Cross-Border Prudential Policy Spillovers: How Much? How Important? Evidence from the IBRN

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Macroprudential policy: Taking stock of the state of the art, and ways forward

Roadmap: International spillovers of prudential policies

"Cross-Border Prudential Policy Spillovers: How Much? How Important? Evidence from the International Banking Research Network" Claudia M. Buch and Linda Goldberg *International Journal of Central Banking* (March 2017)

"Prudential policies crossing borders" Claudia Buch, Matthieu Bussiere, and Linda S. Goldberg *VoxEU* (December 2016)

The International Banking Research Network (IBRN)

- **Internationally active banks have been key contributors to the global financial crisis – and the subsequent recovery.**
- **Yet, there is little consistent evidence across countries on the drivers and effects of global banking.**
- **Founded in 2012, the International Banking Research Network brings together central bank researchers from 28 institutions to analyze issues pertaining to global banks.**
- **Empirical approach of the network:**
    - Analyze (confidential) bank-level datasets and share results
    - Identify relevant heterogeneities across countries and banks
    - Use common methodology
    - Perform meta-analyses

IBRN

The IBRN involves central banks, the BIS, the IMF, and the ECB.

Reserve Bank of Australia	Central Bank of India	Banka Slovenije
Oesterreichische Nationalbank	Central Bank of Ireland	Banco de España
Banco Central do Brasil	Banca D'Italia	Sveriges Riksbank
Bank of Canada	Bank of Japan	Swiss National Bank
Central Bank of Chile	Bank of Korea	Central Bank of the Republic of Turkey
Banque de France	Banco de México	Bank of England
Deutsche Bundesbank	De Nederlandsche Bank	United States Federal Reserve
European Central Bank	National Bank of Poland	Bank for International Settlements
European Systemic Risk Board	Banco de Portugal	International Monetary Fund
Hong Kong Monetary Authority	Central Bank of Russia	

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Project Overview -1

- The systematic development of macro-prudential tools is one of the most significant changes in banking regulation in the past decade.

- ✓ Effectiveness?
  - Desired consequences may be weakened by spillovers.
  - Domestic and foreign entities may not be similarly impacted.
  - There may be shifts outside regulatory perimeter to non-covered entities/activities.
- ✓ Unintended consequences?
  - Spillovers to other geographic regions
- ✓ Large gaps exist in empirical evidence

- The IBRN addresses gaps: Create a new database (with IMF), support range of country studies, conduct meta-analysis, policy implications.

Project Overview -2

Analytical issue # 1. Very few and very recent instances of macro-prudential policies. How can effects really be identified?

Solution: For analytical results, consider tools that operate similarly to macro-prudential tools.

Some prudential instruments have a long history, and operate on similar margins within banks, applied without macro-prudential label.

Need data on key instruments, with timing of changes.

Since international spillovers are target, need cross-country evidence.

IBRN and IMF together built a prudential instruments database.

IBRN and IMF database collaboration

- **Covers 2000Q1 through 2014Q4. 64 countries.**
- **Contains 5 types of prudential instruments:**
  - ✓ **Countercyclical capital buffers**
    - General capital requirements
    - Sector-specific capital requirements (split into real estate credit, consumer credit, and other)
  - ✓ **Interbank exposure limits**
  - ✓ **Concentration limits**
  - ✓ **Loan-to-value ratio limits, and**
  - ✓ **Reserve requirements (local and foreign currency)**

➢ **Tightening is -1, loosening +1** (SSCB, RR take values between -3 and +5)

Cerutti, Correa, Fiorentino and Segalla "Changes in Prudential Policy Instruments – A New Cross-Country Database" March 2017 *International Journal of Central Banking*

