

China's Overseas Lending

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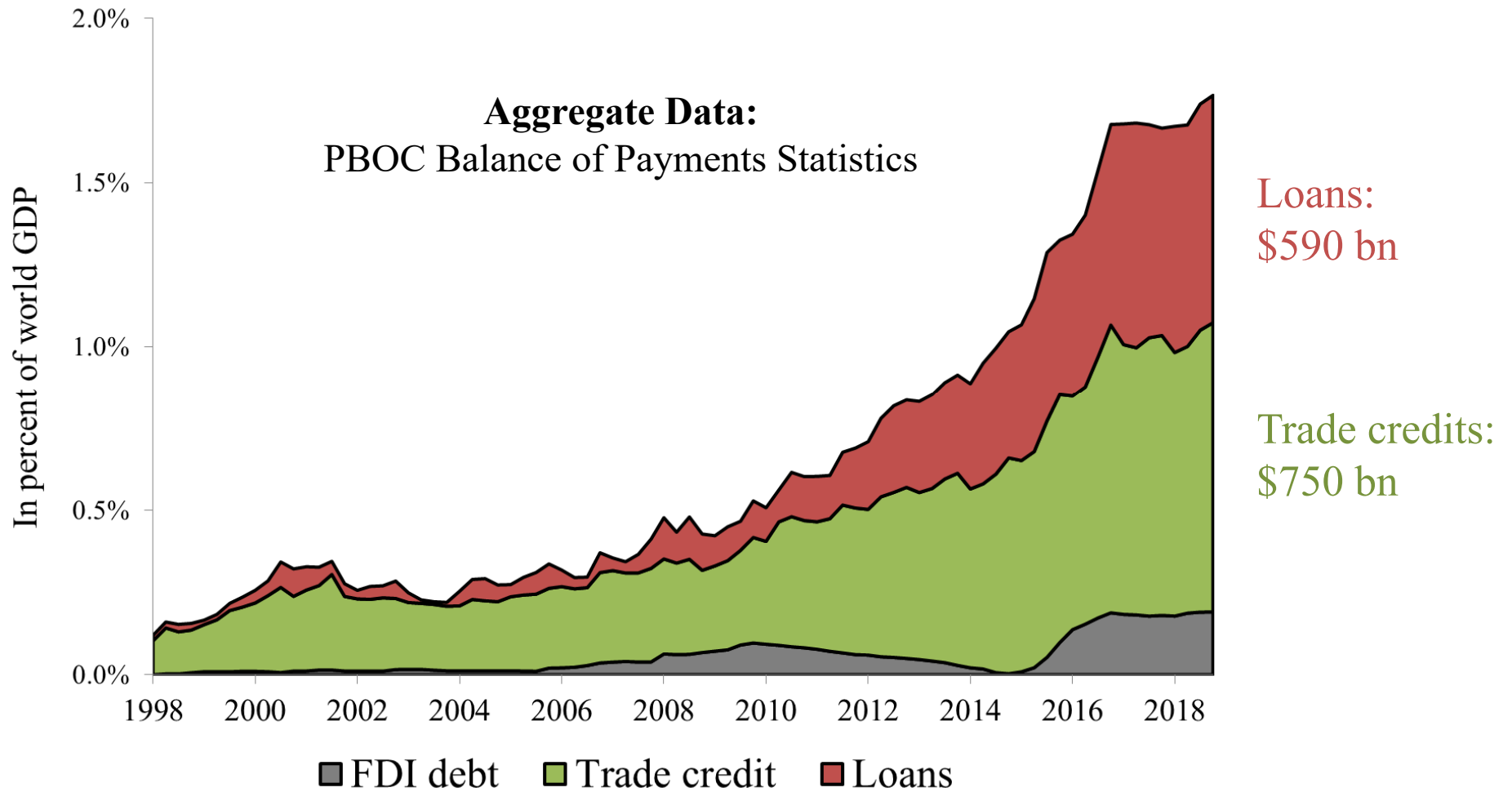
(Kiel Institute for the World Economy)

IMF ARC, November 7, 2019

China's role in the international financial system: A big unknown

- Large literature on the “trade shock“ from China (e.g. Autor et al. 2013, Acemoglu et al. 2016)
- **China's role in international finance is poorly understood**
 - Chinese government is the world's largest official creditor (surpassing IMF, World Bank, all Paris Club members)
 - Chinese state-owned banks provide one fourth of bank lending to emerging markets (Cerutti et al. 2018)
 - Many developing countries heavily indebted to China

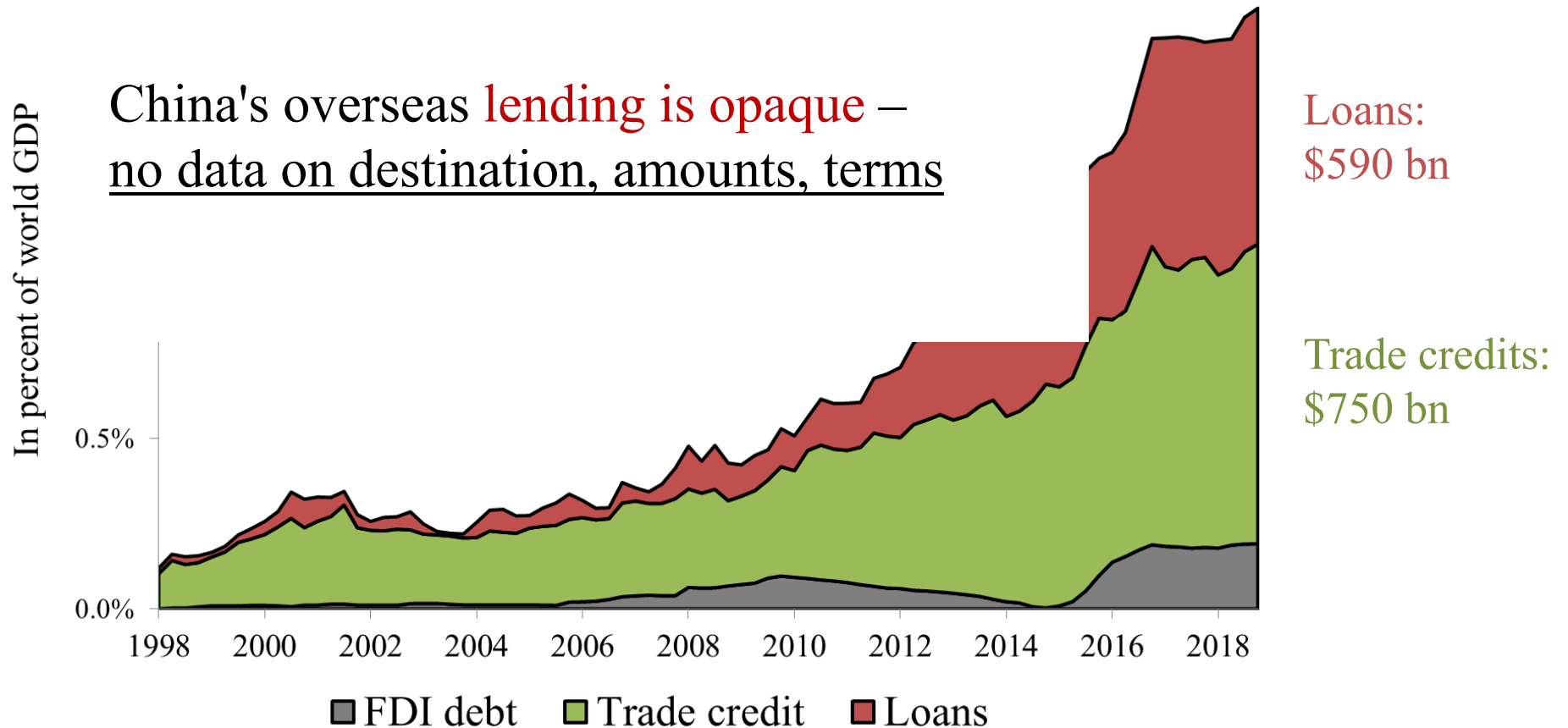
China's overseas lending boom



China's overseas lending boom

The problem: lack of transparency

China's overseas **lending is opaque** –
no data on destination, amounts, terms



Contributions of this project

We build a **consensus database** on the size, destination and characteristics of China's global lending and capital flows

Main insights:

- Chinese lending is **not fully captured by the “gold standard” data sources (World Bank/IMF)** on debt and intl' finance. We estimate these capture $\frac{1}{2}$ of Chinese lending to developing world
- This **“hidden debt”** has significant consequences for: (i) int'l surveillance, (ii) sovereign risk pricing, (iii) payment seniority
- China's lending is **official**, and does not fit the **“textbook theory”** of international capital flows. Literature of the past three decades primarily focuses on **private** flows

We created a consensus dataset of Chinese lending

Existing data sources

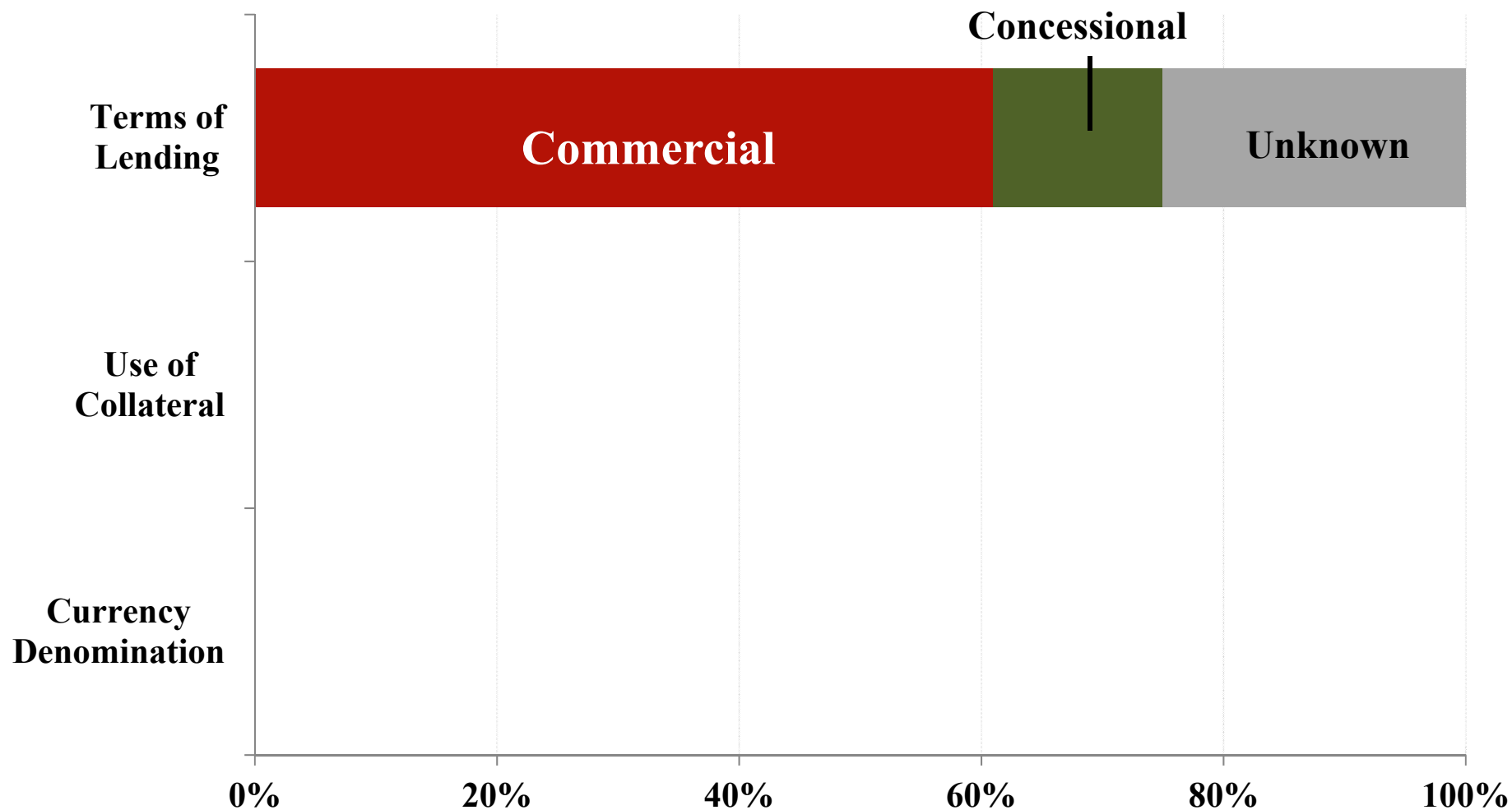
- William & Mary AidData:
 - Chinese Official Finance Dataset
 - Chinese Diplomacy in Asia Data
- Inter-American Dialogue Database
- John Hopkins China-Africa Research Initiative
- BU China Global Energy Finance
- Lowy Institute:
 - Chinese Aid in the Pacific
 - Pacific Aid Map
- Dozens of debtor and creditor-specific resources
- Dozens of sources for pre-2000 Lending

