

Financial Stability in Retrospect and Prospect David Aikman

Banco de Portugal Financial Stability Conference 8 October 2019

Plan

- What have we done?
- What have we learned?
- What is still to do or learn?



Story So Far

- A lot has been done <u>practically</u>
- A huge shift has taken place <u>ideologically</u>
 - ➤ Liquidity, as well as capital
 - > Systemic, as well as idiosyncratic
 - ➤ Non-bank, as well as banks' resilience



Pre-Crisis International Regulatory Architecture

	Banks	Non-Bank Financial Firms
Capital	✓	
Liquidity	?	
Systemic	X	
Resolution	X	



Post-Crisis International Regulatory Architecture

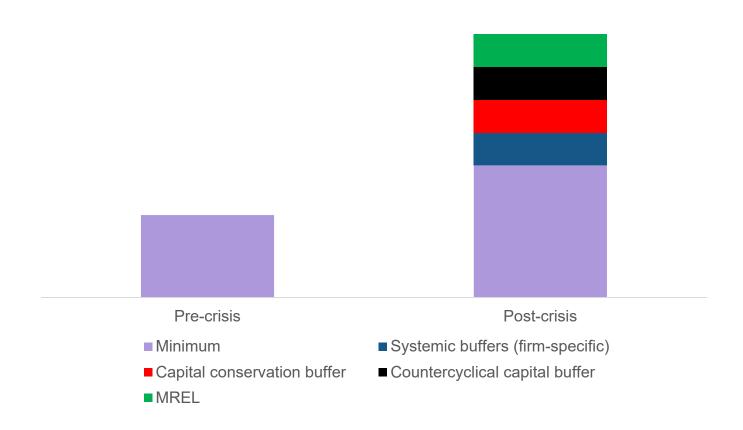
	Banks	Non-Bank Financial Firms
Capital	✓	✓
Liquidity	✓	✓
Systemic	✓	?
Resolution	✓	✓



Micropru reform



Capital Stack Schematic





Leverage

Implementation of Leverage Ratio

LR status	% of FSB jurisdictions	% of market size
Final rule in force	~65%	~65%
Final rule or draft regulation published	~35%	~35%
Draft regulation not published	<1%	<1%



Liquidity

Implementation of NSFR

NSFR status	% of FSB jurisdictions	% of market size
Final rule in force	~45%	~35%
Final rule or draft regulation published	~55%	~65%
Draft regulation not published	<1%	<1%



Resolution

Implementation of Bank Resolution

Resolution powers	% of FSB jurisdictions	% of market size
Fully implemented / in place	~40%	~50%
Partially implemented / in place	~50%	~45%
Not implemented	~10%	~5%



What impact has this had?



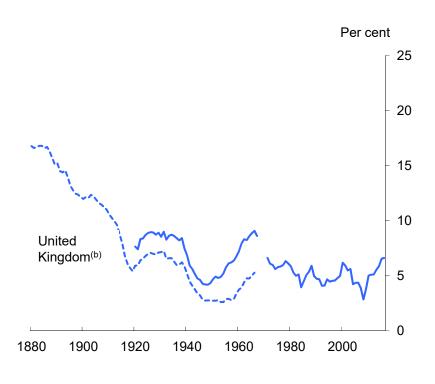
Capital

Capital/Leverage Ratios

14% Ratio of equity to total exposure % % % % % % % Basel III Risk-Weighted Capital Requirement w/G-SIB Buffer Basel III Leverage Ratio Requirement 0% 2010 2013 2015 2016 2017 2009 2011 2012 2014 2018 -Large banks: risk-weighted -Large banks: equal-weighted

Source: Bolton et al (2019) using Basel Committee on Banking Supervision (2010a and 2019).

