** trade liberalization (with third parties) can reduce mismatch
  - **Paper 3:** credit supply improves export performance - with heterogeneous impacts across different types of firms

# Deep Trade Agreements and Vertical FDI: The Devil is in the Details

- **Goal:** examine how deep trade agreements affect the international organization of production
- **Method**
  - Theoretical analysis neatly extending the Antras-Helpman (2008) model of contractual frictions and global sourcing
  - Empirical analysis of impact of preferential trade agreements on vertical FDI
- **Data:** WTO data on PTA and firm-level data from Bureau van Dijk
- **Main findings:** depth of trade agreement correlated with vertical FDI – driven by provisions improving contractability of inputs (as opposed to headquarter services)

# Testing the theory

- **Which provision matter most?**

- PCA indicators are hard to interpret
- Discretization of  $\mu_h$  ad hoc (e.g. why not use the proportion of provisions of each type?)
- Possible alternative: Bayesian Model Averaging (see e.g. Kraay and Tawara, 2013)

- **Additional testable implications (?)**

- Bigger impacts of PTA provisions in countries where rule of law is stronger
  - exploit heterogeneity in contract enforcement across countries
- How does the impact of  $\mu_h$  and  $\mu_L$  vary with  $\eta$  (intensity of headquarter services)
  - Exploit variation in headquarter intensity across sectors

# Additional Minor Comments

- **Additional explanatory variables** (data permitting)
  - Non-tariff Barriers
  - FDI Restrictions
  - Taxation (incl subsidies)
- **Why focus on intensive margin of FDI only?**
  - Results presented in footnote 25 merit more attention!
- **Measurement of vertical FDI**
  - How to deal with missing data?
  - Attenuation bias?
- **IV; is exclusion restriction plausible?**

# Assortative Matching of Exporters and Importers

- **Goal:** document and explain matching patterns between importers and exporters
- **Model:** Becker style assortative matching (Elegant!)
- **Empirical test:** exploit impact of end of multifibre agreement and associated entry of chinese firms on matching between Mexican exporters and US importers.
- **(Nice!) Data:** matched importer-exporter data
- **Key findings:**
  - Matching is approximately one-to-one
  - End of MFA agreement induced US importers to switch to suppliers with greater pre-shock imports and Mexican exporters to switch to those making fewer pre-shock exports

# Assortative Matching of Exporters and Importers

- **Assortative Matching Model:** Elegant and creative!
  - But what about (i) uncertainty (ii) transaction costs (iii) match-specific learning?
  - Predictions of the “love of variety” model are a strawman
- **What about random matching with time-varying competition?**
  - Idea: pool of matches smaller when competition is tougher
  - End of MFA increases competition => higher exit – especially of *small* firms
    - U.S. firms that lose partner need to find a new one; new partners are more likely to be high capability
    - resonates with evidence about 2008-2011 period being associated with upgrading

# The Effect of Credit on the Export Performance of Colombian Exporters

- **Goal:** estimating the credit elasticity of exports
- **Method:** IV approach controlling for selection bias & reverse causation
  - IV for credit: total loan disbursements of banks that have a relationship with the exporting firm as an instrument.
  - IV for selection: superintendent's term in office
- **(Nice!) Data:** matched bank-exporter data
- **Key findings:** the credit elasticity of exports is positive – but varies with size

# Tackling Selection Bias

- **Other selection issues:**
  - Selection into- (and out of) exporting?
  - Formation (and dissolution) of credit relationships?
- **Clarification:** how can a superintendent's term serve as an instrument when year dummies are included?
- **Alternative options to gauge sample selection bias**
  - Assess sensitivity of findings to arbitrarily imposed (size) thresholds.
  - Exploit change in sample coverage induced by decree 4350 to test sample selection
    - leads to inclusion of additional firms;
    - Can compare how similar firms selected by superintendents are to this sub-population

# Interpretation and Extensions

- **Motivation and interpretation of IV**
- **(Potential?) Alternative IV**
  - Exploit the information on the currency composition of the firm's debt: is it possible to instrument debt using weighted exchange rates?
- **Heterogeneity**
  - Do term structure and type of finance matter?
  - Is the credit elasticity of external finance higher amongst those firms that are less likely to obtain trade credit?