→
**Clean
&
Merge**
→

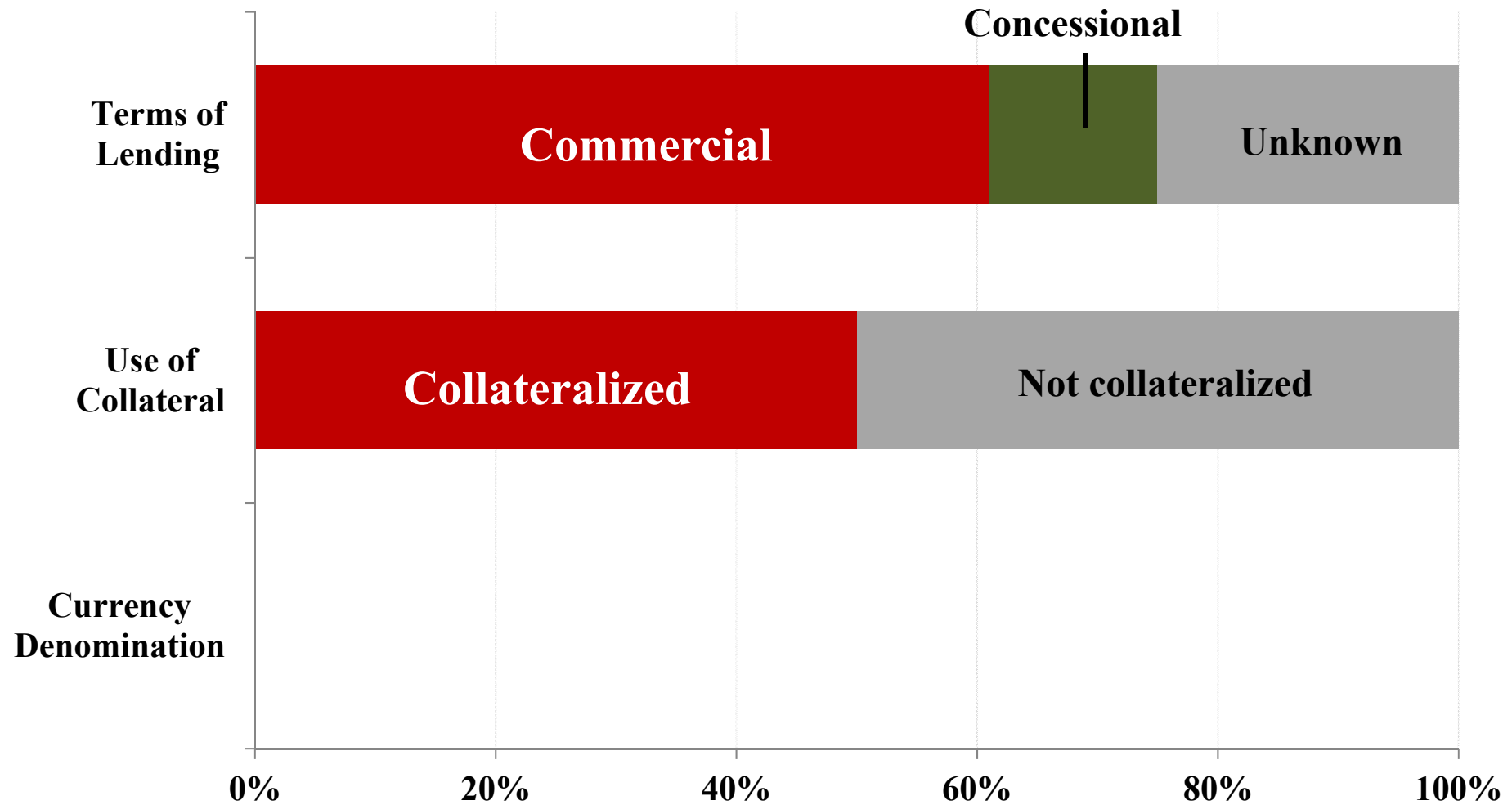
Our merged database

- **5000 Chinese official loans and grants from 1950 to 2017**
- **530 billion USD total volume**
- Gathered interest rates, repayments schedules and fx denomination

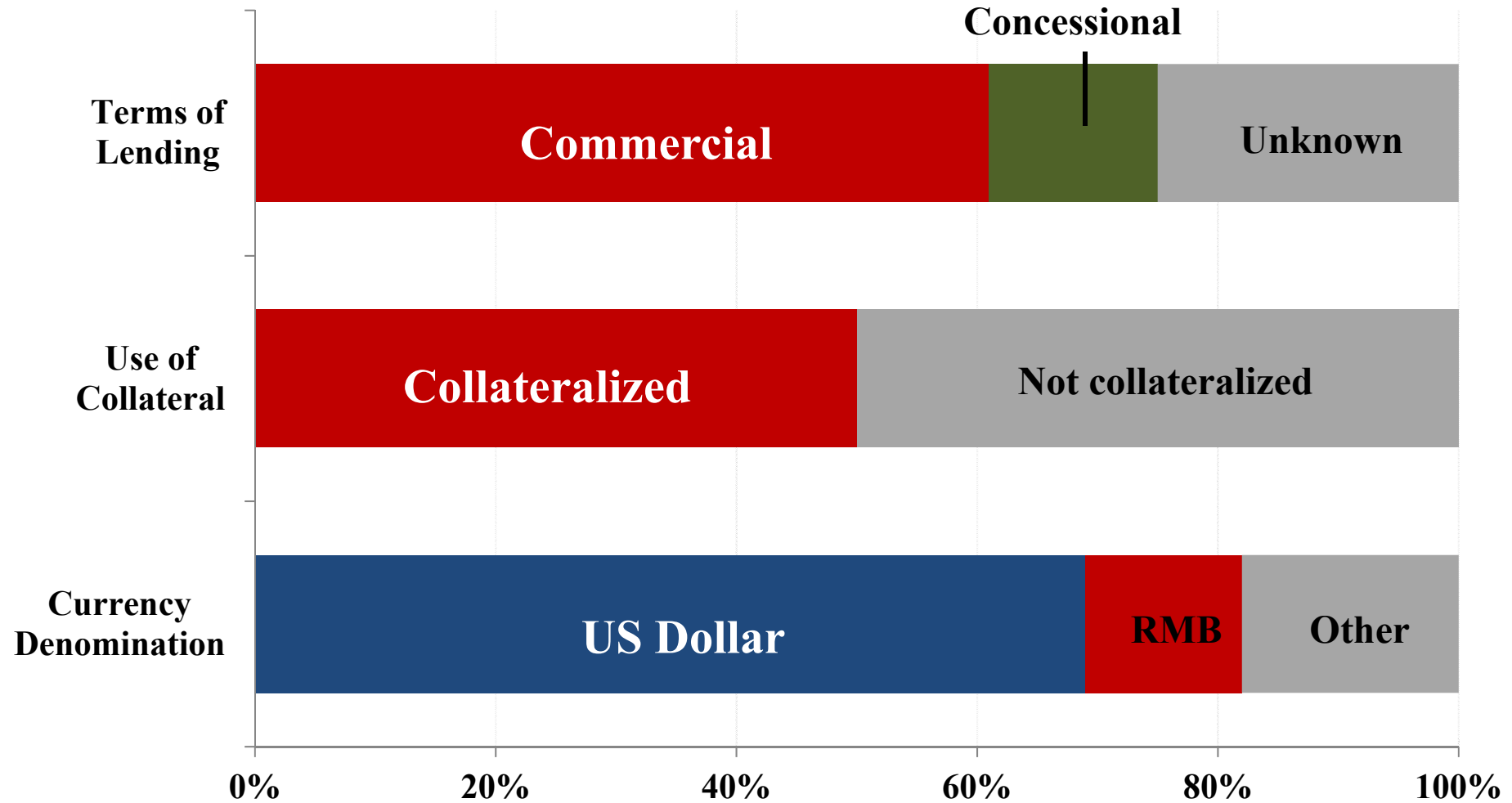
The terms of China's *official* loans are closer to those extended by global *private* creditors



...around 50 percent of the loans are collateralized



...and most loans are denominated in USD



We estimate debt stocks from loan-level data

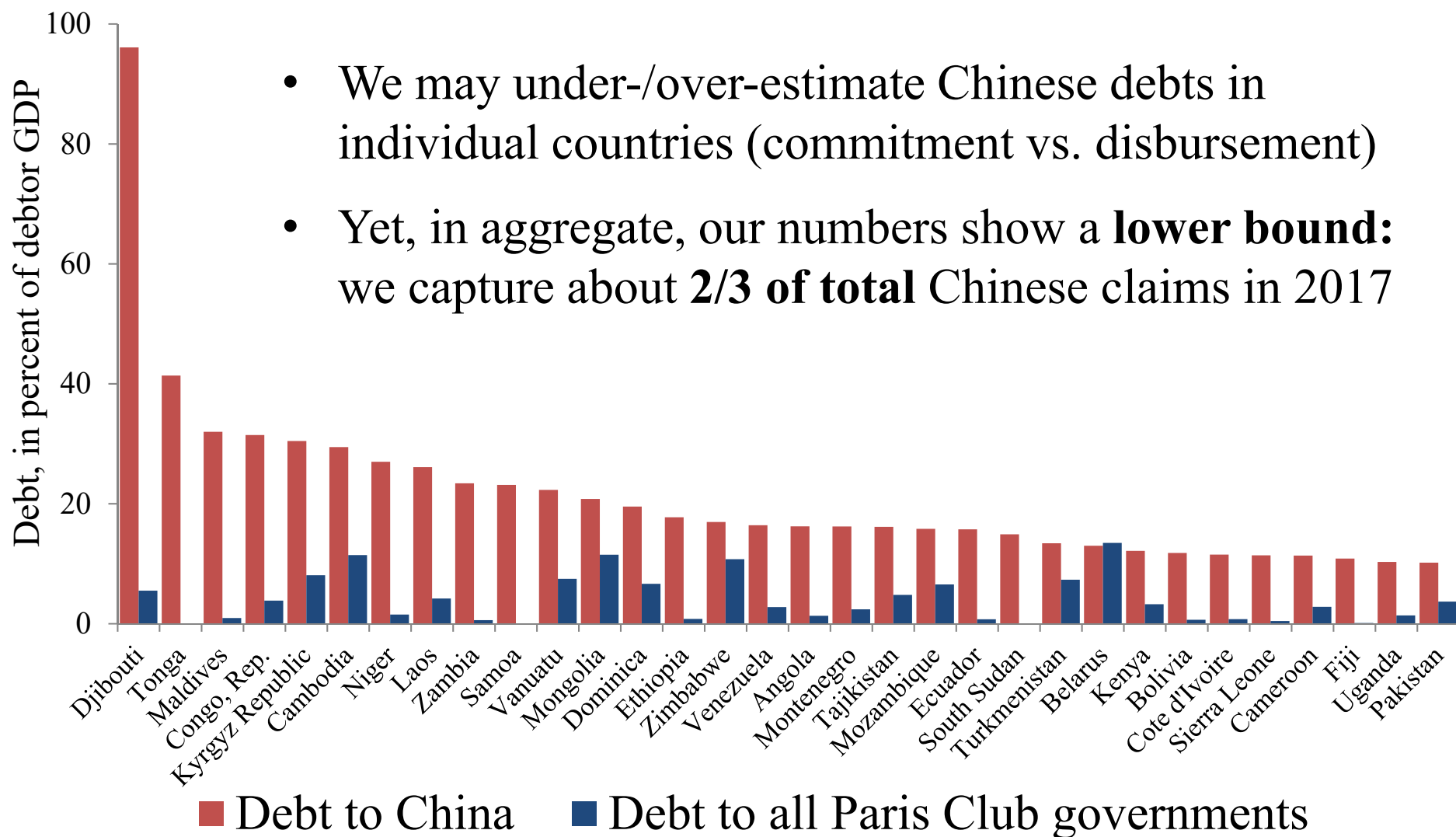
- There is no data on outstanding debt stocks to China
- We use our information on maturities, currency and interest rates to compute loan-specific repayment schedules for >1500 loans