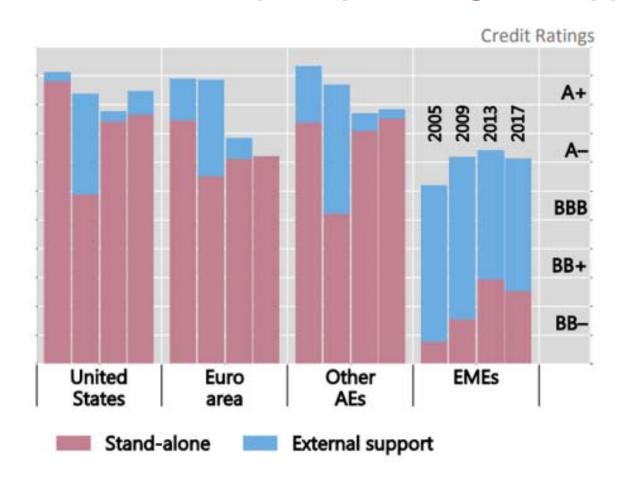
Leverage Ratio



Source: Bank of England.



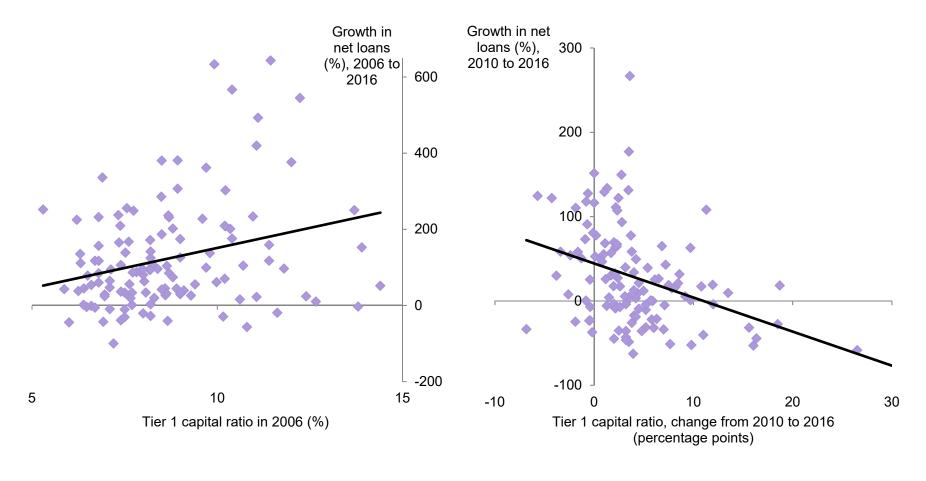
Reduced market perception of gov't support



Source: BIS.



Capital and lending

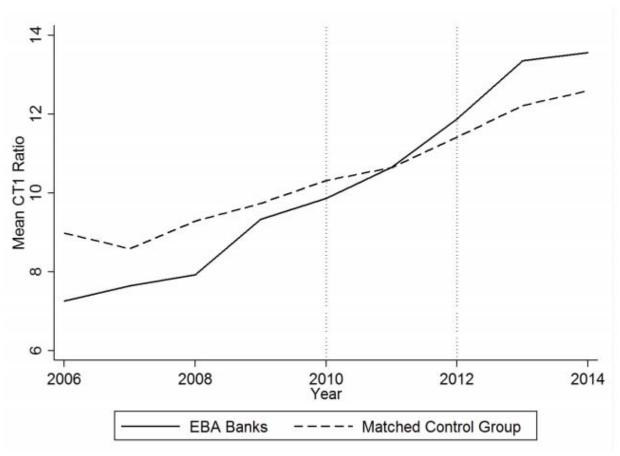


Source: Haldane et al (2018).



Capital and Lending

Capital ratio



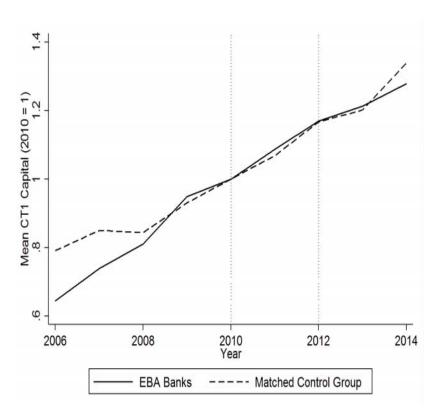
Source: Gropp, Mosk, Ongena and Wix (2018).

