

# A stocktake of progress in developing the macroprudential policy framework

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## My topic today

Since the 2007-2009 financial crisis, a large number of countries have set up macroprudential policy frameworks:

- Cerutti et al (2016) document macroprudential tool use in 64 countries
- Edge and Liang (2021) find that 47 countries have set up Financial Stability Committees (FSC) to coordinate or discharge macroprudential policy
- One prominent FSC, the UK's Financial Policy Committee, is now 10 years old

**This is a good time to take stock of how the regime is functioning – which aspects are working well, and what needs a rethink?**

## Assessment criteria

I'm going to assess the progress those developing macroprudential policy frameworks have made in four areas:

- How much progress have we made in articulating the **objectives** of macroprudential policy?
- How well have macroprudential bodies performed in their **risk assessment monitoring** task?
- How actively and systematically are **macroprudential tools being used**?
- What **impact** has macroprudential policy had?

Q1. How much progress have we made in articulating the **objectives** of macroprudential policy?

## Macroprudential policy objectives

- A decade ago, conceptions of the aims of macroprudential policy were vague and diverse —eg “Protecting banks from the cycle’ versus ‘Protecting the real economy from the banks”, Bank of England (2009)
- Now, there is widespread agreement that the aim is to protect and enhance the resilience of the whole financial system, to safeguard stability
- But these remain fuzzy and imprecise concepts, and they grant almost complete discretion to macroprudential authorities in how they interpret these mandates

## Instrument versus goal independence

- We've reversed the conventional wisdom that independent central banks should operate with **instrument but not goal independence** (DeBelle and Fischer (1994))
- Macroprudential authorities have full or almost full independence over how to translate the high-level objectives they are given into operational goals
- But they have only partial instrument independence, and in some cases none at all

## Macroprudential policy objectives

- Constraints arise only in the few cases where macroprudential authorities have been transparent in their chosen targets, thus inviting scrutiny and (implicit) govt endorsement
- Some good examples of this:
  - Publication of stress test scenarios (albeit these provide only weak accountability given the large number of degrees of freedom available to the regulator)
  - Published judgements on optimal capital requirements, eg UK FPC's view that 13.5% Tier 1 capital is the right steady state level for UK banks
- But there has been little/no progress defining operational goals for countercyclical macropru policy

## Problems created by this degree of ambiguity:

- **Accountability gap:** the macropru regulator is judged against targets it sets itself
- **Expanding remits:** climate change, competitiveness, competition, “productive finance”,...
- **“Framework hysteresis” (Barwell 2021):** scope of policy defined by the actions/choices of predecessors, eg should borrower resilience be part of the goal?
- Lowers the bar for a govt intent on **weakening regulatory standards**, and creates the possibility of future policymakers choosing policies in own interests (the “revolving door problem”)

## Suggestions

- **Voting and individual accountability** on some policy decisions (eg CCyB)
- Publish with a lag **transcripts** of policy meeting decision meetings (not deliberation meetings), and the **staff policy documents** supporting these meetings
- Set out ex ante **circumstances where FSCs expect to act** (what a “non-standard” environment looks like, in quantitative terms)
- Research on quantitative metrics such as **GDP-at-risk** or variants

Q2. How well have macroprudential bodies performed in their **risk assessment monitoring** task?

## Risk assessment

Twice-yearly Financial Stability Reports contain FSC's collective judgement on the risk environment

- Use these as a lens through which to assess their judgements retrospectively
- Which risks were emphasised, which weren't