→ **Dataset of debt to China for >100 countries, 2000-2017**

Download at <https://sites.google.com/site/christophtrebesch/data>

→ **For top 50 recipients, average debt to China rose from 1% of GDP in 2000 to more than 15% of GDP in 2017**

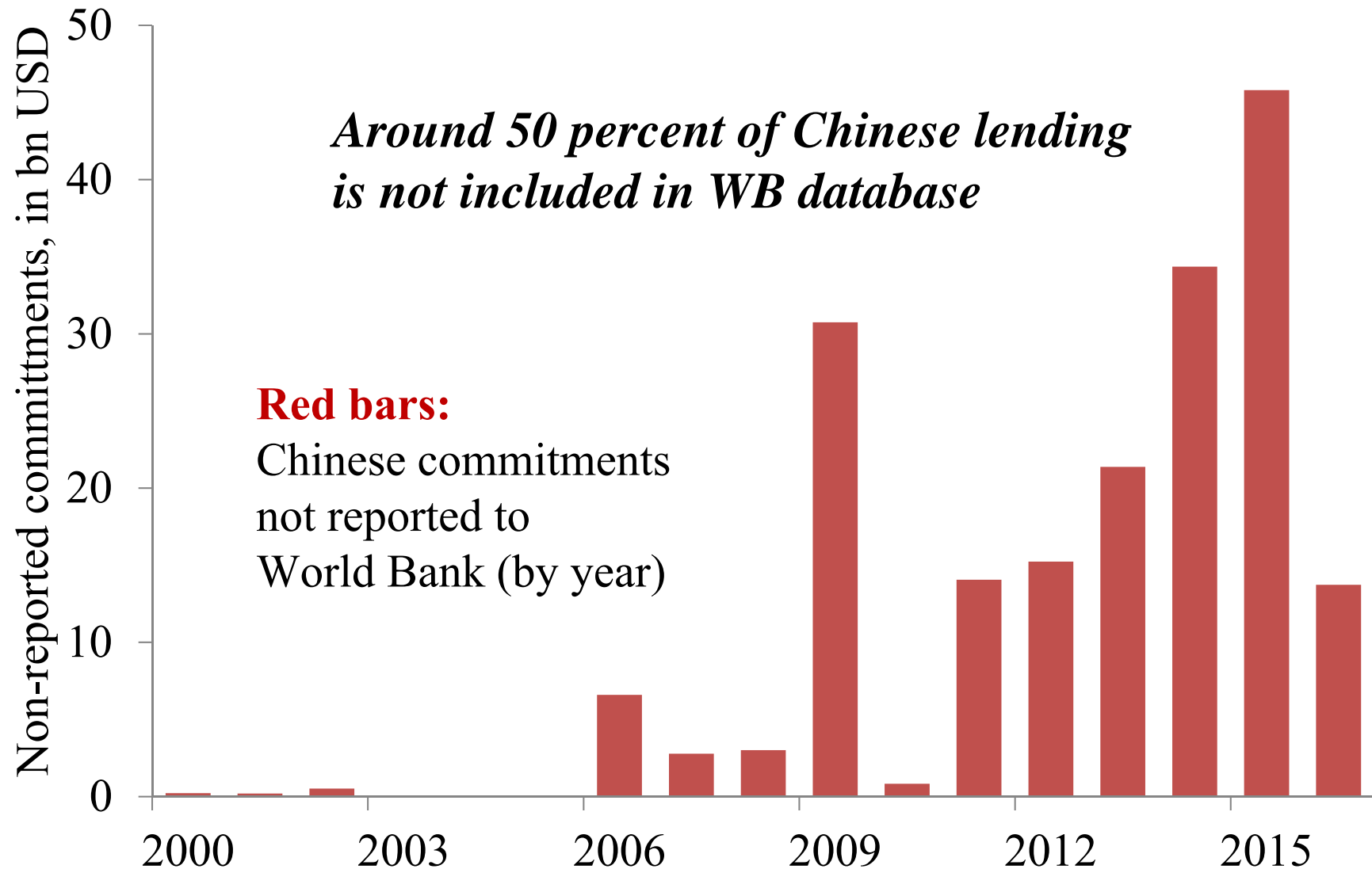
Debt owed to China in 2017: The top 30 recipients



Quantifying hidden debts from China

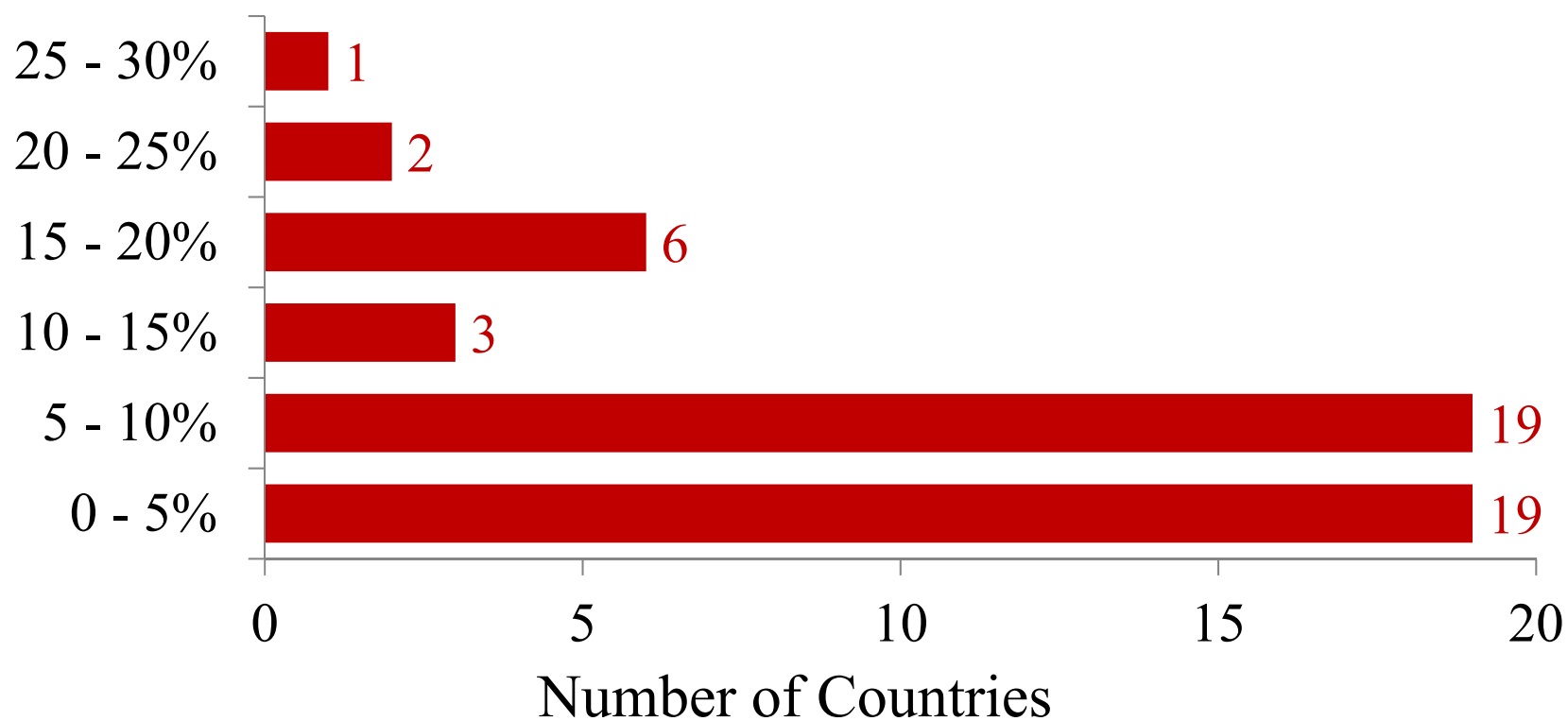
- **How large is the under-reporting problem?**
- Debtor side: Chinese lending coincides with reporting gaps in official debt statistics (loans to state-owned enterprises, disbursement through contractors & funds)
- Creditor side: China not a member of OECD, Paris Club
- **Compare our debt data to those of World Bank Debtor Reporting System (DRS)**

China's overseas lending and World Bank statistics: *Missing loans and hidden debts*

