Comments on Calmette & Straub, "Intellectual Property Rights & Trade: Firm-Level Evidence from Low- & Middle-Income Countries"

> James K. Hammitt Harvard and TSE



Synopsis Questions

Synopsis: Motivation

Question: Does stronger IPR protection in destination countries encourage imports?

Insights from theory

- Yes: with less risk of imitation, foreign firms export more ("market expansion")
- No: with less competition, foreign firms reduce quantity & increase price ("market power")

Synopsis: Empirical Analysis

Firm-level data from comparable surveys in 10 low- & middleincome origin countries, 2002-2005

46% Thailand & Vietnam, 87% these + Egypt, Chile, South Africa
Dependent variable: share of firm-level output that is exported

– Direct or (direct + indirect)

Independent variables:

- Park-Ginarte index of IPR protection in destination country (leading destination, or max of top 3 destinations), 2005
- Fixed effects: origin (10), origin-destination pair (214), sector (120)
- Sector characteristics
 - Innovation (R&D/sales in US)
 - Concentration (Herfindahl-Hirschman index in India)
- Firm characteristics
 - Foreign ownership (indicator), number of workers, age of firm

Synopsis: Empirical Results

Export share of firm-level output increases with IPR protection in destination countries

 Robust to direct v. (direct + indirect) export, controls for sector & firm characteristics

- Export share larger to destinations that increased IPR protection 2000 2005
- Export share larger to destinations with IPR protection more similar to origin (weaker)

Better match between dependent & independent variables?

- LHS is share of firm output that is exported to any destination
- RHS includes IPR protection in leading destination, or max over top 3 destinations

Which origin-destination FEs are included?

- All, leading, top 3?

Alternative models

- Exports to single destination on LHS, destination IPR on RHS
- Total export share on LHS, export-weighted average IPR protection across destinations on RHS?

Know share of sales exported for 5,226 firms

- 2,097 export directly
- 554 export indirectly (overlap w/ direct?)

Export destinations

- Destination 1: 1,873 firms
- Destination 2: 1,614 firms
- Destination 3: 359 firms

Most firms export to 2 destinations?

Why not \geq 2,097 "destination 1"?

How similar are export destinations across originating countries?

Why not measure industry innovation & concentration in exporting country?

- Innovation measured by R&D/sales in US, 1990-1995.
 - Why US, why not 2000-2005?
 - How similar are innovation in origin countries and in US?
- Concentration measured by HHI in India (no date).
 - Why India, when?
 - How similar are concentrations in origin countries and in India?

Why measure export share by firm rather than country/sector level?

- Factors driving export to destination are host, destination, & sector-specific?
- Firm characteristics less important? (foreign ownership)

Include firms that do not export (60%)?

- Binary outcome: export or not
 - Combine with existing models for two-part model
- Tobit or similar
- Use number of destinations as dependent variable (including zero)?

Main effects misintepreted – add interactions?

- Significant coefficients on (foreign) ownership & firm age mean these firms export more, not that strong IPR protection matters more to them (p. 9)
- Effects of IPR protection in main destination and origindestination difference in IPR protection not identified?
 - Difference in IPR = Origin IPR destination IPR, but model includes origin and origin-destination fixed effects
- Export share larger to destinations with IPR protection more similar to origin (weaker)
 - (Origin IPR protection) (destination IPR protection) is negatively correlated with (destination IPR protection); how stable is this estimate?

Conclusion

Nice start

 Provides empirical evidence on how exports from low- and middle-income countries are influenced by IPR protection in destinations
Look forward to further refinement