Project Overview- 3

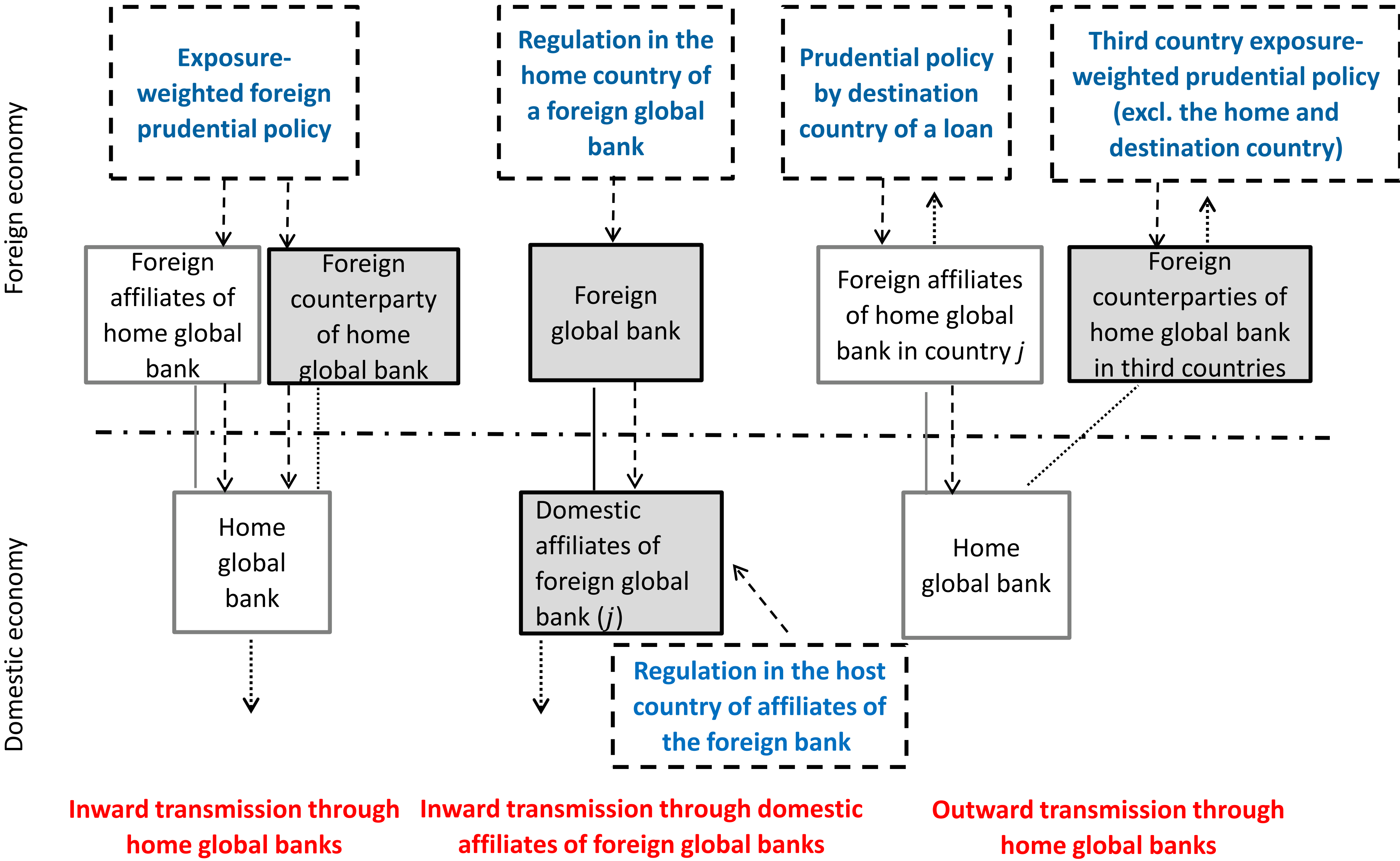
Analytical Issue #2: Country-specific case studies seldom generalize. Need lessons from broad set of experiences, with causality established.

Careful experiment design

- ✓ Determine channels of international spillovers through banks.
- ✓ Determine econometric tests for these spillovers.
  - Use identification through heterogeneity approach.
- ✓ Collaborate and coordinate efforts across multiple countries.
- ✓ Teams use confidential micro data and explore idiosyncratic issues.

Perform ideal meta-analysis

- ✓ Which bank features and data characteristics are associated with higher likelihood of significant international spillovers?
- ✓ Summarize results across countries.



Foreign economy
Domestic economy
Exposure-weighted foreign prudential policy
Regulation in the home country of a foreign global bank
Prudential policy by destination country of a loan
Third country exposure-weighted prudential policy (excl. the home and destination country)
Foreign affiliates of home global bank
Foreign counterparty of home global bank
Foreign global bank
Foreign affiliates of home global bank in country j
Foreign counterparties of home global bank in third countries
Home global bank
Domestic affiliates of foreign global bank (j)
Home global bank
Regulation in the host country of affiliates of the foreign bank
Inward transmission through home global banks
Inward transmission through domestic affiliates of foreign global banks
Outward transmission through home global banks

Types of Specification by Country

	Inward transmission of…		Outward transmission of…
	Exposure-weighted regulation through global banks	Home policy via affiliates	Destination country policy through global banks
Canada			✓
Chile	✓	✓	
France			✓
Germany	✓	✓	✓
Hong Kong		✓	
Italy			✓
Mexico	✓	✓	
Netherlands			✓
Poland		✓	
Portugal	✓	✓	
South Korea		✓	
Switzerland	✓		
Turkey	✓	✓	
United Kingdom	✓	✓	
United States	✓	✓	✓
Total # countries	**8**	**10**	**6**

Results: Meta-analysis of International Spillovers of Prudential Policy

1. **Prudential instruments do sometimes spill over internationally through bank lending.**

2. **Not one-size-fits-all: Spillovers heterogeneous in size and direction**

   - By prudential instrument
   - By bank business models (global bank, branch, subsidiary).
   - Banks with stronger balance sheets tend to reduce international lending by less when regulations tighten.
   - No clear difference between AEs and EMs, or by stage of business cycle

3. **Market share repositioning occurs.**

4. **International spillovers on loan growth have not been large.**

Policy Relevance: International Spillovers of Prudential Instruments

1. **Domestic credit conditions influence by foreign policies.**
2. **No one-size-fits-all set of evidence on spillovers: the extent and direction of international spillovers are not as clean as simple theoretical models would predict.**
   - Financial institutions: spillovers heterogeneous in amplitude and direction
   - Banking structure and FI strengths are key to instrument effects
   - While spillovers are not yet large, potential for increase as tools are activated more.
3. **Market share repositioning may result internationally.**
   - Banks with stronger balance sheets reduce lending by less when regulations tighten, may expand international and domestic roles.
   - Is this a good or bad outcome? Micro- v. Macro-pru goals?


INTERNATIONAL
BANKING RESEARCH
NETWORK
IBRN
IBRN engages central bank researchers in a coordinated study
of global banks and their activities internationally.

Thank You !