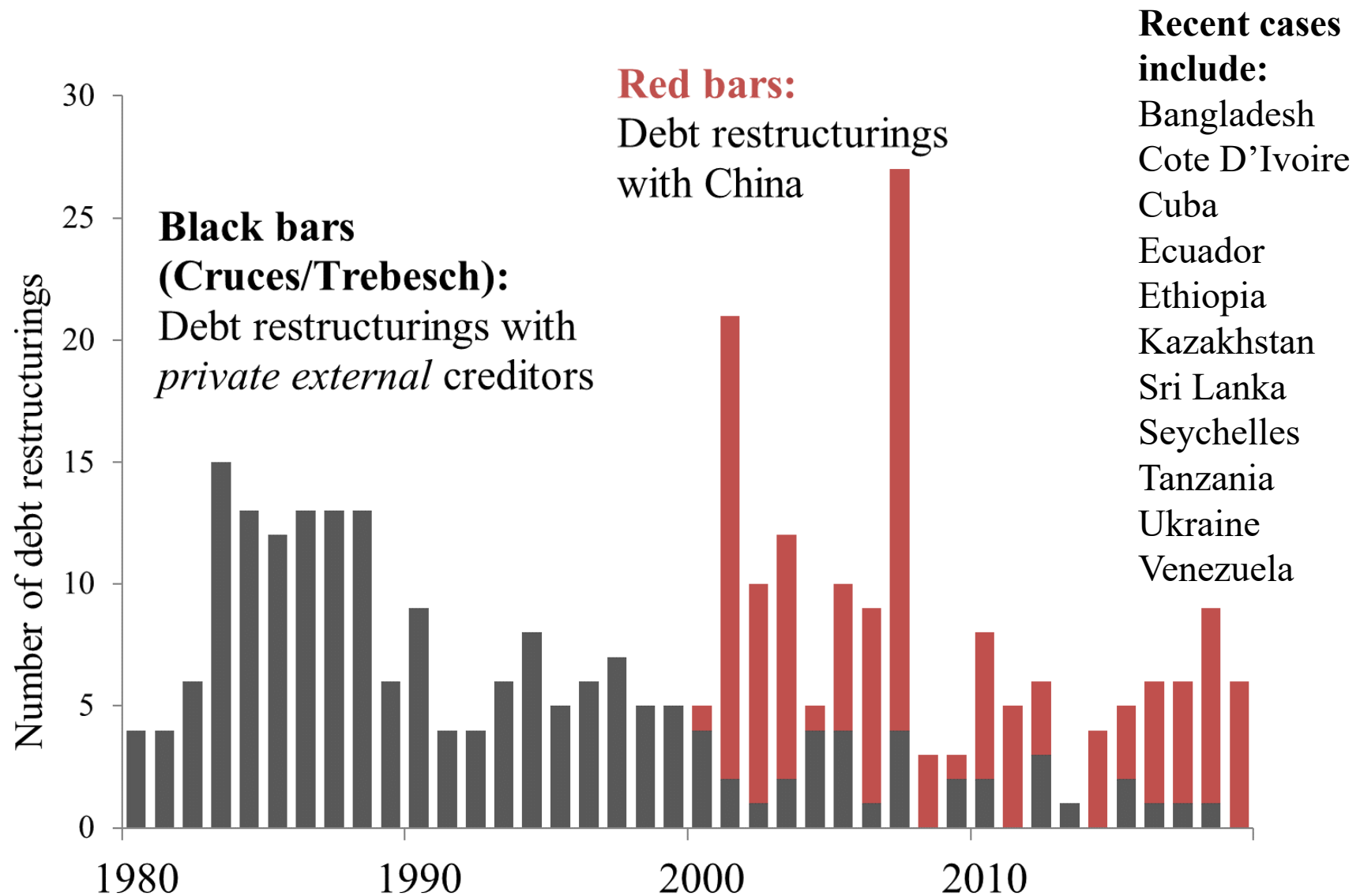


Hidden debt to China in World Bank statistics: magnitudes and incidence

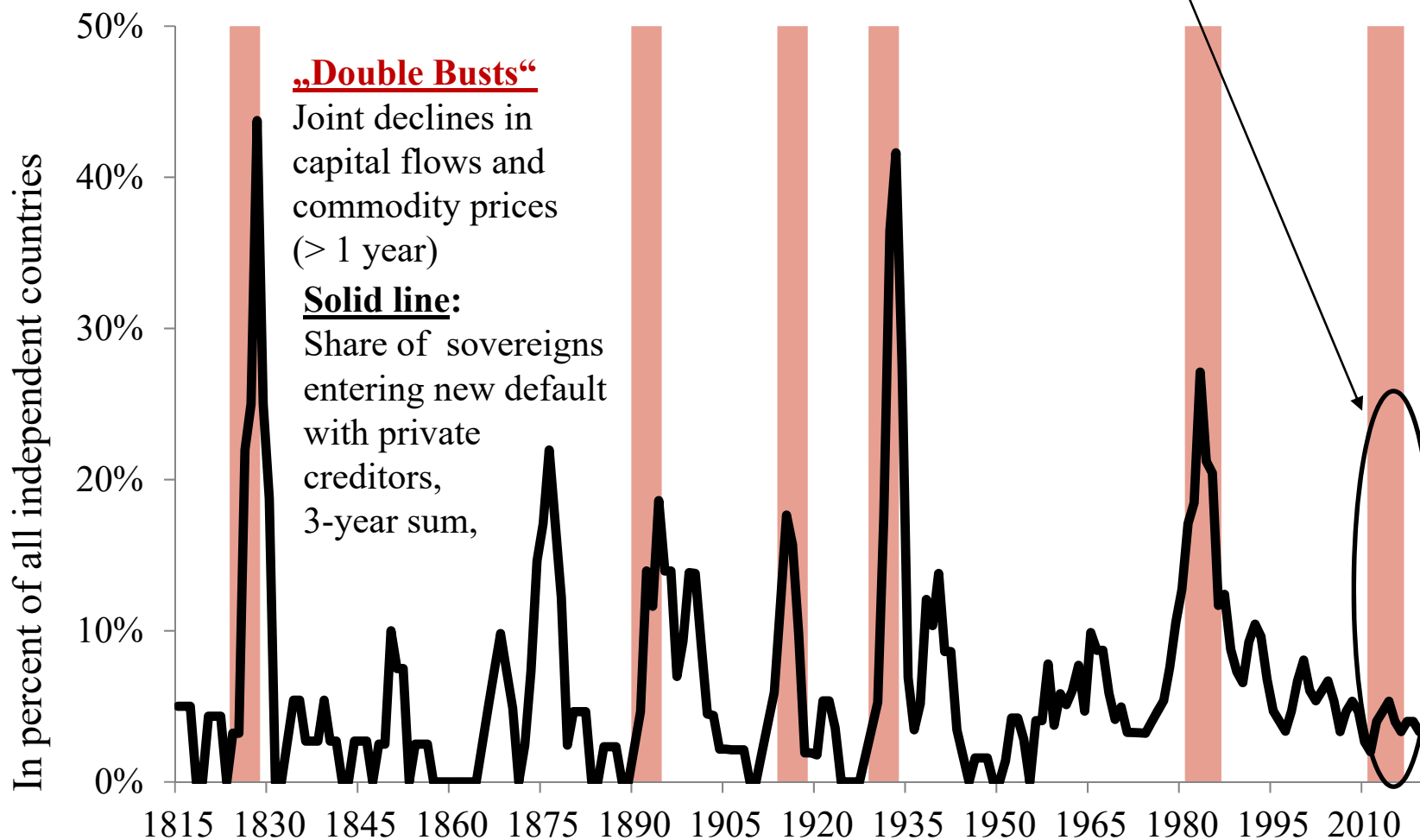
Hidden debt in percent of debtor GDP



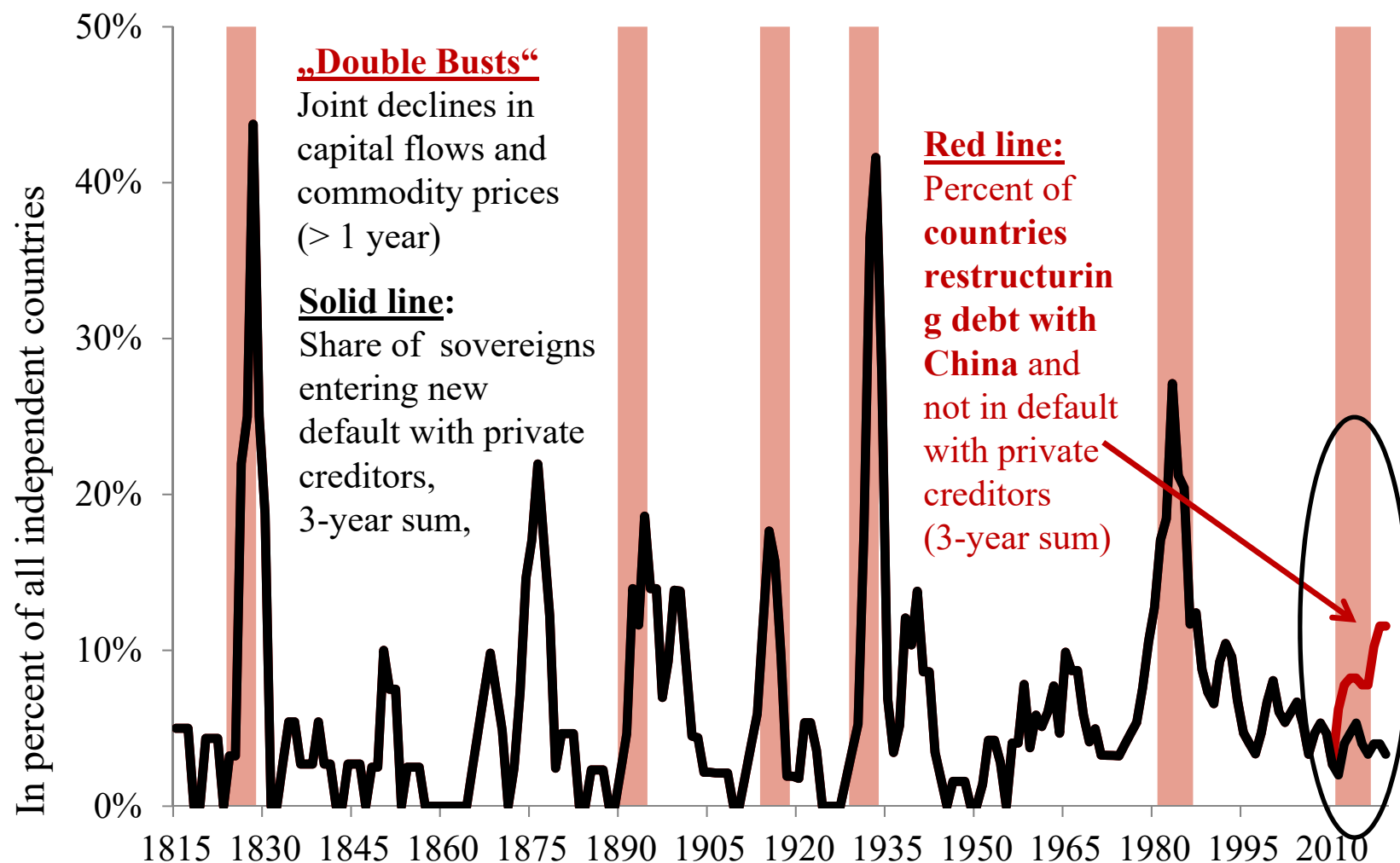
“Missing“ Chinese debt restructurings



The curious case of the *missing defaults*: commodity and capital flow “double busts” and sov. defaults



Some of the *missing defaults* took the form of the restructuring of official Chinese loans

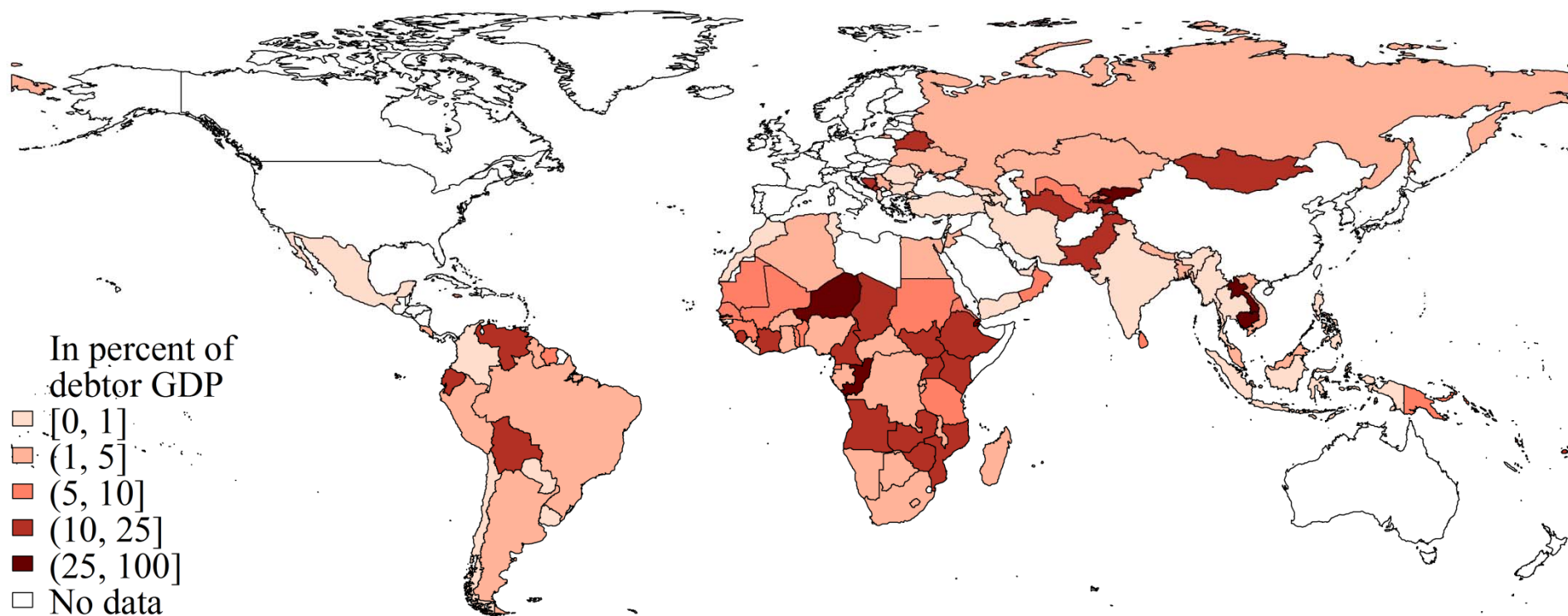


Source: Reinhart, Reinhart, and Trebesch (2017)