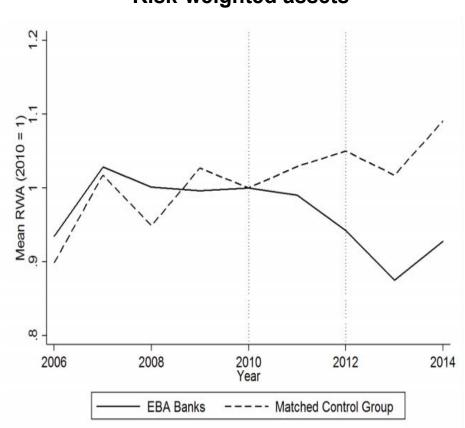


Capital and Lending



Risk-weighted assets



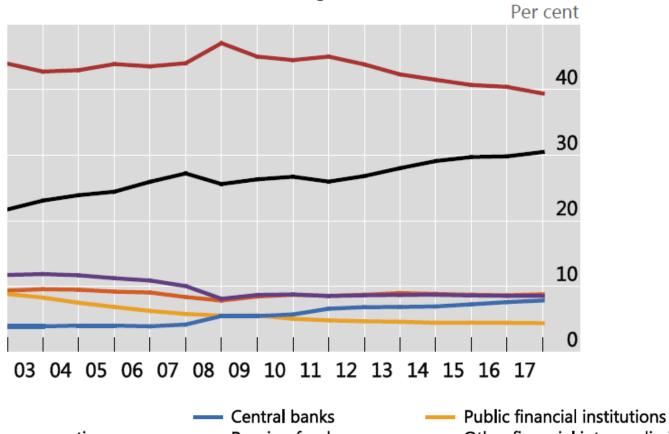


Source: Gropp, Mosk, Ongena and Wix (2018).



Non-Banks

Institutions' share of global financial assets



Banks — Insurance corporations Pension funds

Other financial intermediaries



Macropru



Macro-Prudential Tools

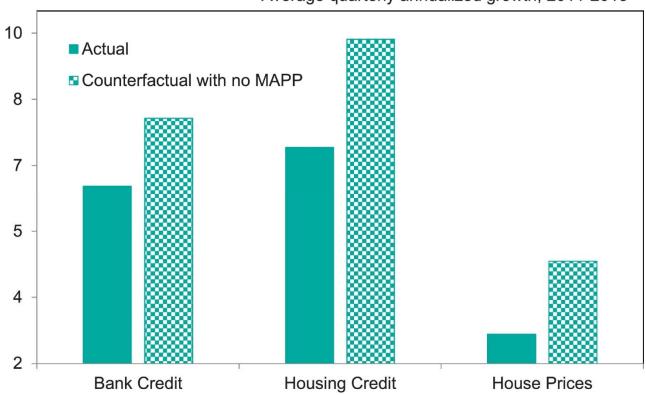
Country	Current CCyB	Effective since	Pending CCyB
Belgium	-	-	0.5% (Jul 2020)
Bulgaria	0.5%	Oct 2019	1% (Apr 2020)
Czech Republic	1.5%	Jul 2019	1.5% (Jan 2020) 1.75% (Jul 2020)
Denmark	1%	Sep 2019	1.5% (Jun 2020)
France	0.25%	Jul 2019	0.5% (Apr 2020)
Germany	-	-	0.25% (Jul 2020)
Hong Kong	2.5%	Jan 2019	-
Iceland	1.75%	May 2019	2% (Feb 2020)
Ireland	1%	Jul 2019	-
Lithuania	1%	Jun 2019	-
Luxembourg	-	-	0.25% (Jan 2020)
Norway	2%	Dec 2017	2.5% (Dec 2019)
Slovakia	1.5%	Aug 2019	2% (Aug 2020)
Sweden	2.5%	Sep 2019	-
UK	1%	Nov 2018	-



Effectiveness of Counter-Cyclical Capital

Counterfactuals with no macroprudential measures used

Average quarterly annualized growth, 2011-2013



Source: Akinci and Olmstead-Rumsey (2018).



Effectiveness of Macro-Prudential Tools

Reduction in GDP-at-Risk from raising CCyB

Country	CCyB at 2.5% by mid-2007	CCyB at 5% by mid-2007
Australia	25%	50%
Canada	36%	72%
France	21%	41%
Ireland	10%	19%
Italy	65%	131%
UK	15%	29%
US	21%	42%

Source: Aikman et al (2019).



