# International Experience with Macroprudential Policy

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# Outline

1. **Macroprudential measures around the world**
   - ➢ Based on IMF's Annual Macroprudential Policy Survey

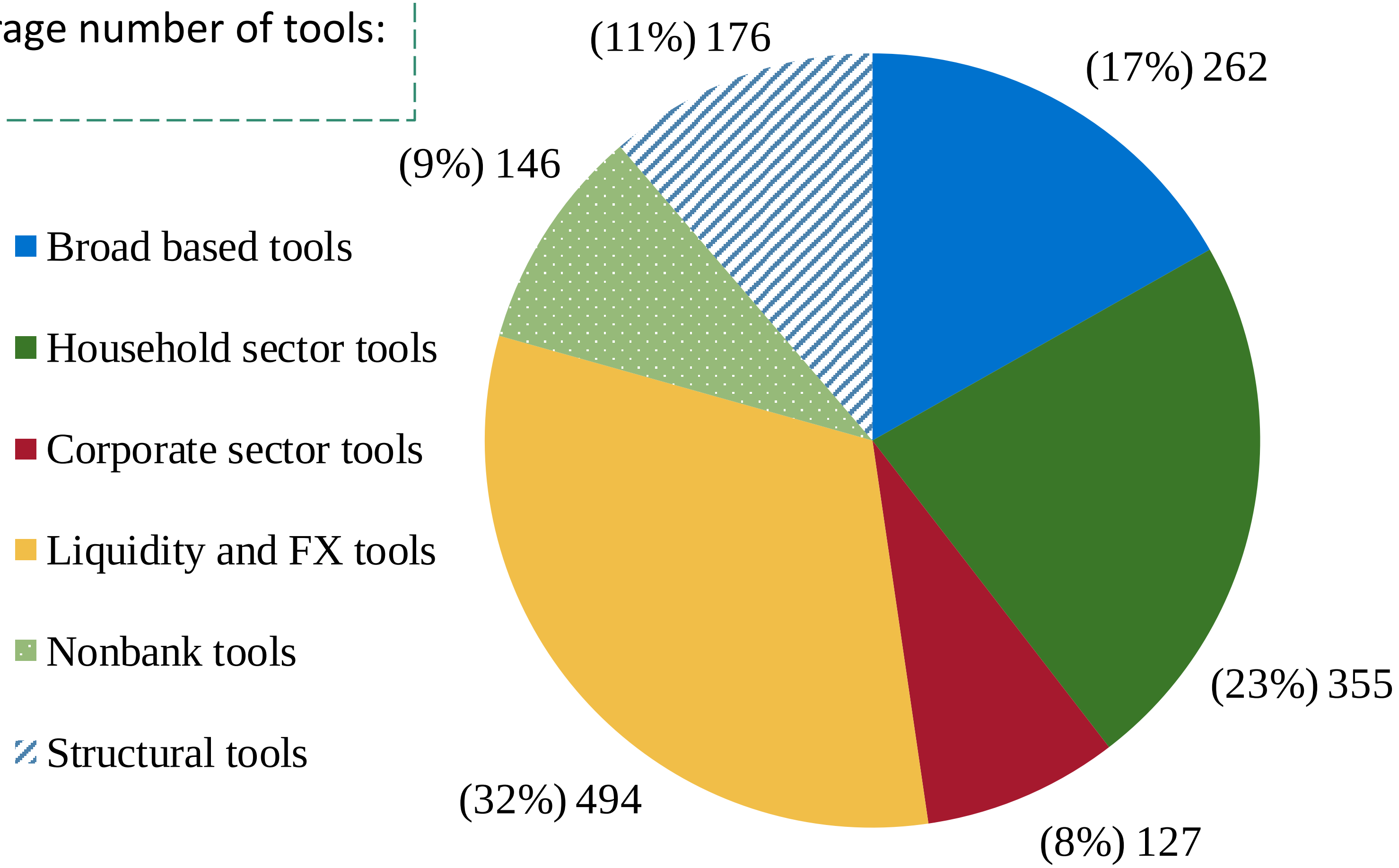
2. **New IMF research on the effectiveness of macroprudential policy**
   - ➢ Based on a new integrated macroprudential database