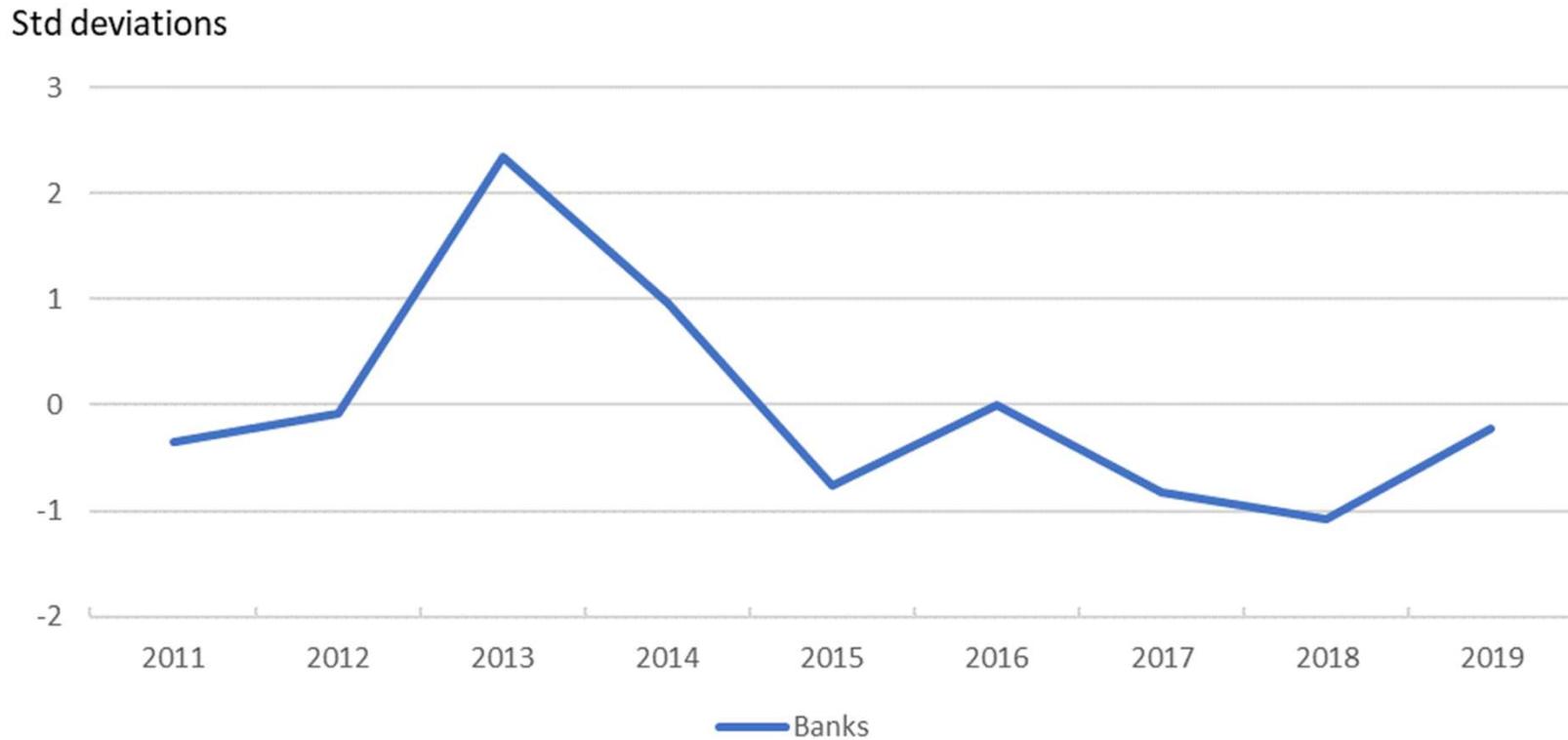
Focus for now on judgements in the FSRs of the BoE, the ECB, and the FSOC – this gives us a time series of 10 years' worth of risk judgements