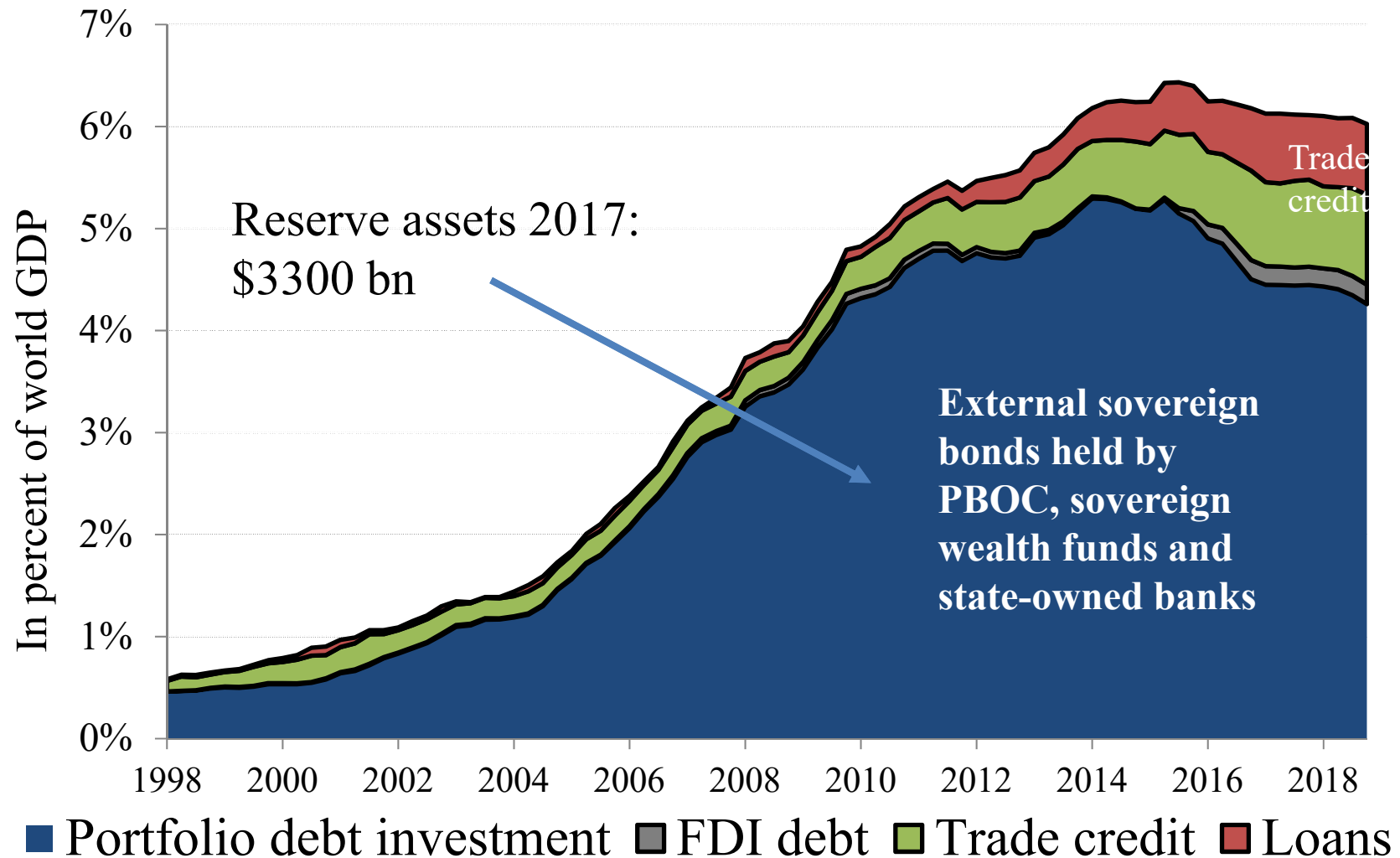
The big picture:

- (i) The **geography of China's lending** and capital exports
- (ii) Accounting for **full menu of China's capital exports**:
incl. asset (bond) purchases, FDI debt, PBOC swap lines

Debt owed to China from direct loans as of 2017

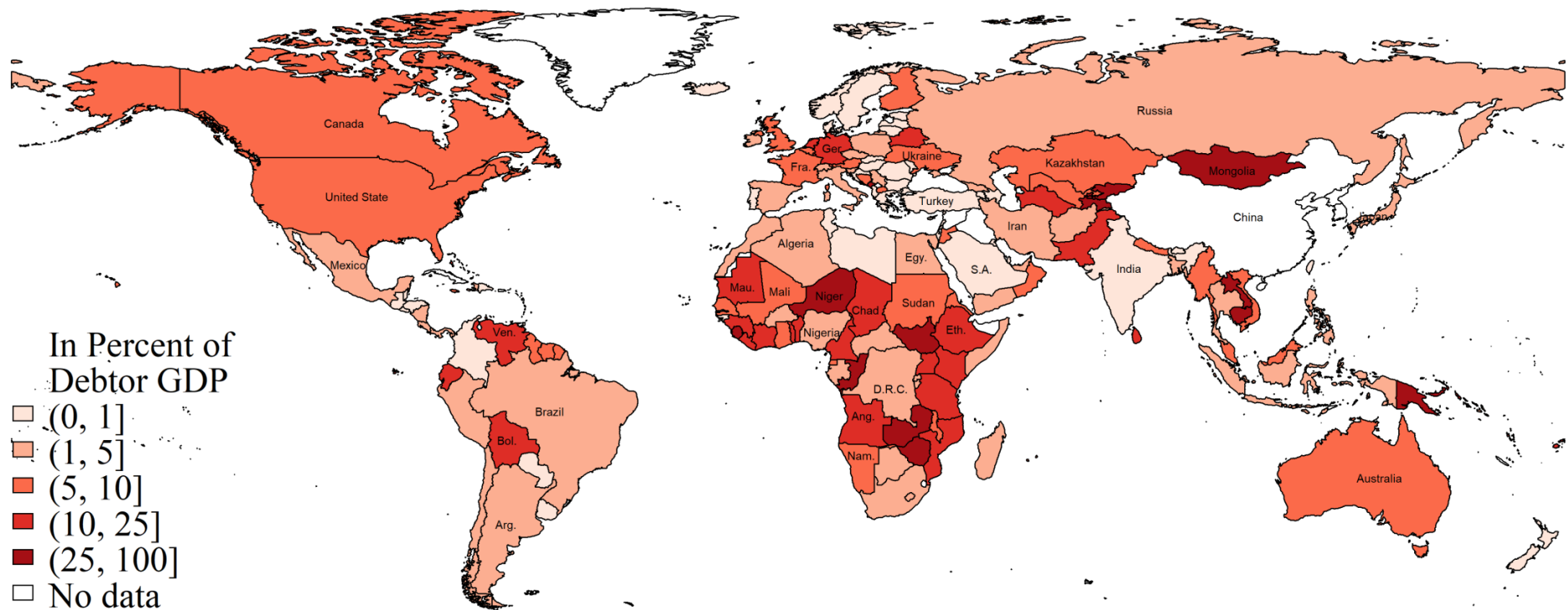


Aggregating all Chinese debt claims on the rest of the world (incl. bond purchases by PBOC & swap lines)



Adding asset purchases, swap lines & trade credits

→ many high- and middle-income countries also heavily indebted to China



What drives Chinese capital outflows?

- Standard theory of international capital flow drivers:
 - Synchronized across countries
 - Driven by financial conditions in the US
- **Chinese capital outflows are official (state-driven), so standard push and pull factors do not apply in the same way.**
- Empirical evidence:
 - VAR with recursive identification, Cholesky ordering in the spirit of Miranda-Agrippino/Rey (2015), Bruno/Shin (2015)
 - Results: domestic factors (esp. GDP growth) are key driver. Global factors (VIX, US interest rates) less so

Conclusion

- China has become the world's largest official creditor
- Standard data sources do not fully capture China's lending
 - Many country's official debts are grossly underestimated
 - “Credit events” with China not captured by rating agencies
- Standard theories of intl' capital flows not a good fit

Outlook:

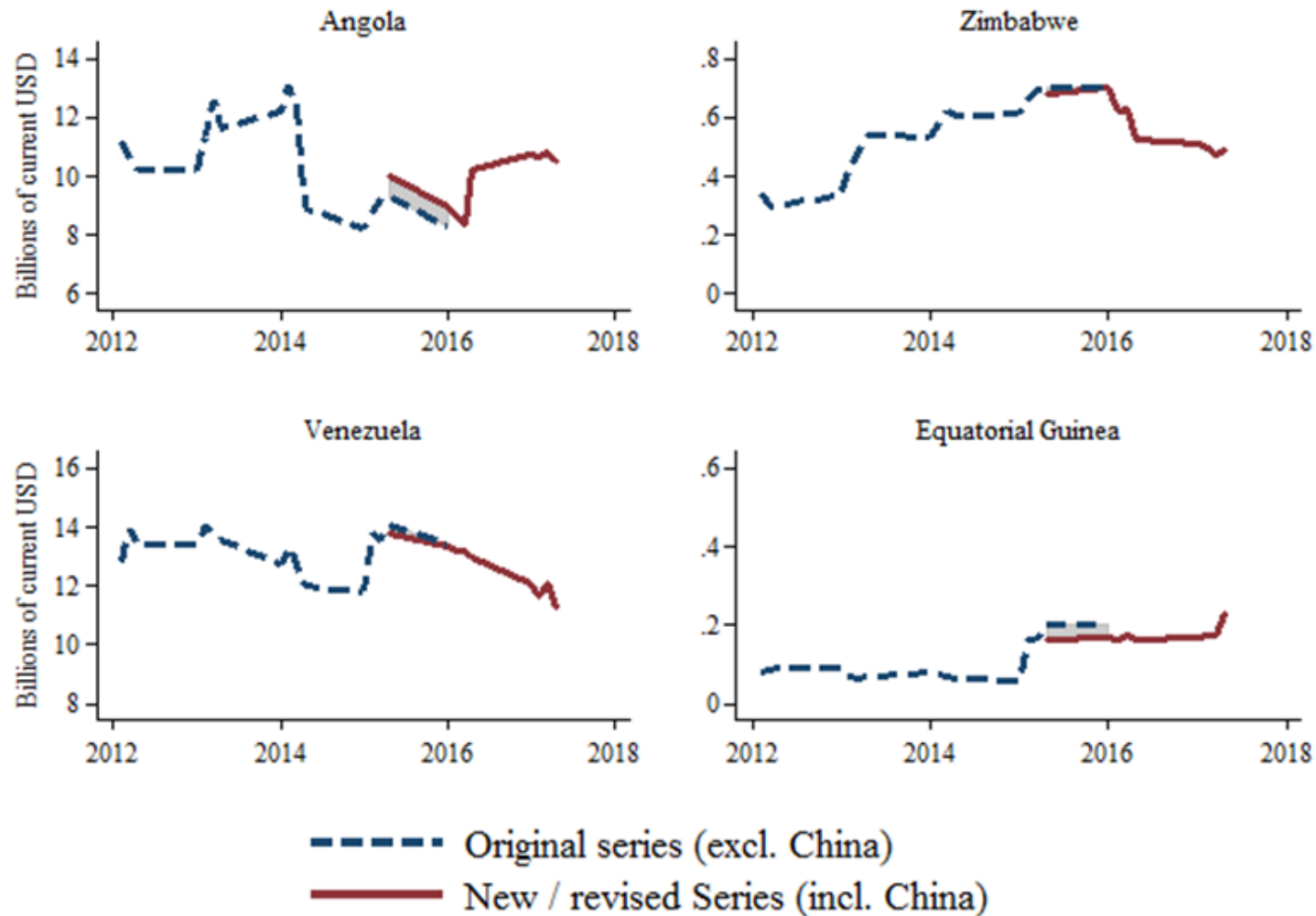
- More research is needed on these areas, especially incorporating geopolitical considerations
- Will China's economic slowdown (ongoing and expected) result in a "sudden stop" for emerging markets?

