

Trade Collapses and Sovereign Debt Restructurings: Does a Market-Friendly Approach Improve the Outcome?

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discussion by:

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- Very interesting and challenging empirical investigation
- Sovereign debt restructuring episodes are subject to highly heterogeneous trade outcomes:
 - at the 25th percentile **imports** fall $\approx 30\%$; at 75th increase $\approx 30\%$
 - at the 25th percentile **exports** fall $\approx 20\%$; at 75th increase $\approx 20\%$
- Can different type of restructuring strategies help explaining this heterogeneity?
 - debt restructurings may occur **after** or **before** default
 - trade adjustments in **prices** or **quantities**?
 - implications for different sectors and type of goods?

- Country-goods trade dataset from UN Comtrade + WDI for other variables
- 3 types of restructuring episodes from 1970-2018 ([Asonuma and Trebesch, 2016](#)):
 - **Post-default** (with missed payments)
 - **Weakly-preemptive** (temporary missed payments)
 - **Strictly-preemptive** (no missed payments)
- Different type of restructurings are not exogenous:
 - econometric approach: **inverse probability weighting**

- Type of restructurings **is not random** and may be related with outcomes in other variables:
 - ex: GDP growth, Fed funds rate, inflation rates, past defaults
- To capture the exogenous variation of restructurings the authors apply an **inverse probability weighting** estimator (Jordà and Taylor, 2016):
 - time event analysis is reweighed using probabilities of a probit selection regression
 - crucial identification assumption: **selection on observables**. For a type of restructuring Φ :

$$\Delta Y_{t \geq t_0}(\Phi) \perp \Phi_{t_0} \mid \text{observables}_{t < t_0}$$

Summary of results

- Volume of **imports falls more in post-default** than in preemptive restructurings
- But volume of **exports doesn't change substantially** between either type of restructurings
- When disaggregating these results by type of good:
 - asymmetric **fall of consumption intermediate goods imports in post-default** restructurings
- Extensive margin for the **number of goods whose volume falls** after restructuring:
 - Imports: relatively worse for post-default
 - Exports: relatively worse for preemptive

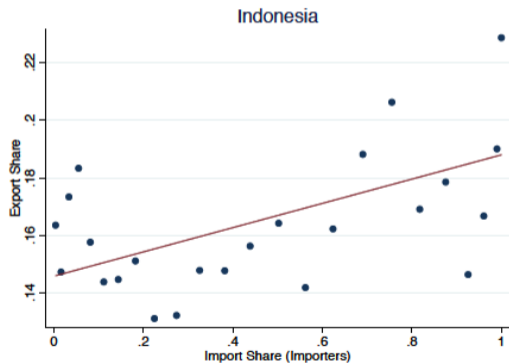
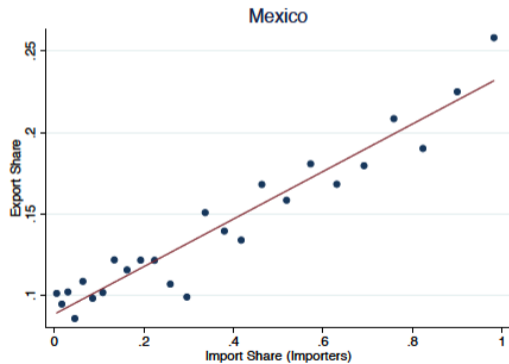
- Emerging market economies are typically affected not just by **temporary** but also **permanent shocks** ([Aguiar and Gopinath, 2007](#))
- Permanent shocks can be more relevant for default and restructuring decisions ([Aguiar and Gopinath, 2006](#); [Yue, 2010](#))
- Selection probit regression:
 - can try to capture **expectations also about future growth** of an economy
 - ex: data from the IMF World Economic Outlook

Comments - Firm input/output

- If different type of restructurings are associated with **different devaluation outcomes**, then firms or sectors **input/output structure** may affect trade outcomes [Blaum \(2018\)](#):
 - model of **related importing and exporting** (*global firms*): increase in import costs is (partially) offset by stronger exports
 - model of **unrelated importing and exporting**: increase in import costs affect mostly high intensity import firms/sectors
- [Blaum \(2018\)](#) shows that exports can be faster at reacting if high intensity import firms are also high intensity export firms
- Data sources for input/output tables:
 - World Input Output Database; OECD (for both member and non-members)
 - [Johnson and Noguera \(2017\)](#) for data for 40 countries between 1970-2009

Comments - Firm input/output

- From [Blaum \(2018\)](#), Mexican establishments around 1994, and Indonesia establishments around 1998



Comments - Interest rate and credit channel

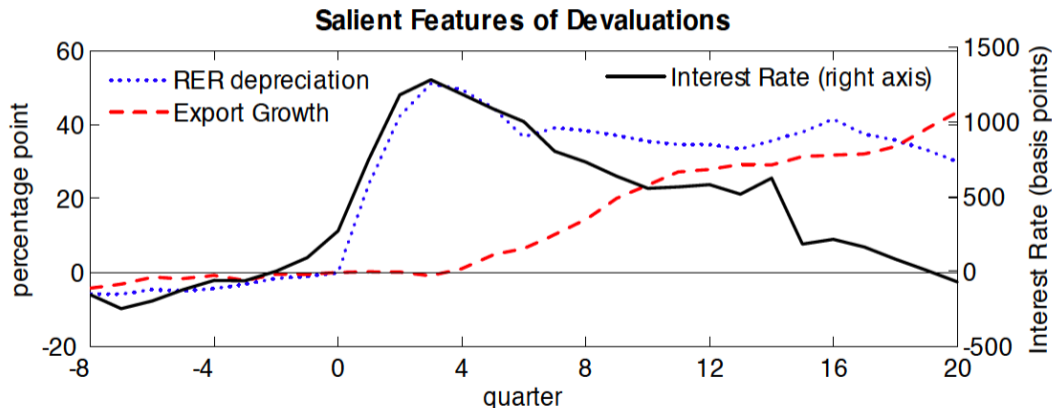
- From a Armington model one can derive the (rest of the world) demand for a country's exports as $exp = n_{exp}^{\frac{\gamma-1}{\theta-1}} p_{exp}^{-\gamma} Y_{row}$, γ and $\theta > 1$. With $p_x = p_d$ and $RER = p^d / p_m$:

$$exp = \underbrace{n_{exp}^{\frac{\gamma-1}{\theta-1}} \dot{n}_{ext}}_{\text{extensive margin}} - \underbrace{\gamma r \dot{e}r}_{\text{intensive margin}}$$

- From the intensive margin, a restructuring episode that implies a devaluation ($r \dot{e}r < 0$) should be associated with larger exports
- But if exporting is a dynamic decision (ex: sunk cost of exporting as in [Alessandria and Choi, 2007](#)), then an interest rate increase may imply a lower number of exporters ($\dot{n}_{ext} < 0$)
- Data: evolution of EMBI during restructurings; external finance dependence of different sectors (Rajan and Zingales)

Comments - Interest rate and credit channel

- From [Alessandria et al. \(2015\)](#), salient features around 11 notable devaluation episodes



Open questions...

- 1 The results presented in the author's paper are very interesting and make the reader want to know more about mechanisms behind different restructuring strategies:
 - real exchange rate channel
 - interest rate and credit channel
- 2 Input/output structure may be useful to understand export dynamics for different sectors and type of goods (intermediate/materials):
 - recent emergence of global value chains can be severely affected by trade frictions (Yi, 2003)
- 3 The authors can try to compare devaluations episodes with and without debt restructuring to highlight some of these channels

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Only if necessary

- use if necessary