# Risk assessment

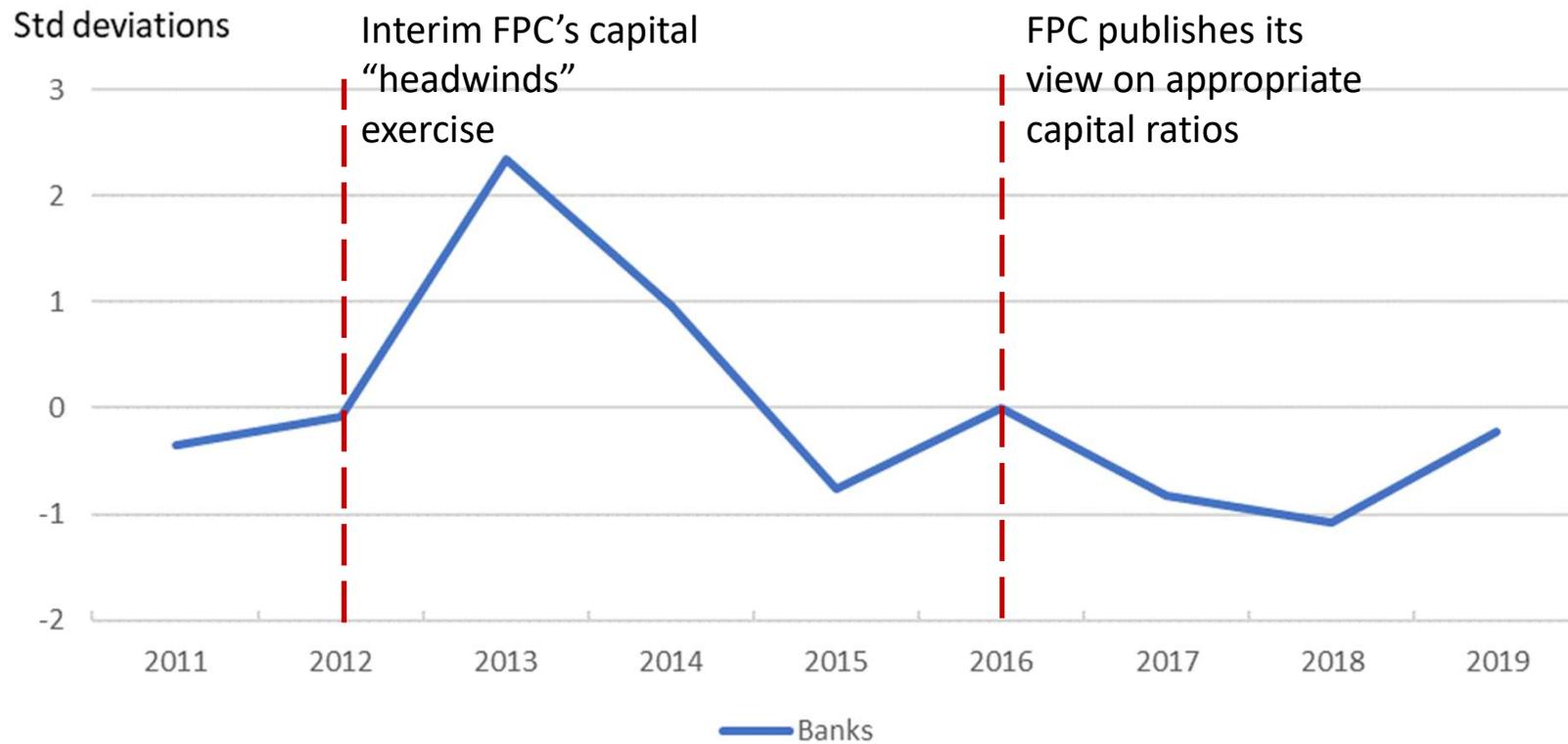
We use a simple count of the number of times specific risk terms appear in the documents

Category	Words searched for
Banks	Capital ratio, capital requirement, risk weight, Basel III, price to book
Non-bank financial institutions	Shadow bank, non-bank, market liquidity, repo market, investment fund, money market fund, hedge fund, margin, central counterparty, basis trade
Residential mortgages	Household debt, house prices, LTI, LTV
Consumer credit	Consumer credit, credit cards, personal loans
Corporate sector resilience	Corporate debt, corporate leverage