3. **IMF's Integrated Policy Framework (IPF)**
   - ➢ Develop through case studies, cross-country empirical work

# Macroprudential measures around the world

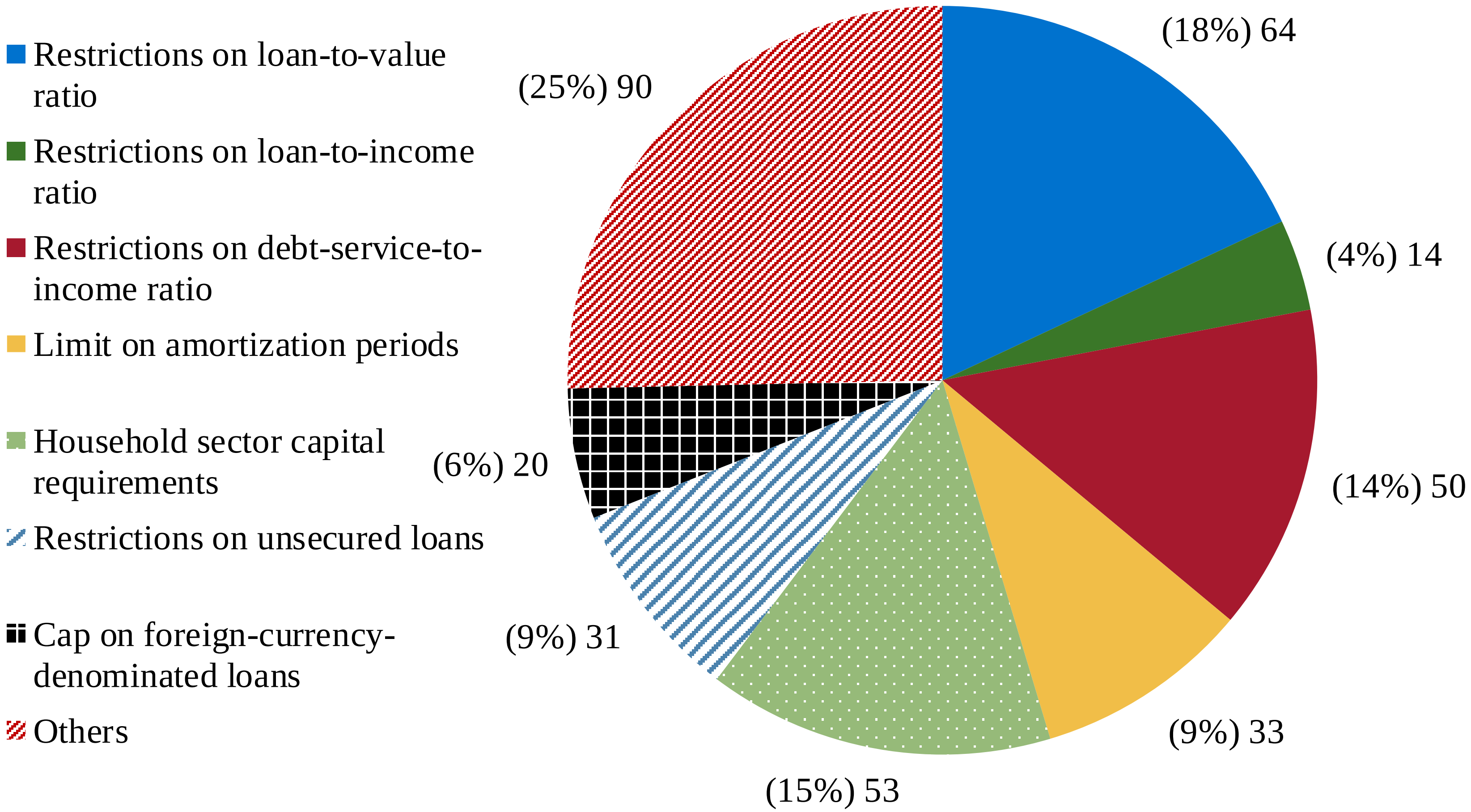
# Countries are using a whole range of tools….

Total number of tools: **1,560**
Average number of tools: **10.2**




Source: IMF Macroprudential Policy Survey Database. Note: Numbers denote frequency of measures reported; percentages denote the share among total measures reported.

