Trade, Misallocation, and Capital Market Integration

Laszlo Tetenyi

June 22, 2020

New York University

How do capital and goods market integration interact?

- Countries opened up to trade since 1970s
- Emerging economies opened up to trade in two ways:
  - Opening up to capital inflows — in the 1990s
  - Keeping capital markets closed — recent times
- Integrating capital markets can lead to:
  - Higher growth and faster adjustment to the trade shock
  - …at the expense of misallocation and indebtedness
- **I study an economy opening up to trade with open or closed capital markets**

My approach

- I build a general equilibrium trade model of firm dynamics and financial frictions
  - Entrepreneurs with limited access to external finance operate firms
  - Firms need financing to expand — larger firms are not necessarily more productive
  - Decreasing variable trade cost leads to higher profits for *all* exporters
- Show that capital market integration affects trade due to firm dynamics:
  - Reallocation of resources towards exporters is faster
  - Lower costs help exporters to expand, but also to survive longer
  - Higher survival probability increases the fraction of zombie firms in the economy
- **Financial frictions *can* affect the gains from trade**

Key findings

- Calibrate to Eastern Europe opening up to trade — 20% import share change
- **Capital market integration magnifies both the gains and losses from trade:**
    - Higher output (up 12% from 7%) and consumption (up 13% from 8%)
    - More misallocation, inequality and lower productivity
    - The middle class suffers — workers with savings and domestic firm owners
    - Consumption equivalent welfare is higher
    - Along the transition path, gains are front-loaded, losses are back loaded
- Without trade liberalization, capital market integration is less useful
- More developed economies are *less* affected by both reforms

Supporting empirical evidence

Export exposure and capital misallocation along the transition path

- Panel of firms aggregated to industry-level in the EU after 1999
- Sectors with high export share and low development:
  1. Have higher misallocation of capital
  2. See increases in both the share of unproductive firms and their survival rate

Exporting dynamics in the model vs data:

- Panel of Hungarian firms after 2005
- Export dynamics are affected by frictions:
  1. Export sales: external finance matters for the intensive and extensive margin
  2. Entry costs: Exporting decision is autocorrelated

Conclusion and some extensions

Allowing capital inflows have benefits that outweigh the costs in terms of welfare

- Decline in productivity has no additional negative effects
- 2008 crash with a tightening borrowing constraint:
  - Cleansing affect of the crisis
  - Trade collapse
  - Sluggish recovery
- Constrained planner can lower the increase in misallocation:
  - Capital control
  - Tax on capital
  - Wage subsidy