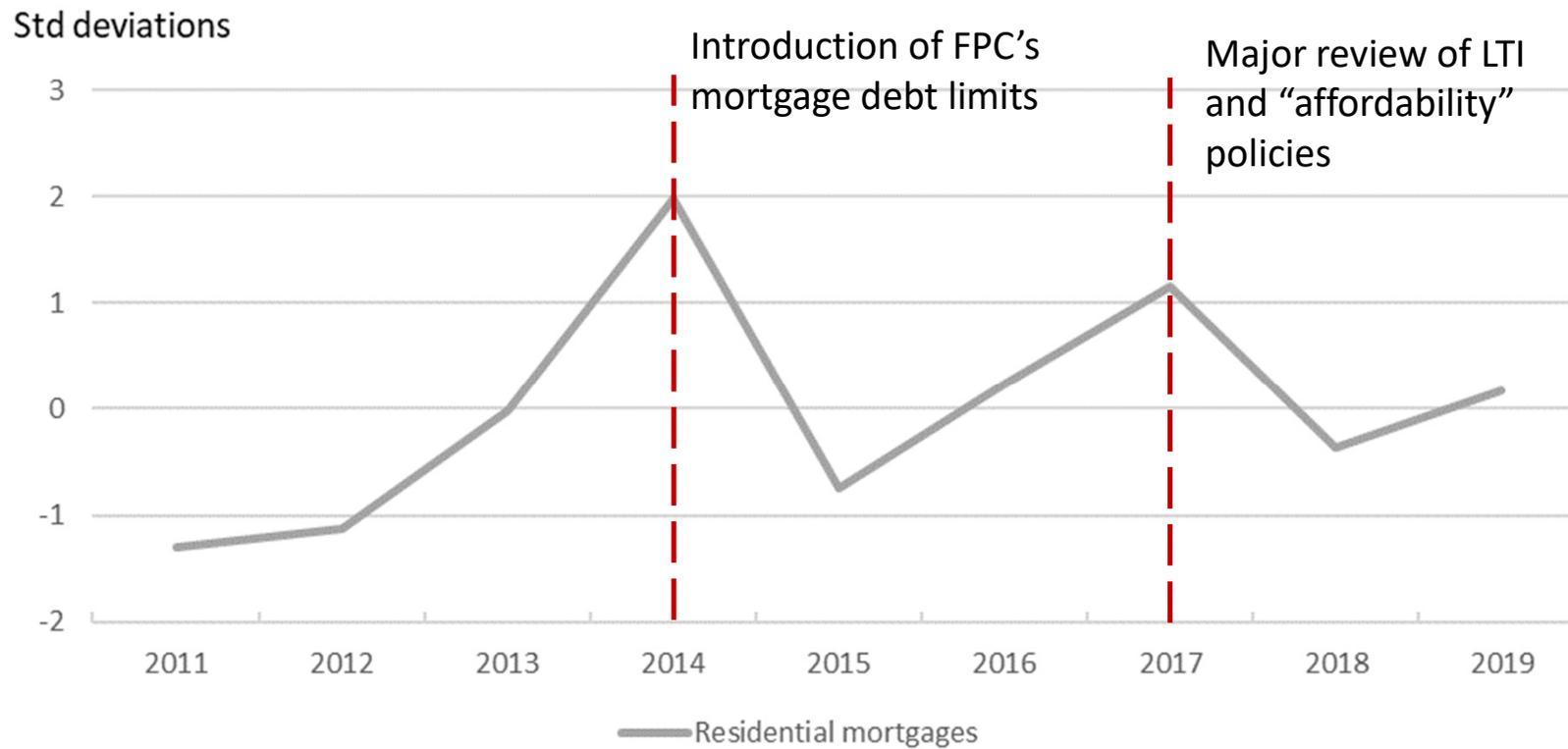
## Standardised word count of bank resilience related terms per year in BoE FSRs