Thank you for your attention

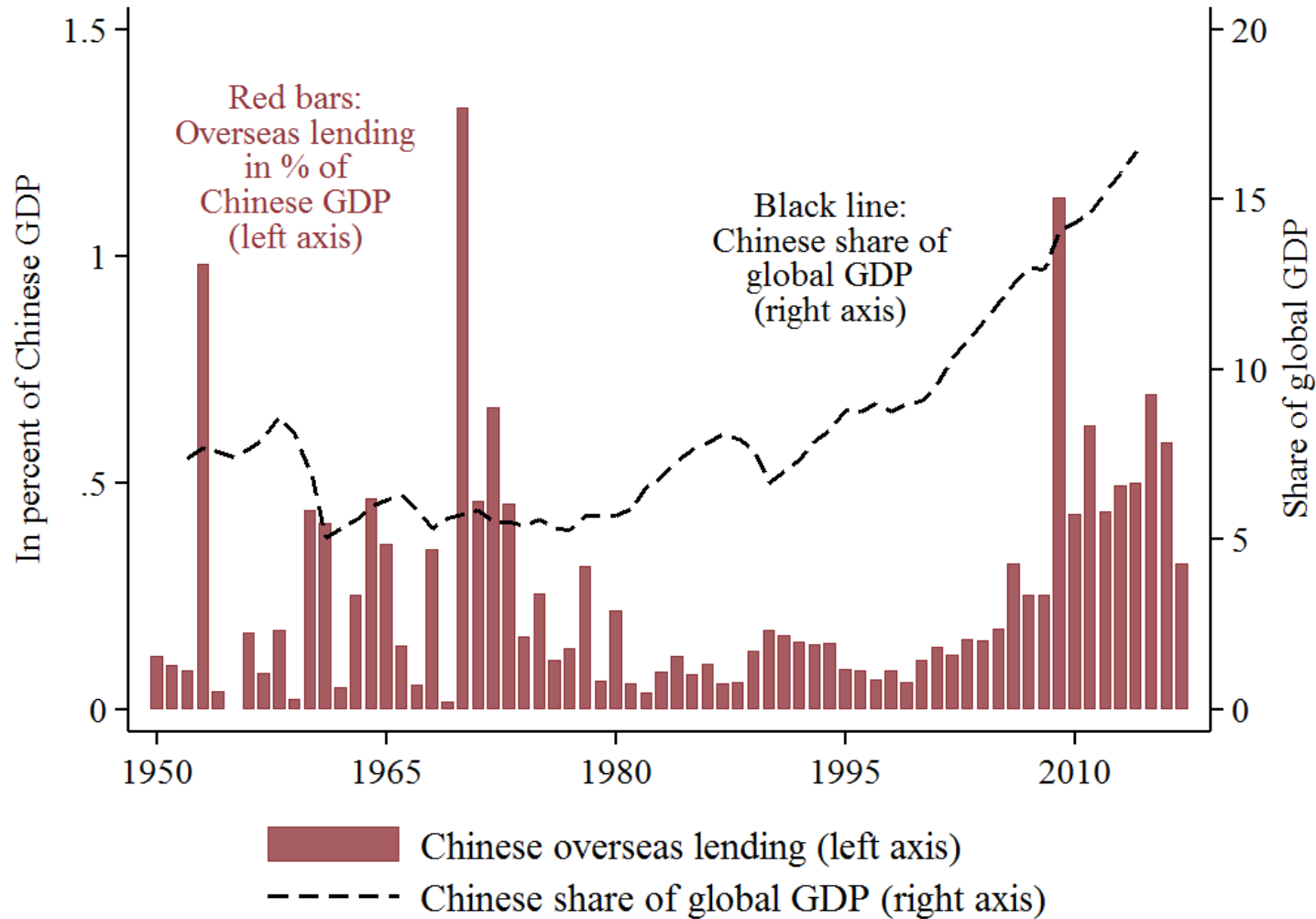
Appendix

Underreporting in **BIS** Banking Statistics

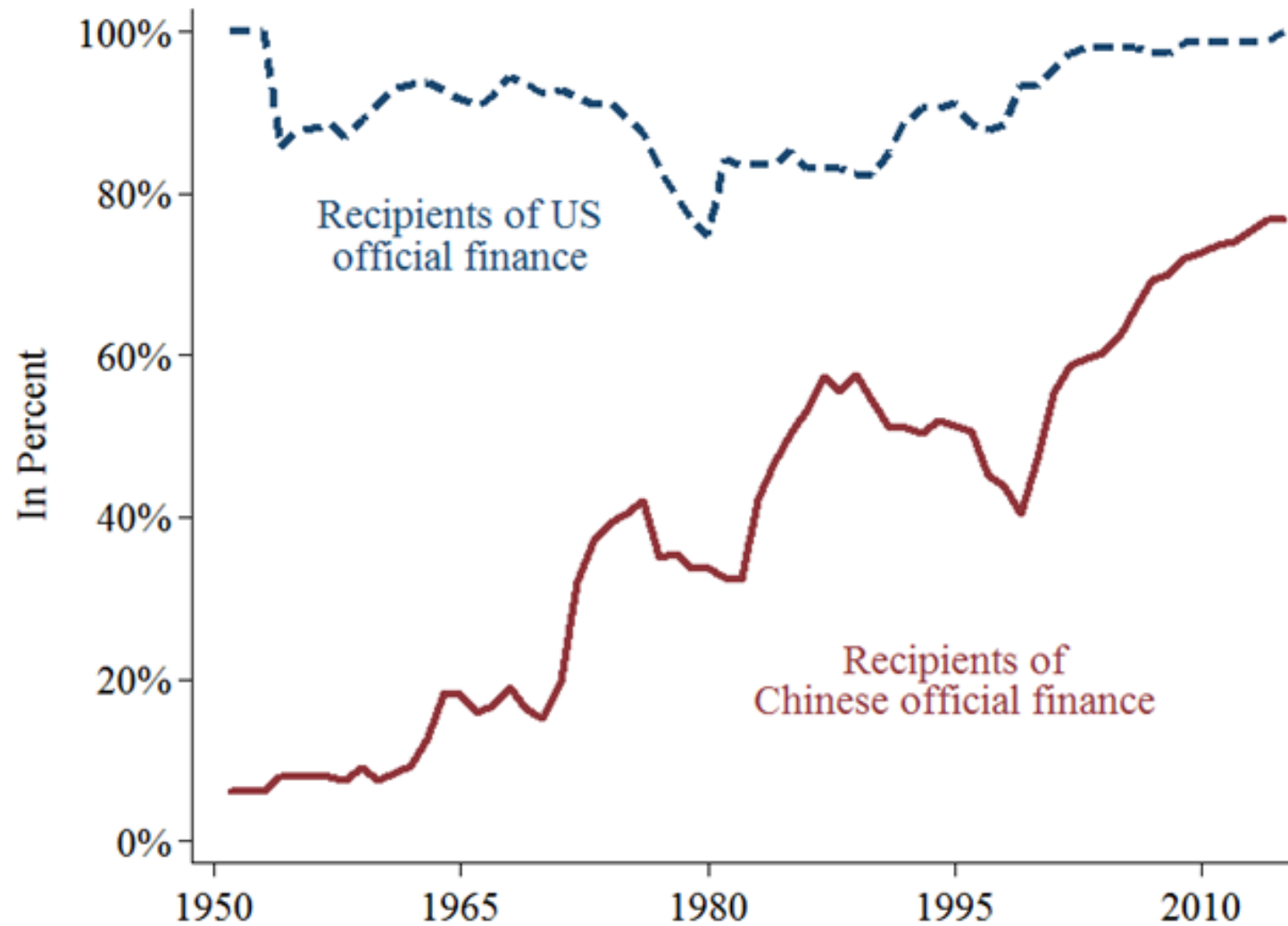
Underreporting most acute in high-risk countries



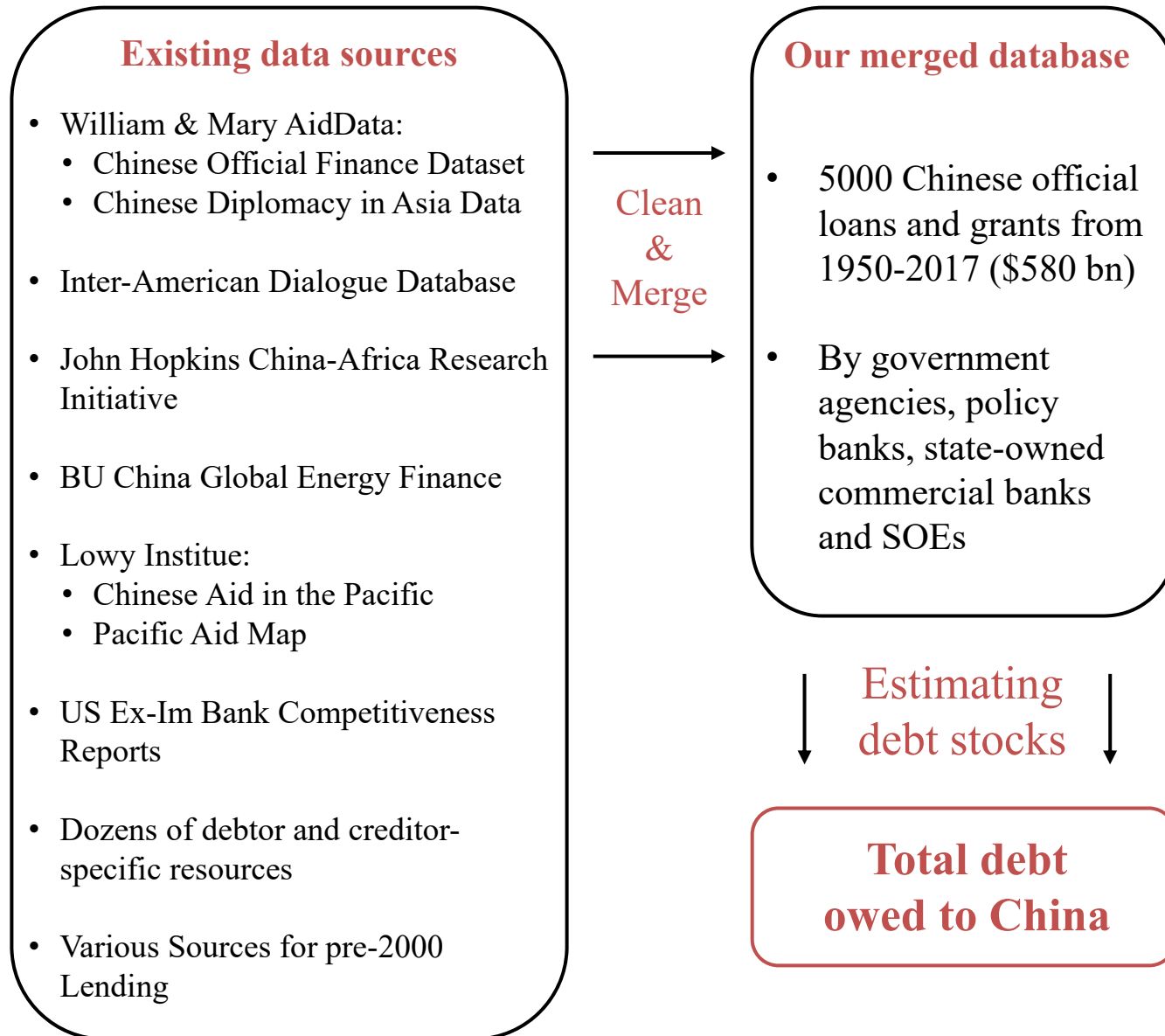
China has always lent abroad ...but it was not such a large economy



