**Repatriation of Sovereign Debt During Crises**

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**We Study Sovereign Debt Investorbase Dynamics During Crises Based on Near-Global Data Set**

- Who holds sovereign debt? Characteristics of sovereign debt investors are understudied but important: Shape borrowing and repayment incentives
- We find that sovereign debt is repatriated - shifted from external to domestic creditors - during defaults but not other types of crises
- Crisis management matters: Preemptive defaults less likely to be associated with repatriation. Financial repression is unlikely to drive the findings.

**Motivation and Contribution**

- Data limitations are common when studying sovereign borrowing, particularly during rare crises
- Previous papers: Limited sets of countries, short time series, individual crises
- Our advantage: Leverage a new, comprehensive sovereign debt data set to overcome power problems
- Question: Who holds sovereign debt during crises?
  - Focus: Private external versus domestic creditors
  - Dynamics during different types of crises

**Empirical Specification: Event Study**

We regress repatriation on crisis start dummies at a range of horizons:

\[ y_{st} = \alpha_s + \sum_{k=1}^{4} \beta_{sk} D_{sk} + \epsilon_{st} \]

- \( y_{st} \): Repatriation measure in country \( s \), year \( t \)
- \( D_{sk} \): Dummy = 1 if country \( s \) in year \( t \) a crisis of type \( k \) years away from a crisis of type \( k \) is a crisis of type \( k \)
- \( \alpha_s \): Country fixed-effects (robust to two-way FE)
- Significant drop in \( \beta_{sk} \) over the event window: Repatriation

**Main Result**

![Graph showing external debt share across crisis types]

- Estimates of coefficients on external debt share at different horizons by crisis type
- The external debt share falls significantly during sovereign defaults: less evidence for repatriation during banking/currency crises
- Alternative repatriation measure: Same conclusions

**Measures of Repatriation**

- Baseline measure (\( F_t \) external debt, \( D_t \) domestic debt):
  \[ \text{External debt share} = \frac{F_t}{F_t + D_t} \]
- Two concerns:
  - Repatriation inherently a flow concept
  - Depreciation - rise in external debt share because foreign-currency denominated debt tends to be external
- Alternative measure:
  \[ \frac{\text{External flows}}{\text{GDP}} = \frac{F_t - F_{t-1}}{\text{GDP}} \]
- We adjust foreign-currency denominated part of \( F_t - F_{t-1} \) for exchange rate changes

**Investigating the Mechanism**

**Type of default matters for repatriation**

- We split the sovereign default crisis sample by type: "hard" versus preemptive (Asonuma Trebesch 2016)
- Find that repatriation stronger during "hard" defaults

**Financial repression not associated with repatriation**

- We split sample of crisis episodes by strength of capital controls (Chinn-Ito index)
- Find that strong capital controls are not more associated with repatriation
- Evidence against financial repression as a driver of repatriation

**Work in progress:**

- Evaluate secondary market hypothesis (Broner et al. 2010)

**The Sovereign Debt Data Set**

- Extension of Arslanalp Taula (2014)
- Near-global cross-section (180 countries), long time series (1989-2020)
- Consistent debt definition (general government, face value)
- Consistent external/domestic creditor definition: Residency principle
- Foreign official loans are excluded: Interested in private creditor behavior

**The Crisis Data Set**

- Three main crisis types: Sovereign default, banking crisis, currency crisis
- Frequency distribution: 65 defaults, 129 banking crises, 213 currency crises
- Emerging markets more crisis-prone than advanced countries

**Additional Results/Robustness**

- No evidence for cyclical repatriation
- Output not significantly worse during strong- and repatriation crises
- Reverse causality: Granger tests favor crises causing repatriation rather than the reverse
- 10-year trend: Emerging market sovereign debt moving abroad
- Foreign official loans offset repatriation
- Results robust to country selection, event study horizon, crisis definitions

**Crisis Dynamics of Other Relevant Variables**

- Total debt/GDP falls during defaults and currency crises
- But not banking crises: Borrowing part of crisis response measures
- All crises associated with GDP downturns (and current account improvements - not pictured)