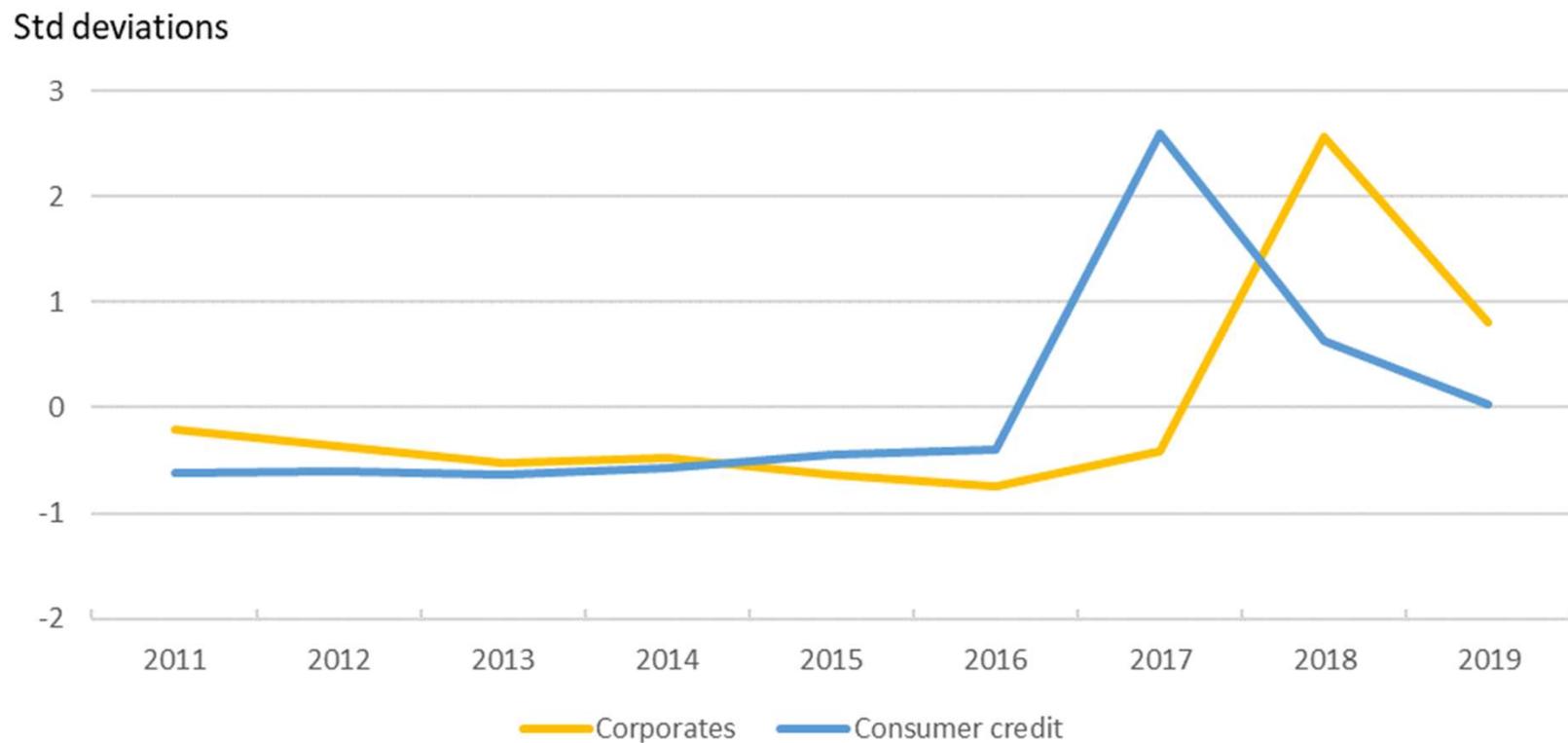
This picks out key events in recent bank capital policy history...