What is still to do/learn?



Open issues

Calibration: Is TLAC as credible as equity?

Complexity / Multi-polarity: Is the regime too complex?

Stress testing: Beyond banking, to marked based finance?

Macro-pru: Defining/refining the reaction function?

Political economy: Where is the boundary of macropru?

Meta-questions: Is finance too big?

Will fintech be disruptive?

Open issues

Calibration: Is TLAC as credible as equity?

Complexity / Multi-polarity: Is the regime too complex?

Stress testing: Beyond banking, to marked based finance?

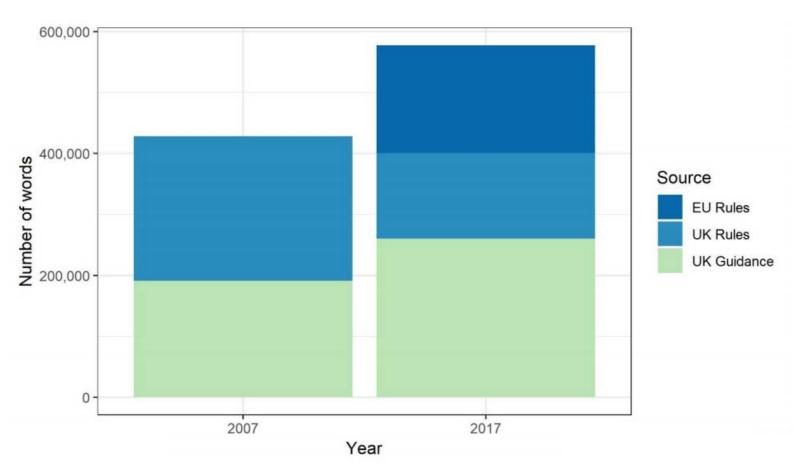
Macro-pru: Defining/refining the reaction function?

Political economy: Where is the boundary of macropru?

Meta-questions: Is finance too big?

Will fintech be disruptive?

Regulatory Complexity



Source: Bank of England (forthcoming).



Open issues

Calibration: Is TLAC as credible as equity?

Complexity / Multi-polarity: Is the regime too complex?

• Stress testing: Beyond banking, to marked based finance?

Macro-pru: Defining/refining the reaction function?

Political economy: Where is the boundary of macropru?

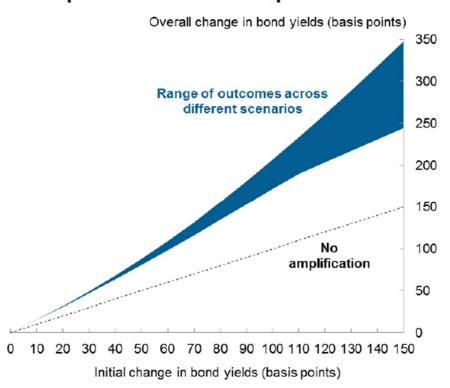
• Meta-questions: Is finance too big?

Will fintech be disruptive?



How material could feedbacks in the wider financial system be?

Amplification of initial price shocks(1)



For UK investment-grade corporate bonds.
Source: Bank of England.



Open issues

Calibration: Is TLAC as credible as equity?

Complexity / Multi-polarity: Is the regime too complex?

Stress testing: Beyond banking, to marked based finance?

Macro-pru: Defining/refining the reaction function?

Political economy: Where is the boundary of macropru?

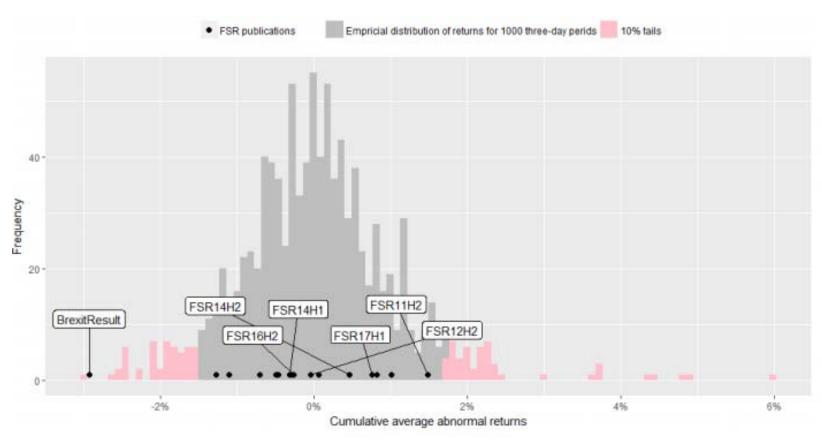
Meta-questions: Is finance too big?

