Financial Vulnerability and Export Dynamics

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Widespread concerns about export concentration in DC

- Export diversification is now on the top of policymakers' agendas
  - "*The deplorable state of the productive technology as well as poor diversification of industrial structures are at the origin of the small benefits derived by African countries from the current Round of Negotiations*" (United Nations Economic Commission for Africa, 2006)
- The gains from export diversification go beyond the traditional gains from specialization
  - Diversification is necessary for long-run growth
  - Diversification is good for price and output stability
- But financial vulnerability generates credit rationing and exacerbates sunk costs of entering into exporting
- Credit rationing and sunk costs are bad for export diversification

Outline

How do financial crises affect export diversification?

- Supply-side shock⇒Financial crises in exporting countries:
  - Reduce exporters' entry rate, by increasing the incidence of sunk costs of entry into exporting
  - Reduce exporters' propensity to increase the number of products and destinations, by preventing them from fully exploit economies of scale
- Demand-side shock ⇒ Financial crises in importing countries, by reducing economic growth:
  - Reduce the intensive margin of exports demand
  - Reduce the extensive margin of exports demand

What do we know? Findings so far

- Cross-country studies
  - Financial crises affect trade volumes through demand-side shocks (Bems et al., 2010; Levchenko et al., 2010)
  - ... and through supply-side shocks (Amiti and Weinstrein, 2011; Chor and Manova, 2012)
  - Also through increased protectionism (Evenett, 2009)
- A few country case studies at the firm level...
  - The bulk of the 2008-2009 trade collapse in France was due to demand-side shocks (Bricongne et al., 2012)
- ...but no evidence on their implications for export diversification in a multi-country framework

This paper

- Our focus: investigate the relationship between financial vulnerability and export dynamics
  - Using a unique cross-country dataset providing firm-level information on export dynamics at the industry level
  - Using a diverse sample of developing countries: EAP, ECA, MENA, SA, and SSA
  - Using generalized DID techniques, accounting for endogeneity issues
- Our contributions
  - Estimating the impact crises on firm, product, and destination entry/exit rates into/from export markets
  - Estimating both contemporaneous and lagged effects
  - Checking the relative importance of supply-side and demand-side shocks

The data

- Exporter Dynamics Database (EDD) (Cebeci et al., 2012)
- Sample of 34 developing countries from 5 geographic regions, including 5 MENA countries: Iran, Jordan, Lebanon, Morocco and Yemen
- Comprehensive indicators at the HS 6-digit level on exporter dynamics in terms of entry and exit...
- ...and on product and destination dynamics as well
- Merging of the resulting ISIC data with the Rajan & Zingales (1998) (RZ) index of financial vulnerability
- Other databases include: WDI and Chinn & Ito (2008) financial openness data

Identification

- Baseline specification:

$$Export_{cpkt} = FinVul_k * \sum_{j=0}^{J} (\beta_1 Crisis_{c(t-j)} + \beta_2 Crisis_{p(t-j)} + \beta_3 Crisis_{cp(t-j)}) + \alpha X_{ct} + d_{ct} + d_{pt} + d_{cp} + d_{ck} + d_{kt} + \epsilon_{cpkt}$$

- where $Export_{cpkt}$ is the indicator of export diversification in country c for trading partner p, in the industry k during year t
- $FinVul_k$ is the RZ index of financial vulnerability⇒degree of dependence on external finance in industry k
- Coefficients of interest: $\beta_1 < 0$, $\beta_2 < 0$, $\beta_3 < 0$
- Use of the Braun (2003) index of asset tangibility as a robustness check

Financial vulnerability and firm dynamics

- Crises reduce exporters' entry rates relatively more in financially-dependent industries
  - 7.1 percentage points relatively higher when exporting countries in crisis
  - 2.5 percentage points relatively higher when importing countries in crisis
- Crises increase exporters' exit rates importantly in financially-dependent industries
  - Insignificant effect when exporting countries in crisis
  - 10.6 percentage points relatively higher when importing countries in crisis
- Exacerbated effects when both countries in crisis and when exporting countries have more restrictive capital accounts
- Cumulative effects but no more significant 3 years after the crisis

Financial vulnerability and product/destination dynamics

- Crises reduce product/destination entry rates and their increase exit rates relatively more in financially-dependent industries
- Demand-side shocks relatively more important
- Exacerbated effects for products' entry rates when both countries are in crisis
- Significant cumulative effects but no more effects 3 years after for products and 4 years after for destinations
- Crisis effect less pronounced in MENA
  - Low incidence of financial crises
  - Stronger beneficial effect of financial openness

Concluding remarks

- Main results
  - Financial crises disproportionately increase export concentration in financially-vulnerable industries by:
    - reducing firm, product and destination entry rates
    - increasing firm, product and destination exit rates
  - These effects are more pronounced:
    - when both countries are in crisis
    - in countries with more restrictive capital accounts
- Main implications:
  - The effects of financial vulnerability go beyond its impact on economic growth and export volumes
  - Financial openness is a good substitute for underdeveloped domestic financial markets

Thank you for your attention