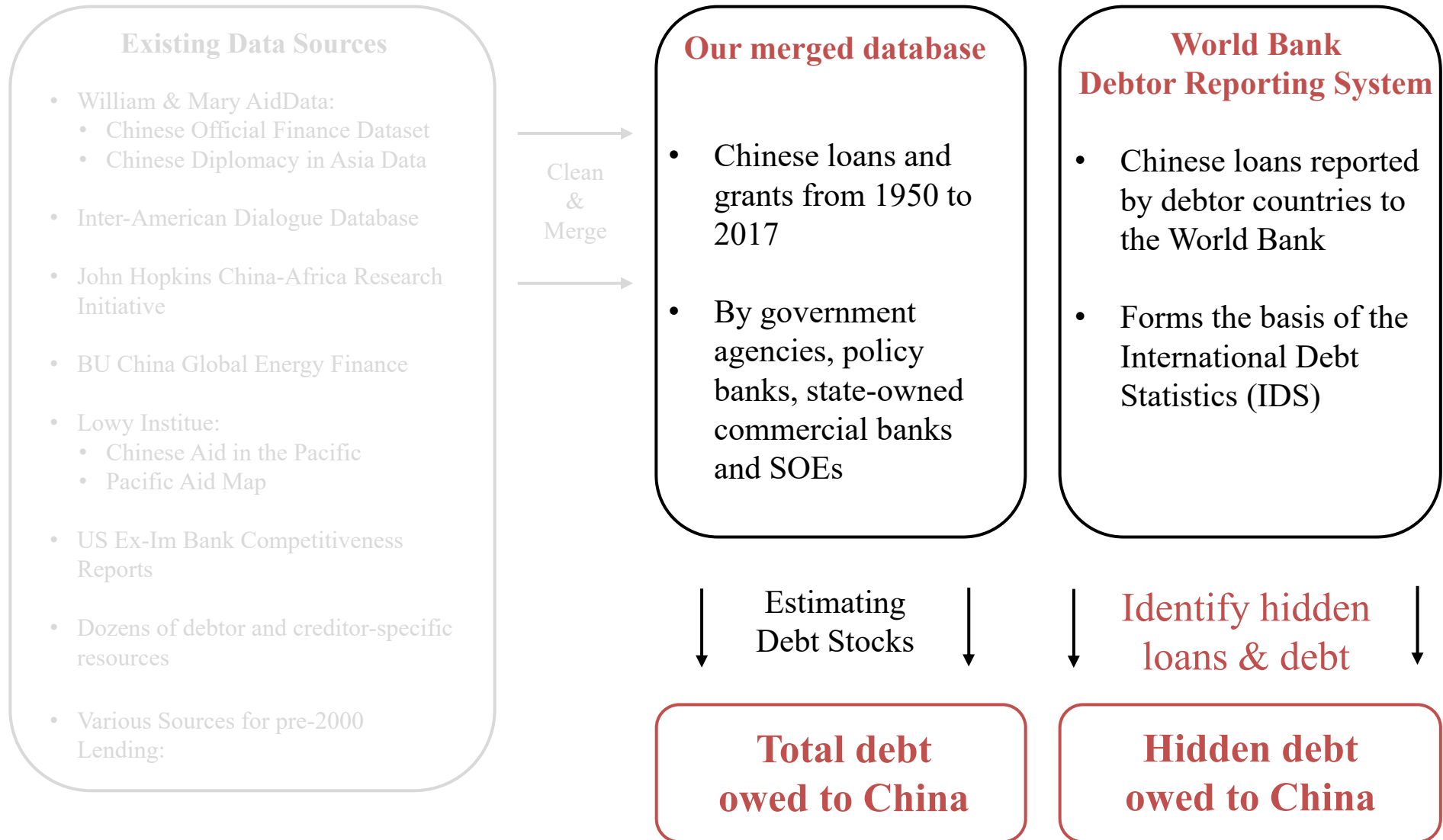
...and it did not lend on such a global scale



...from loans we compute debt stocks owed to China



...and identify hidden loans & debt stocks



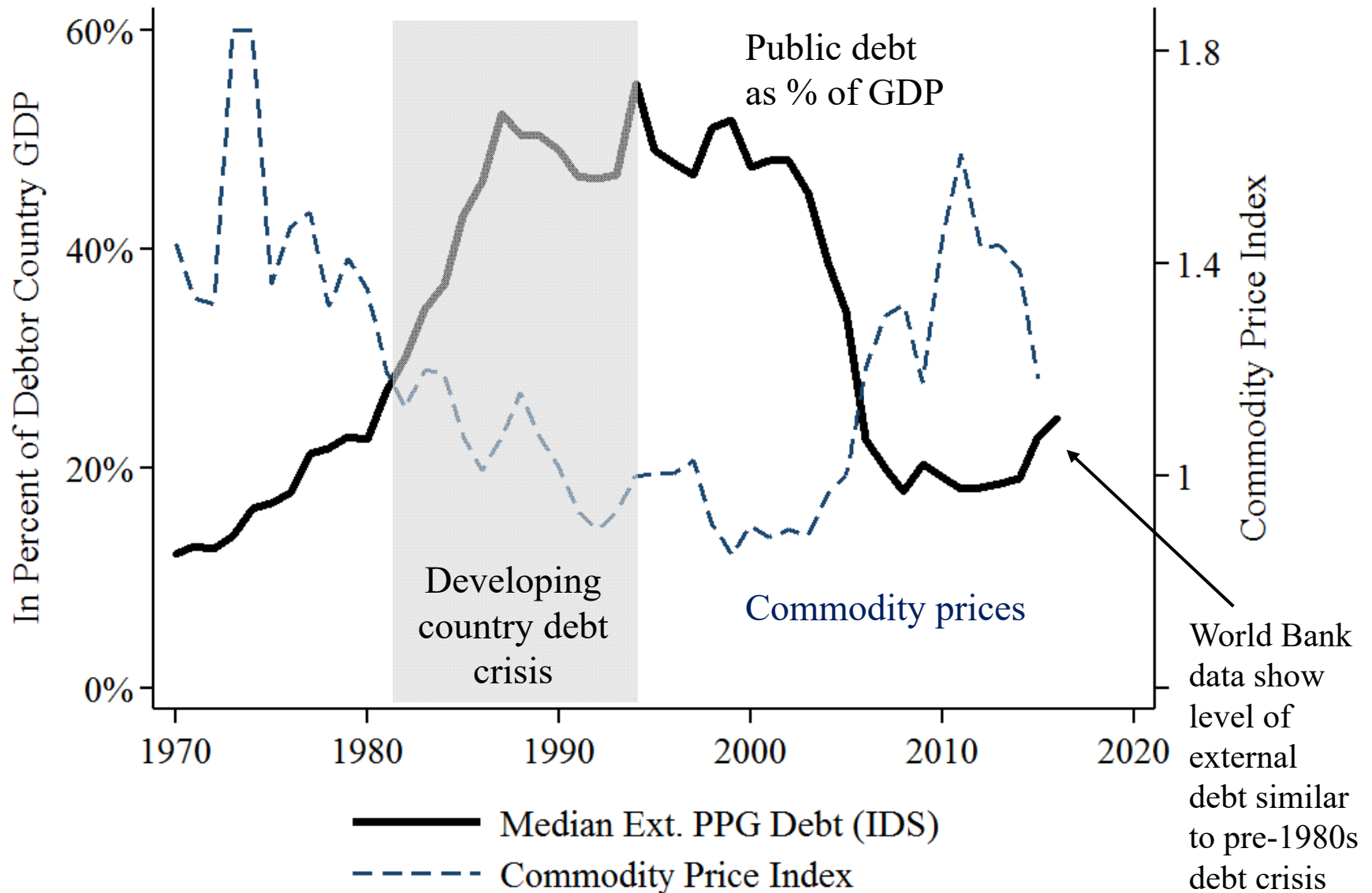
We estimate geographic distribution...

There are no data on detailed Chinese reserve holdings & trade credit flows, but geographic allocation can be estimated with reasonable precision from a variety of international statistics and debtor sources:

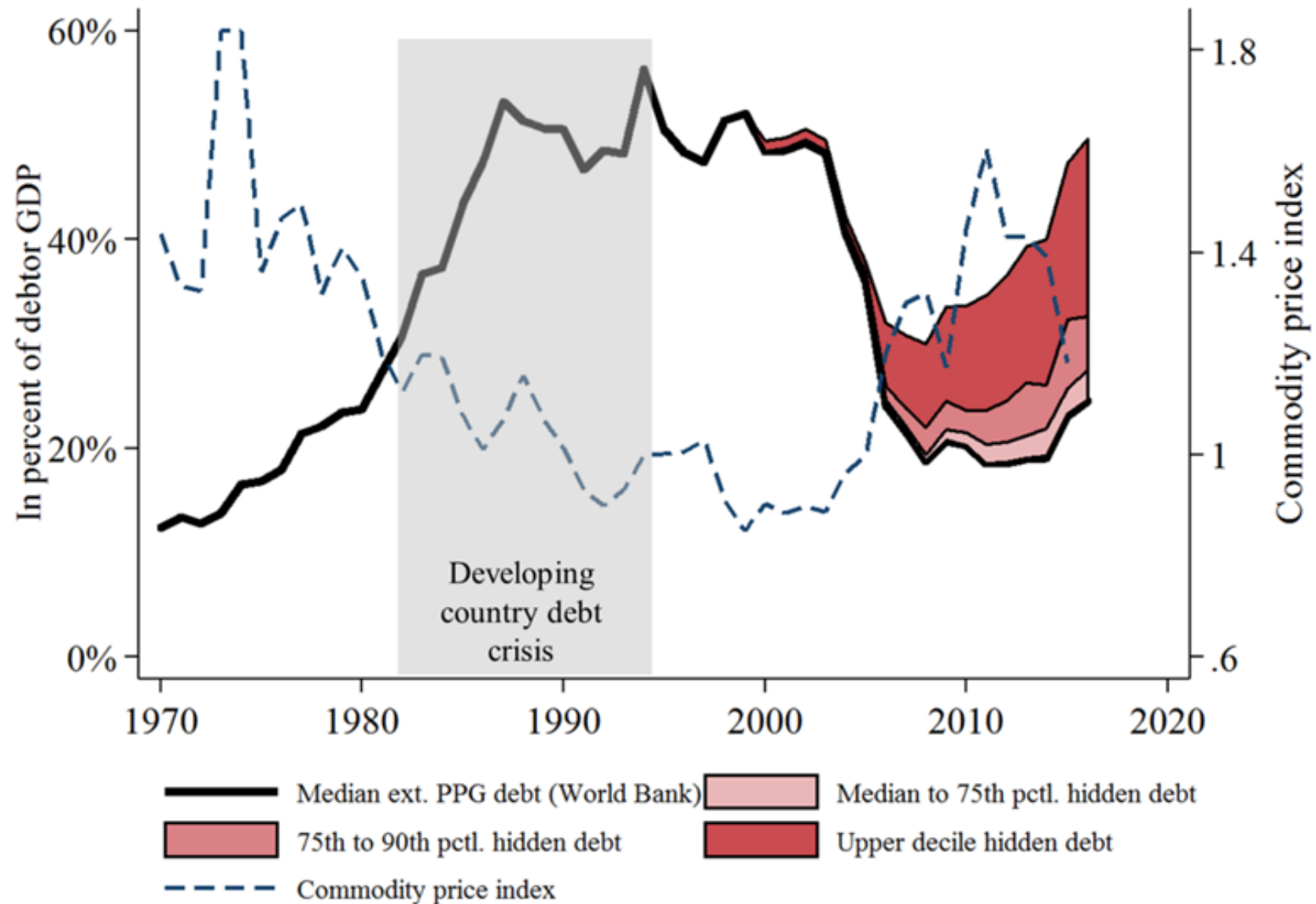
- **FDI debt:**
IMF Coordinated Direct Investment Survey, American Enterprise Institute
- **Portfolio debt (reserve and non-reserve assets)**
IMF COFER, IMF Coordinated Portfolio Investment Survey, Arslanalp and Tsuda (2012 & 2014), various debtor sources e.g. US TIC data
- **Trade debt:**
OECD Working Group on Export Credits, US Ex-Im Bank Competitiveness Reports
- **PBOC swap line debt:**
PBOC and recipient Central Bank Annual Reports; Quarterly External Debt Statistics