# … often using a variety of tools for the household sector




Source: IMF Macroprudential Policy Survey Database.
Note: Numbers denote frequency of measures reported; percentages denote the share among total measures reported.

# Use of CCyB: still room for further action

- 73 jurisdictions indicated the existence of a CCyB framework, but only a few have set a positive buffer rate

| Jurisdiction | Current buffer | Effective date | Pending buffer | Effective date |
|---|---|---|---|---|
| Hong Kong SAR | 2.50% | January 2019 | | |
| Sweden | 2.50% | September 2019 | | |
| Norway | 2.00% | December 2017 | 2.50% | December 2019 |
| Iceland | 1.75% | May 2019 | 2.00% | February 2020 |
| Czech Republic | 1.50% | July 2019 | 1.75%<br>2.00% | January 2020<br>July 2020 |
| Slovakia | 1.50% | August 2019 | 2.00% | August 2020 |
| Denmark | 1.00% | September 2019 | 1.50% | June 2020 |
| United Kingdom | 1.00% | November 2018 | | |
| Ireland | 1.00% | July 2019 | | |
| Lithuania | 1.00% | June 2019 | | |
| France | 0.25% | June 2019 | 0.50% | April 2020 |
| Bulgaria | 0% | | 0.50%<br>1.00% | October 2019<br>April 2020 |
| Belgium | 0% | | 0.50% | July 2020 |
| Germany | 0% | | 0.25% | July 2020 |
| Luxembourg | 0% | | 0.25% | July 2020 |

Sources: ESRB, BIS, IMF Macroprudential Policy Survey.

# New IMF research on the effectiveness of macroprudential policy

# New IMF research on the effectiveness of macroprudential policy

- **Macroprudential policy matter in small open economies …**
  - Erlend Nier, Tjoervi Olafsson, Yuan Gao (Monica) Rollinson (forthcoming)
  - **Exchange rate movements can have strong effects on domestic credit. Macroprudential policies can mitigate those effects—in particular, borrower-based tools.**

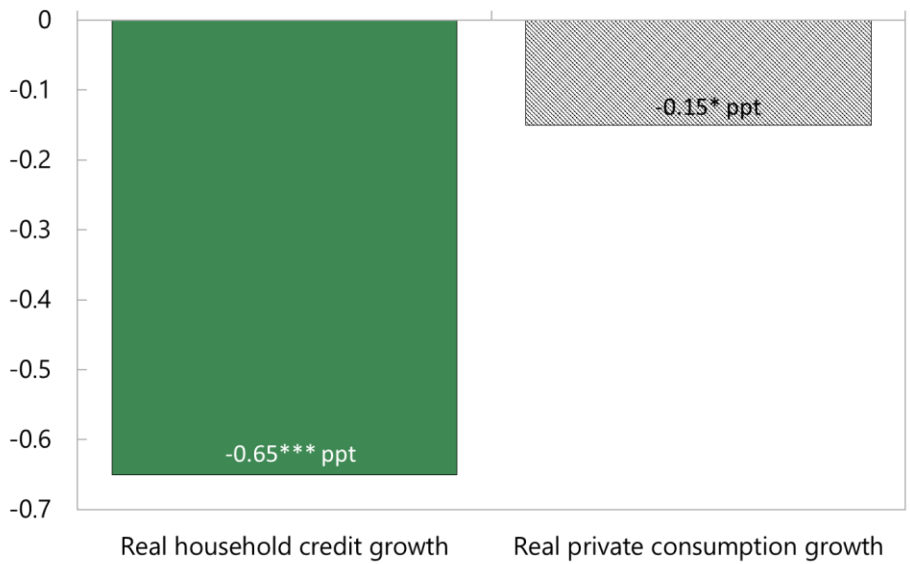
- **…and can limit growth-at-risk**
  - Gaston Gelos, Luis Brandao Marques, Machiko Narita, Erlend Nier (forthcoming)
  - **Easing financial conditions can put GDP at risk. Macroprudential policy can mitigate those risks; monetary policy is less useful.**

- **Digging deeper: quantitative effects of macroprudential policy**
  - Zohair Alam, Adrian Alter, Jesse Eiseman, Gaston Gelos, Heedon Kang, Machiko Narita, Erlend Nier and Naixi Wang
  - **Presents a new database and digs deeper into the quantitative effects of macroprudential policies—in particular, borrower-based tools**