Will fintech be disruptive?



Financial Stability Communication

Market impact of Financial Stability Report

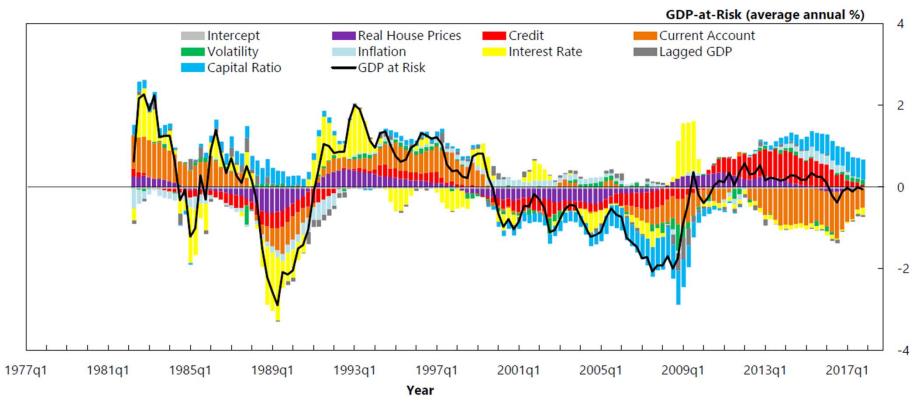


Source: Harris et al (2019).



FIGURE 5: Decomposition of GDP-at-Risk at 3 year horizon

(A) UK - 3 years ahead



Source: Aikman et al. (2019)



Open issues

Calibration: Is TLAC as credible as equity?

Complexity / Multi-polarity: Is the regime too complex?

Stress testing: Beyond banking, to marked based finance?

Macro-pru: Defining/refining the reaction function?

Political economy: Where is the boundary of macropru?

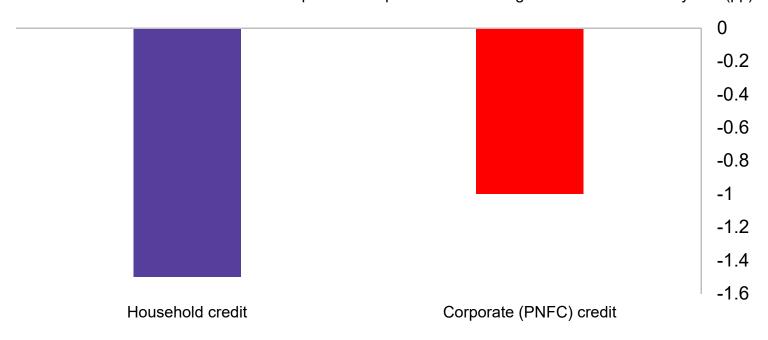
• Meta-questions: Is finance too big?

Will fintech be disruptive?



Aggregate Demand Externalities

Cumulative impact on 5th percentile of GDP growth over **next** three years (pp)



10pp increase in credit to GDP ratio over **past** three years

Source: Aikman et al (2019).

• Increasing household or corporate debt shift the *distribution* of <u>future</u> GDP growth to the left, making any subsequent downturns more severe



Open issues

Calibration: Is TLAC as credible as equity?

Complexity / Multi-polarity: Is the regime too complex?

Stress testing: Beyond banking, to marked based finance?

Macro-pru: Defining/refining the reaction function?

Political economy: Where is the boundary of macropru?

Meta-questions:
Is finance too big?

Will fintech be disruptive?



Conclusion

- A lot of progress, practically and conceptually
- Much more energetic academic debate and illuminating research
- Unfinished business, practically and academically