**Is a new debt crisis brewing in
countries with (hidden) debt to China?**

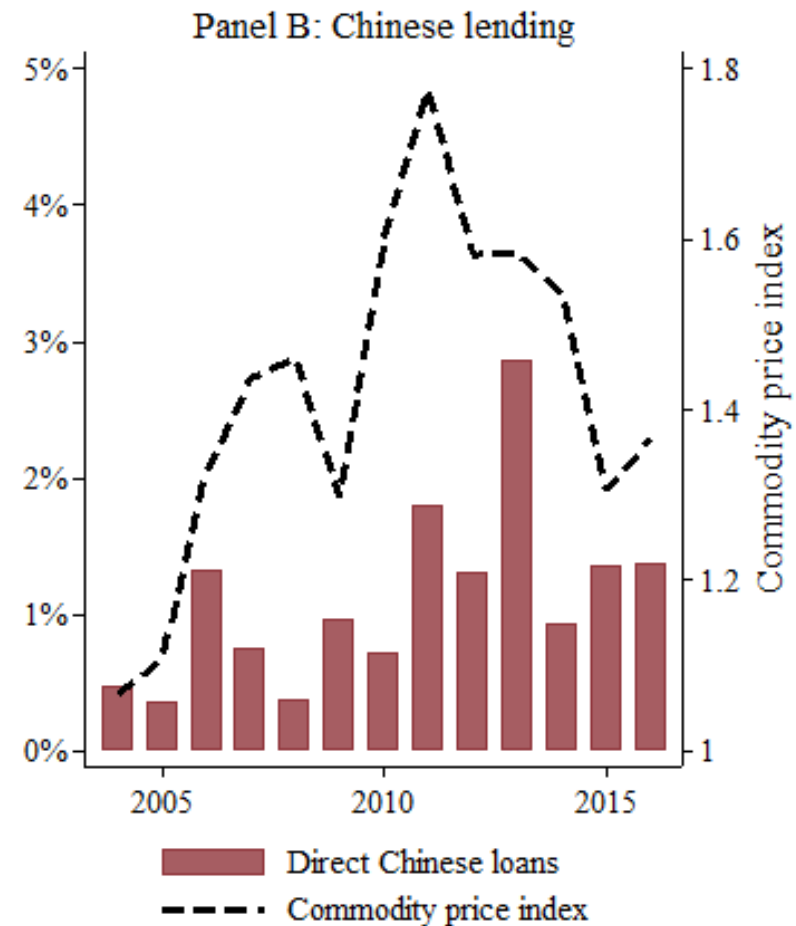
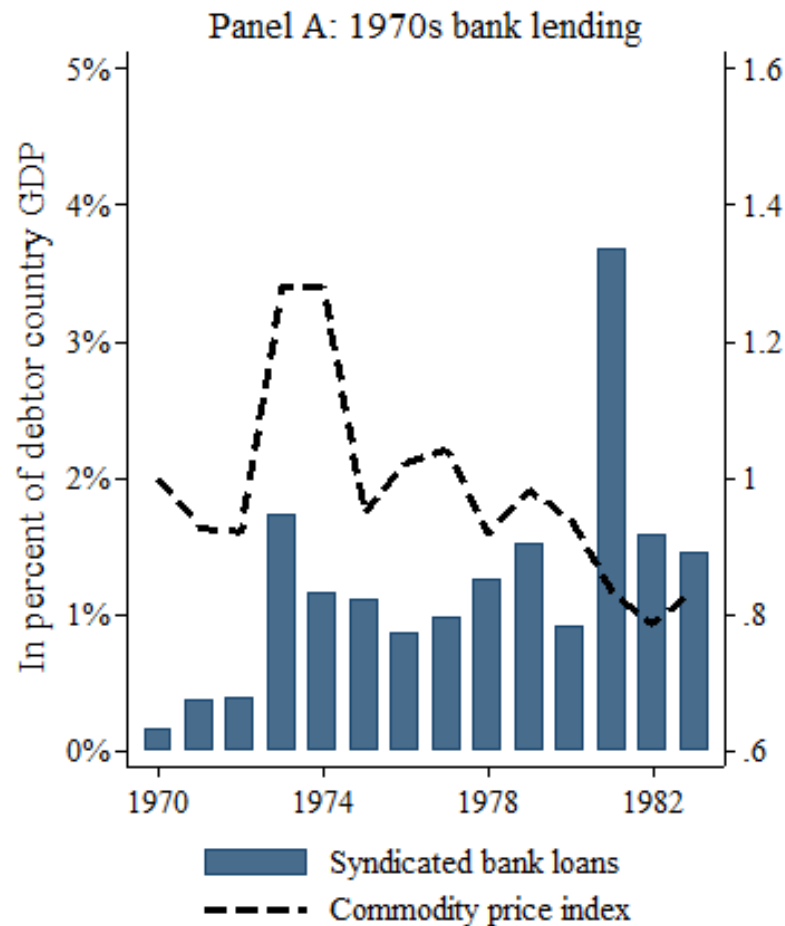
A new debt crisis? Some parallels to the 1970/80s



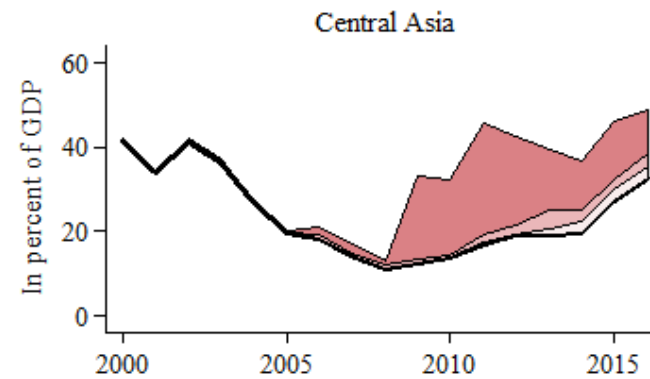
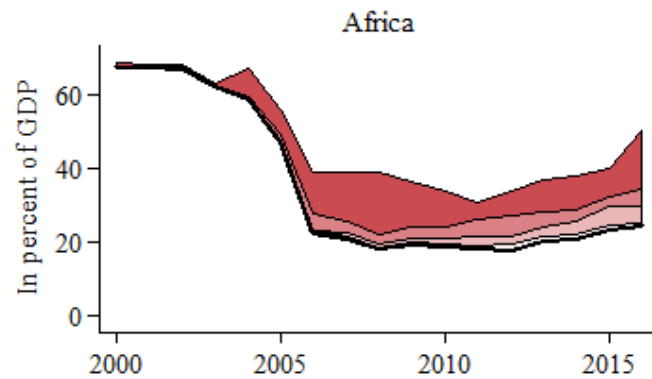
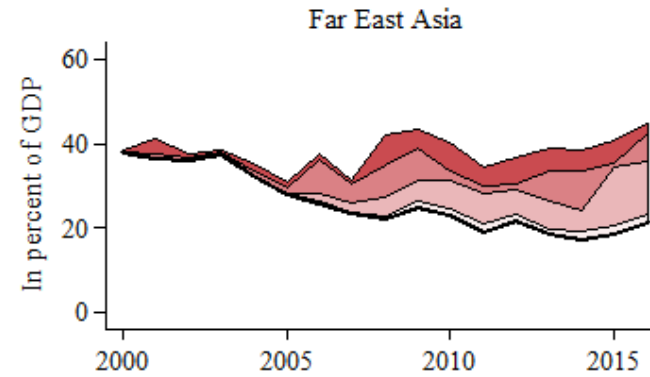
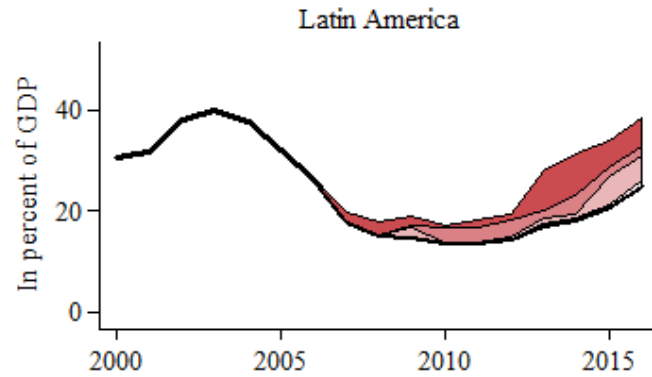
But the *hidden debts* to China add substantially to the precariousness of the situation



A new debt crisis? Parallels to the 1970/80s



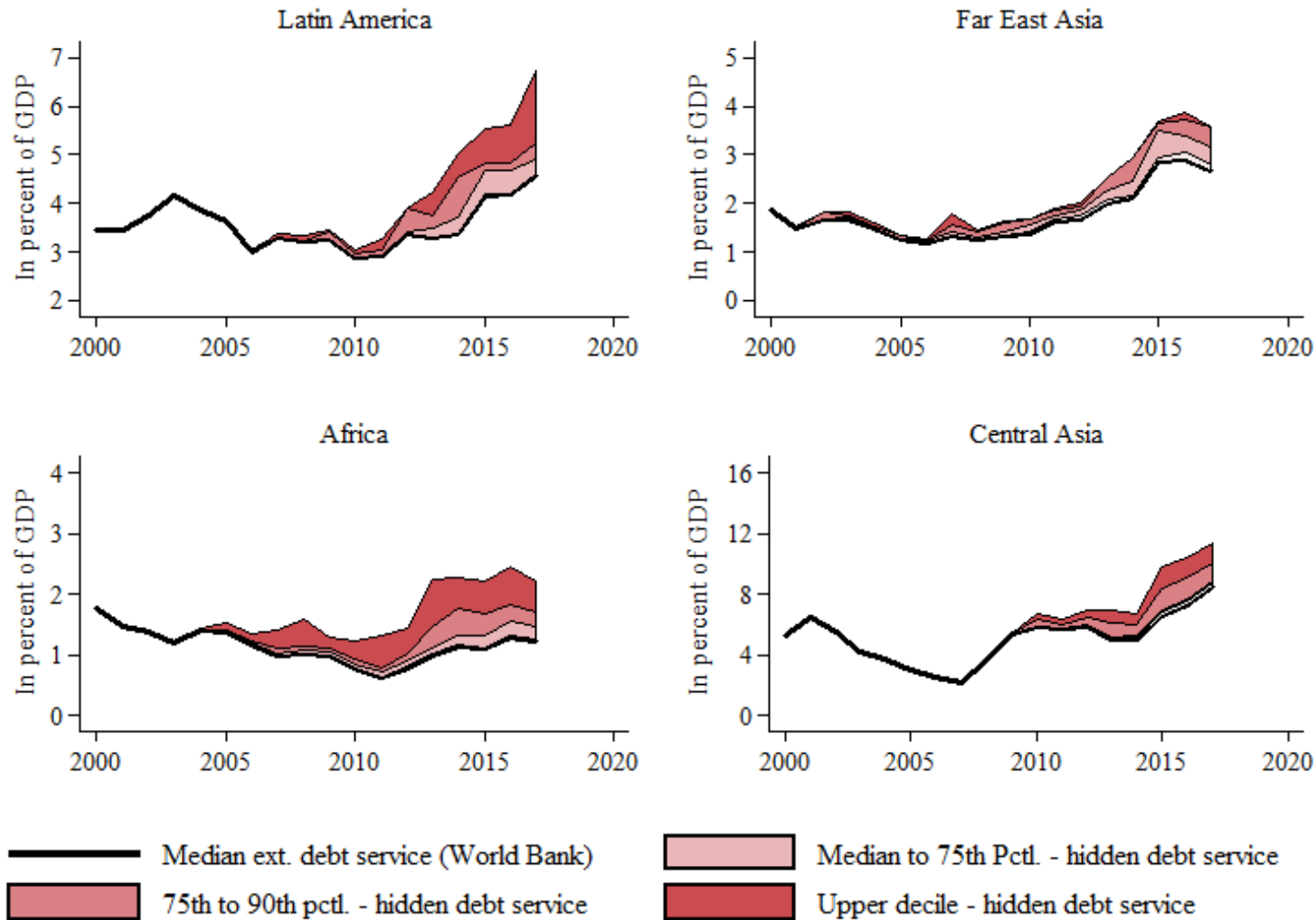
External debt trends revisited



— Median ext. PPG debt (World Bank)
75th to 90th pct. hidden debt

Median to 75th pct. hidden debt
Upper decile hidden debt

External debt service revisited



**What drives Chinese capital
outflows?**

What drives Chinese capital outflows?

- VAR with Cholesky ordering:

$$\begin{pmatrix} \textit{Real GDP growth} \\ \textit{China MP index} \\ \textit{Capital outflows} \\ \textit{Commodity price index} \\ \textit{VIX} \end{pmatrix}$$

- Quarterly data from BOP Statistics 1998 - 2018