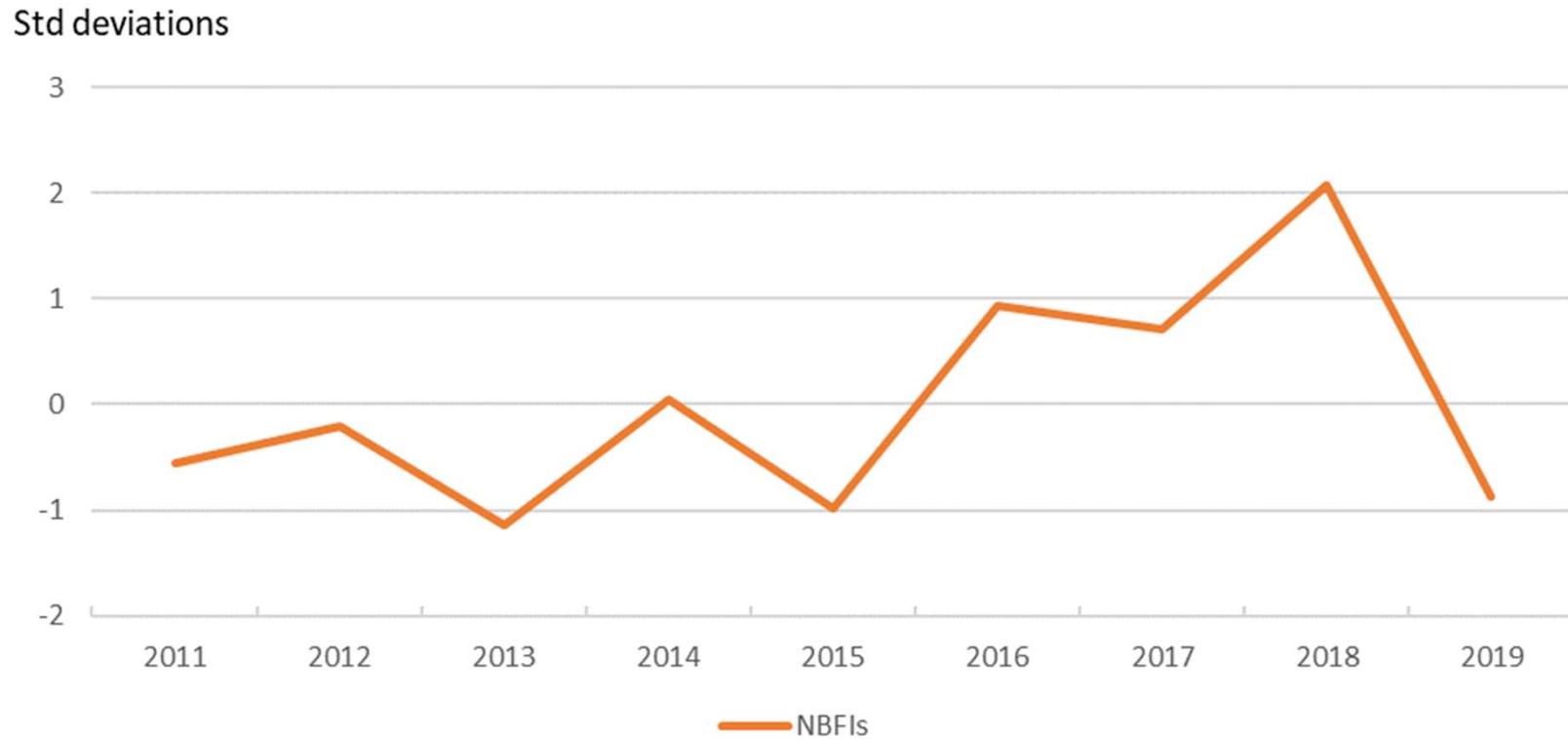
## ...Similarly for residential mortgage policy



