



BANK FOR INTERNATIONAL SETTLEMENTS

# The impact of macroprudential policies: An empirical analysis using credit registry data

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*The views expressed in this presentation are those of the authors and not necessarily those of the  
Bank for International Settlements*



# Motivation of the project

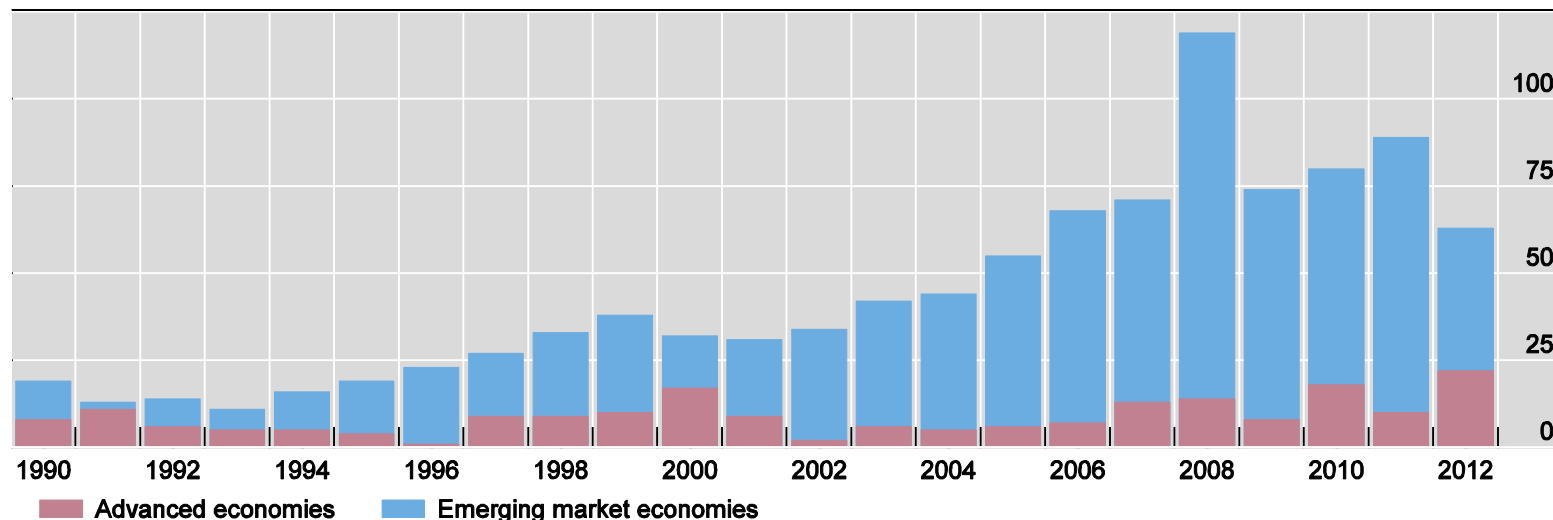
- Development of macroprudential policy tools has been one of the most significant changes in past years
- Implementation raise challenges:
  - What is the impact of macroprudential policies (eg credit supply, bank risk taking) ?
  - What is the interaction of MPPs with monetary policy and the business cycle?
- Effectiveness should be analysed with respect to the specific goal to achieve:
  - increase the resilience of the financial system or
  - to tame financial booms and busts



# Use of macroprudential measures over time<sup>1</sup>

Number of macroprudential policy actions

Graph 1



<sup>1</sup> The sample covers 1,034 macroprudential policy actions adopted in 64 countries (29 advanced and 35 emerging market economies). The database has been constructed using information in Kuttner, K N and I Shim (2013): “Can non-interest rate policies stabilise housing markets? Evidence from a panel of 57 economies”, BIS Working Paper Series, No 433, November; and Lim, C H, I Krznar, F Lipinsky, A Otani, and X Wu (2013): The Macroprudential Framework: Policy Responsiveness and Institutional Arrangements, IMF Working Paper No. 166.

Sources: IMF; BIS. Altunbas et al (2016).



## Motivation of the project (2)

- Most of the studies use aggregate data or bank-level data. A very limited use has been done of credit registry data (exceptions Jimenez et al, 2012; Dassatti and Peydro, 2014)
- Joint project under the auspices of the Consultative Council for the Americas (CCA):
  - Credit register data for five countries Latin America countries: AR, BR, CO, MX, PE (good laboratory)
  - Not possible to pool the data (data highly confidential)
  - Research protocol (same modelling strategy and similar data definition)
  - Focus on domestic credit. Project wants to complement the analysis of the IBRN (cross-border spillover of macroprudential tools)
  - Meta analysis (different macroprudential tools)



# Output

- 10 papers
  - 5 using credit register data (AR, BR, CO, MX, PE ) inspired by a common protocol but enriched with tailored analysis
  - 1 summary paper using meta-analysis techniques
  - 4 country teams analyzed specific macroprudential episodes using other sources:
    - US project aims at evaluating recent changes introduced by Comprehensive Capital Analysis and Review and Dodd Frank Act Stress tests
    - The paper for Canada focuses on the evaluation of policies in the housing market related to changes in LTV ratios
    - Chilean paper estimates the effect on LTV in the housing loan market due to an unexpected statement done by the Central Bank concerning to the housing price dynamics
    - Brazilian paper analyses the introduction of LTV limits on borrower and contract characteristics



# Macroprudential policies analysed: Sum up

Type of instrument	Measures	Tightening episodes	Loosening episodes
	(1)	(2)	(3)
<b>a. Enhancing Resilience</b>			
Capital requirement/Risk weights (RW)	1	1	0
Provisioning requirement (Prov)	5	5	0
Limits on dividend distribution	2	2	0
Liquidity ratios	0	0	0
<b>b. Dampening the cycle</b>			
Changes in reserve requirement (RR)	3	3	3
Changes in limits on net open position (NOP)	1	1	0
Changes in LTV, DTI limits	3	3	2
Limits on credit growth or lending to specific sectors	0	0	0
Requirement on external borrowing operations	2	1	1
<b>c. Dispelling the gestation of cycle</b>			
Levy/tax on specific assets/liabilities	0	0	0
Introduction of limits on Net open position (NOP)	1	1	0
Official warnings on specific vulnerabilities	2	2	0
Adjustments to lending standards	2	2	0
<b>Total</b>	<b>22</b>	<b>21</b>	<b>6</b>

Note: The distinction is based on Claessens et al (2013)