# Digging deeper: quantitative effects of LTV caps

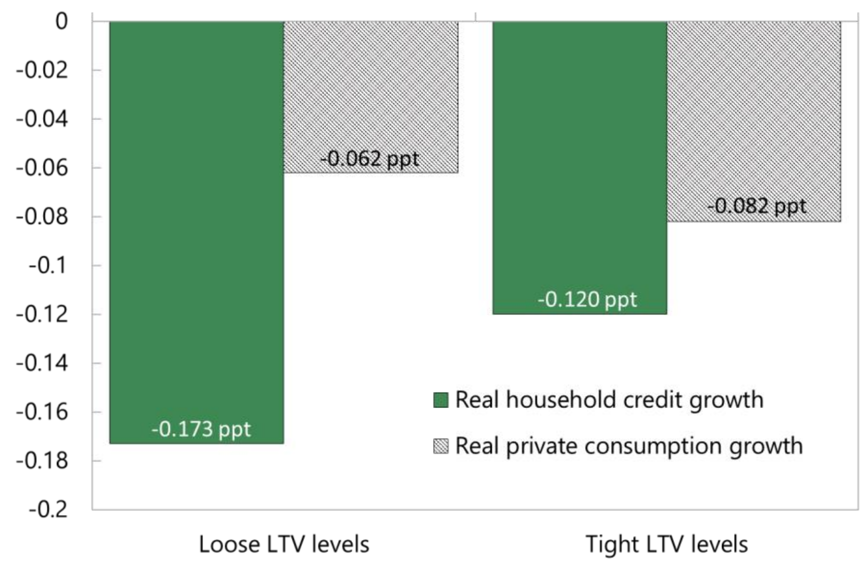
**Effects of a LTV-tightening[1]**

(Cumulative effects of a one percentage point tightening after four quarters)




**Do initial LTV limits matter?[2]**

(Cumulative effects of a 1-ppt LTV tightening conditioning on the inital LTV level)




- LTV tightening is **effective** in reducing household credit growth and quite **efficient** as the side-effects on consumption growth are limited …
- however, **initial LTV levels matter**—both for effectiveness and efficiency, which are undermined when initial LTV limits are tight …
- … hence a **portfolio approach** is preferred, where LTV limits are complemented with other measures.

1. Effects of a one-ppt LTV tightening where the overall tightening is less than 10 ppt—obtained by the augmented inverse propensity-score weighted estimation. 2. Estimated by the fixed effects estimation with the timing assumption. "Loose LTV levels" refers to greater or equal to 100 percent and 90 percent in AEs and EMs, respectively. Source: Alam et al. (2019).