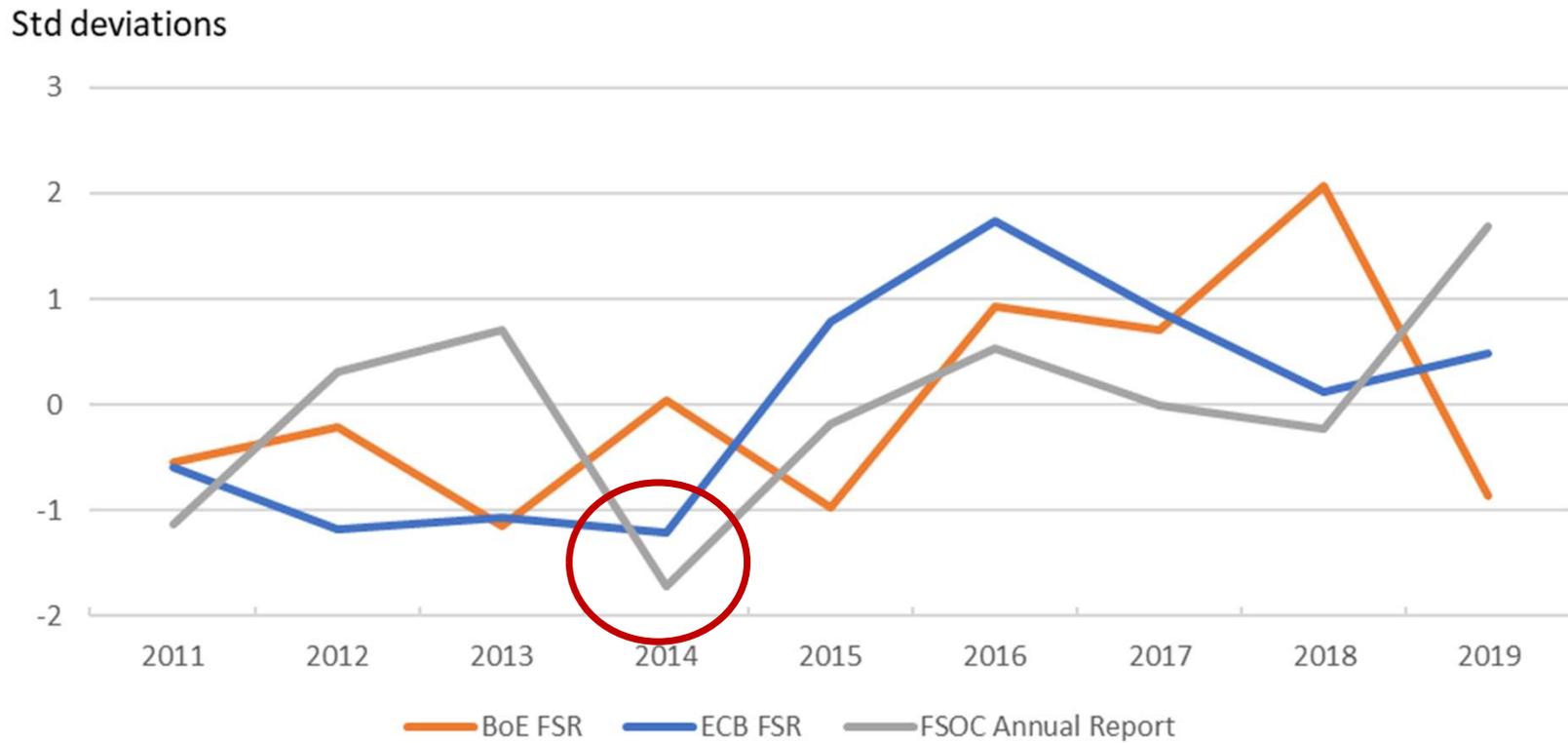
Suggestive evidence that the monitoring of consumer credit and corporate risks was behind the curve...



## BoE FSR devoted increasing attention to vulnerabilities in non-bank financial institutions between 2015-2018



Similar pattern in the FSRs of the ECB and FSOC, with slightly earlier inflection point



## Overall assessment

- Retrospectively, risks related to consumer credit and corporate leverage seem to have been spotted slowly in BoE FSR
- Vulnerabilities in nonbanks which crystallised in March 2020 were identified well in advance – by BoE, and perhaps earlier by US FSOC and ECB

