# Corporate Foreign Bond Issuance and Interfirm Loans in China

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Discussion by Tamon Asonuma (IMF)

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## Disclaimer

• The views expressed herein are those of the authors and should not be attributed to the IMF, its Executive Board, or its management

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## Overview of the paper

- Motivation international and domestic trends
  - i. International China's dominant bond issuance in EM universe in the post-GFC period (i.e., 3.5% in 2007  $\Rightarrow$  30% in 2016)
  - ii. Domestic Tight regulation in China' banking sector (i.e., interest ceiling on loans and deposit)

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# Overview of the paper (cont.)

#### Main question

- What are patterns of international bond issuance by Chinese non-financial corporations (NFCs)?
  - A. Drivers of bond issuance
  - B. Use of received proceeds
  - C. Whether a surge in FX-denominated borrowing by risky NFCs is resulted from regulation decision by the government

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## Outline of Discussion

- Overview of the paper
  - Motivations
  - Main question

• Summary of data, methods and findings and comments/suggestions

- Overview on international bond issuance by China
- Datasets
- Regression analysis on drivers of bond issuance
- Regression analysis on use of raised proceeds
- Regression analysis on role of regulations in financial sector

Summary of the paper - black Main novelty of the paper - red Comment/suggestions - blue

## Overview on international bond issuance by China

- Issuers of international bonds in China
  - Sovereign (PRC MOF, CB)
  - Financial corporations (FC)
  - Non-financial institutions (NFC)
- Comment "Big-picture questions"
  - What is the relationship between sovereign external bond issuance and corporate bond issuance? Complementary or independent?
  - What is the relationship between financial corporations (FC) and non-financial corporations (NFC)? Complementary or substitutable?
  - What can we say on "hidden debt in China"?
    - Not sovereign (IMF 2021, PRC MOF)
    - SOEs (Horn et al. 2022)
    - Non-financial corporations?

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## Datasets

- Bond-level data from Bloomberg
  - 4,454 instruments from 1,353 issuers
  - Currency denomination: RMB 85 percent, US\$ -15 percent
- Firm-level dataset from CSMAR
  - 32,815 instruments by 2,593 firms
  - Revenues and inter-firm loans
- Reconciled dataset (bond- and firm-level)
  - 3,968 instruments
  - 479 US\$-denominated instruments and 3498 RMB-denominated instruments
  - 22,419 observation (firms × years)

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# Datasets (cont.)

#### Comment

- Great effort and contribution to the literature
- Datasets should be a big asset for future work!
- Table on summary statistics
- What is the most important novelty (beyond the coverage)?
- Figure on trend (aggregate)
- Comparison between US\$- and RMB-denominated bonds

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## 1st step: Panel regression on drivers of bond issuance

## Approach

- Panel regression
- Sub-sample analysis by "risky" vs. "non-risky" firms
  - Classification between risky and non-risky sectors by China's Ministry of Industry and Information Technology (CMIIT)
- Two main findings:
  - i. FX (US dollar)-denominated bond issuances are positively correlated with interest rate differential and the impacts is large with large firm size and high leverage
  - ii. Firms in risky economic sectors are more likely to issue dollar bonds

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# 1st step: Panel regression on drivers of bond issuance (cont.)

### • Comment: Two questions:

- 1. How the assessment of "risky sectors" has been made? Assessment might have used reliance on external financing (i.e., endogeneity issue...)
- 2. How does the assessment of "risky sectors" relate to firms producing export goods or firms with external financing?
- *Proposal:* Should use an alternative classification by <u>sector</u> characteristics which are not influenced by profitability or financing
  - Classification by continuous variable rather than binary (risky vs. non-risky)
  - A. Tradable or non-tradable sectors share of exports in production
  - B. Upper or lower-stream sectors share of intermediate/final goods
  - C. Concentrated or diverse sectors share of productions by major firms

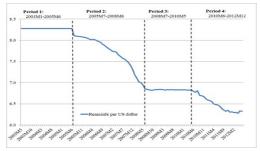
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## 2nd step: Regression analysis on use of raised proceeds

- Approach
  - Panel regression
  - Dependent variable: proceeds from US\$-denominated issuances
  - Sub-sample analysis by "risky" vs. "non-risky" firms
    - Classification between risky and non-risky sectors by China's Ministry of Industry and Information Technology (CMIIT)
- Two main findings:
  - i. Issuers of US\$-denominated bond have lower investment rates (high yields) and likely to lend to other firms (inter-firm borrowing)
  - ii. Safe and profitable firms with good investment projects do not borrow much abroad. When they do, they use the proceeds to finance their investment projects.

## 2nd step: Regression analysis on use of raised proceeds

- Comment: Subsample analysis by time horizon
- One proposal US\$/CHY nominal exchange rate fluctuation
  - Stable vs. depreciation periods



 If firms are taking carry trades, bond issuance and external financing should differ between two periods.

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# 3rd step: Regression analysis on role prudential regulations

## Dataset

- Inter-firm entrusted loans
- Approach
  - Panel regression
  - Data: Entrusted loans
  - Difference-in-difference approach
  - The regulatory tightening in 2009-10 following impacts from the GFC

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- Two main findings:
  - i. Dollar borrowing by risky NFCs are driven by regulatory decisions. As a result, the NFCs decided to borrow abroad.

# 3rd step: Regression analysis on role of prudential regulations

### • Comment: One question

• 1. Was it better off for risky NFC to issue abroad? Have they made more profits?

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- **Proposal**: Compare profits or returns before and after the prudential regulation.
  - 1. Risky firms
  - 2. Non-risky firms
  - 3. Risky firms vs. non-risky firms

## Conclusion

- Great paper!
  - Enriched and innovative datasets
  - Comprehensive story
  - Empirical findings
- Significant contribution to the literature on international bond issuance!
- Comments for future work
  - Overview on international bond issuance by China
  - Datasets
  - Regression analysis on drivers of bond issuance
  - Regression analysis on use of raised proceeds
  - Regression analysis on role of regulations in financial sector

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