# 1. IMF's Integrated Policy Framework (IPF)

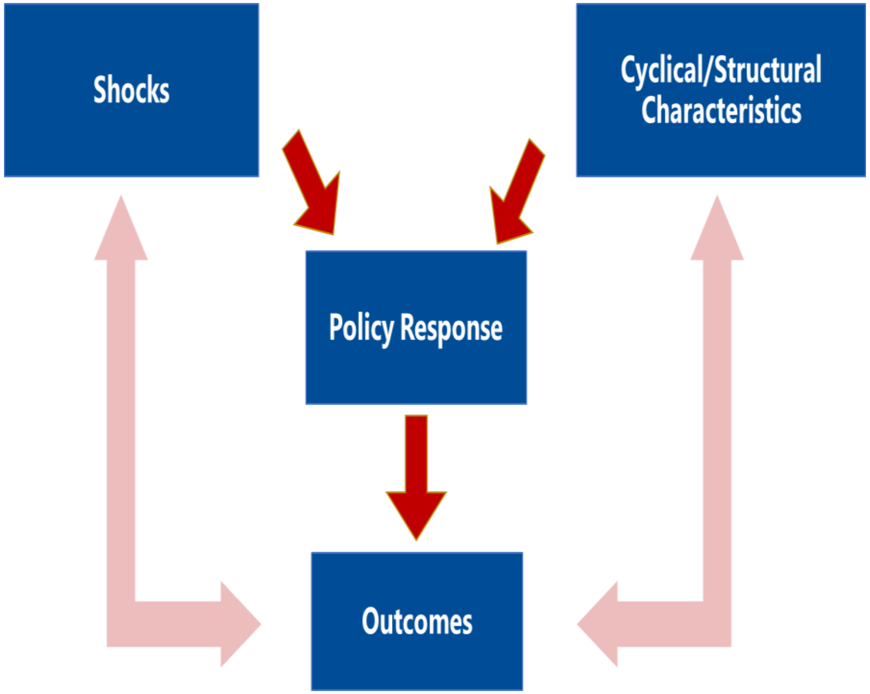
# The Fund's IPF approach

- **systematic assessment of effective policy mix to meet growth and stability objectives:**

➢ joint consideration of monetary, fx intervention, macroprudential, and CFM policies

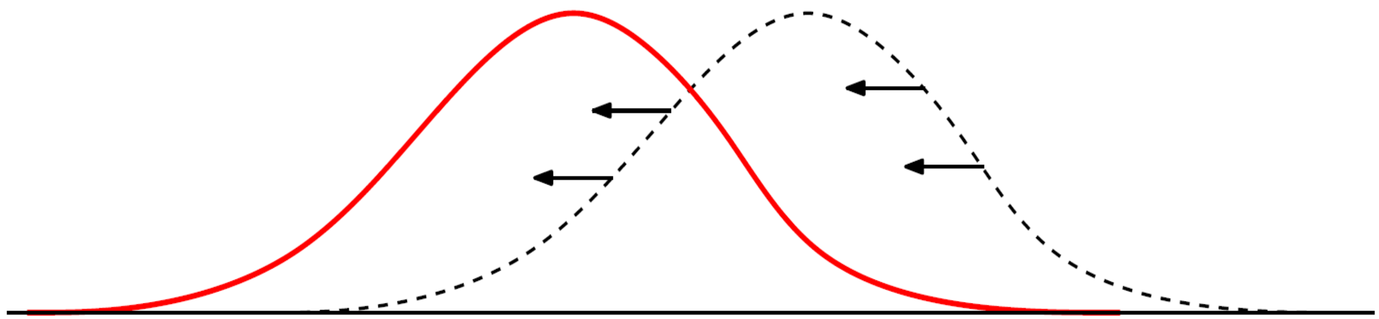
➢ take into account rising spillovers and deepening macro-financial and external linkages

➢ recognize different country characteristics and policy frameworks

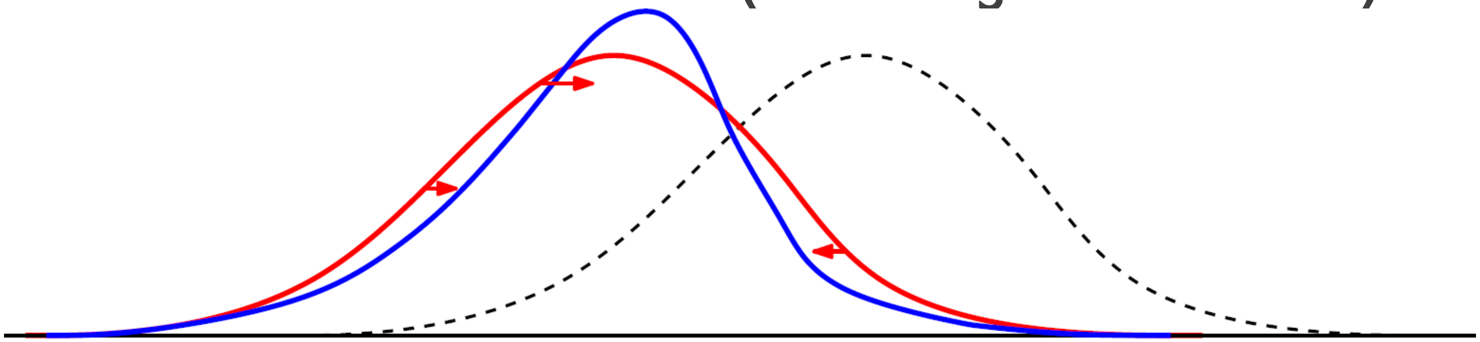


# CaR—Capital flows at risk

- **How do domestic policies affects the impact on capital flows from shocks to global risk appetite?**
  - Consider a sudden increase in the US corporate BBB spread, which shifts the distribution of future domestic portfolio inflows to the left:



- **Policies/frameworks can shift the distribution conditional on the global shock such that tail risks are reduced (and average flows increase):**

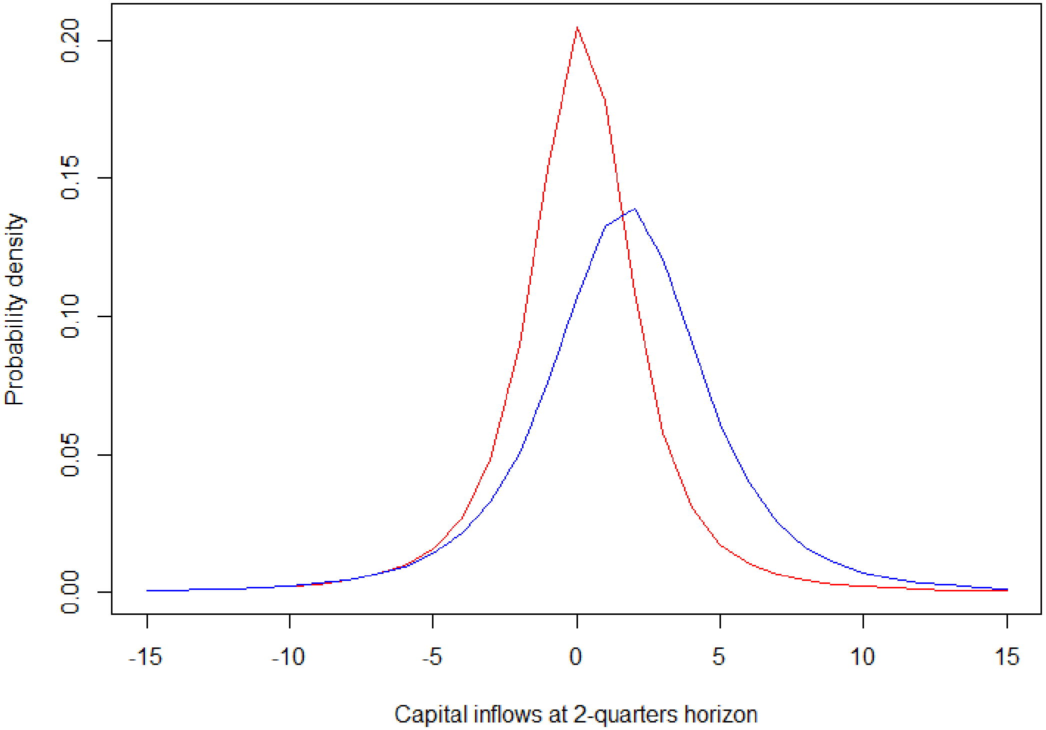


Source: G. Gelos, L. Gornicka, R. Koepke, Sahay, R., and S. Sgherri, 2019, CaR—Capital Flows at Risk, IMF Working Paper, forthcoming.

# How does the level of financial development affect these outcomes?

- **Financial market development mitigates the impact of a global shock on capital flows**

**Financial market development and shock to US corporate yield: short term**




- Distribution of near-term portfolio inflows after a global shock when: financial markets are shallow vs financial markets are well developed

Source: G. Gelos, L. Gornicka, R. Koepke, Sahay, R., and S. Sgherri, 2019, CaR—Capital Flows at Risk, IMF Working Paper, forthcoming.

# Concluding remarks: tentative lessons

- **Macroprudential policy is effective—in particular borrower-based tools…**
- **… but leakages and costs argue for a *portfolio approach***
  - E.g., for housing: Singapore, Hong Kong SAR, Ireland, Czech Republic, Hungary, Norway, Slovak Republic
- **Macroprudential policy can increase the resilience of the financial system and GDP growth to external shocks**
  - Even when such measures are not designed to limit capital flows
- **Macroprudential policy is most useful in the context of overall strong policy frameworks and well-developed financial markets**
  - That reduce the likelihood of negative shocks

# Thank you

# References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  - Survey database
  - Objectives, Design and Country Responses
- The IMF's historical iMaPP database
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