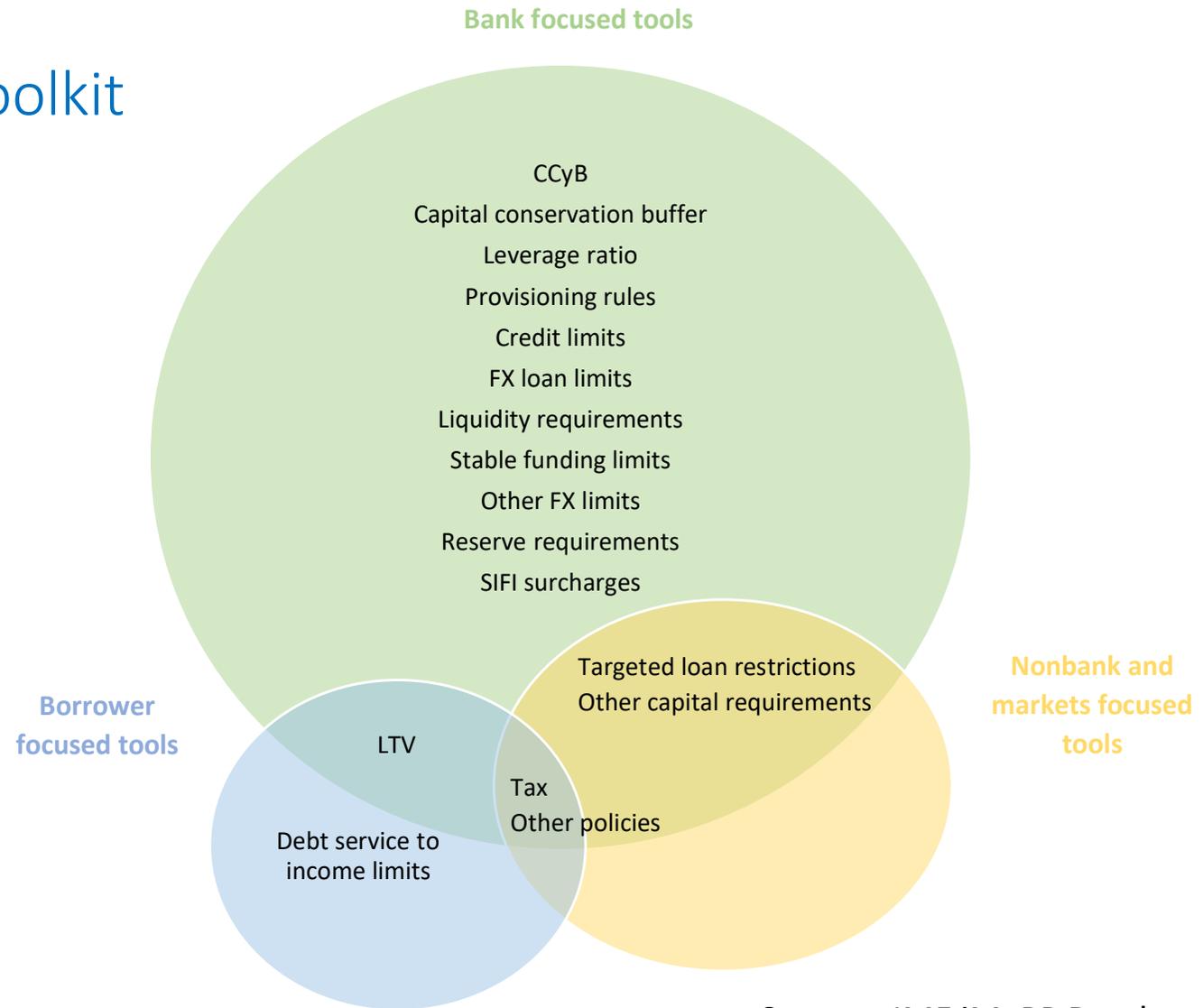
Q3. How actively and systematically are **macroprudential tools being used**?

## Data on macroprudential tool usage

- We use the IMF's Integrated Macroprudential Policy Database (iMaPP) as our starting point (see Alam et al (2019) for details)
- This records policy actions taken on 17 distinct policy tools
  - Based on self-reported actions by countries (upward bias?)
- We make some adjustments:
  - Some classification issues: Canada's domestic stability buffer is akin to CCyB; New Zealand's core funding ratio
  - We exclude some baseline Basel III standards implemented by all countries on autopilot, eg Capital Conservation Buffer
  - We exclude reserve requirements (not relevant for AEs)

# Classifying the toolkit

Very little progress in operationalising tools focused on nonbanks



Source: IMF iMaPP Database

## Summary statistics on macropru tool use

### Advanced Economies, 2009-2018

	Total	Cross-country mean
Number of macroprudential actions	346	10
Of which:		
Tightenings	312	9
Relaxations	34	1

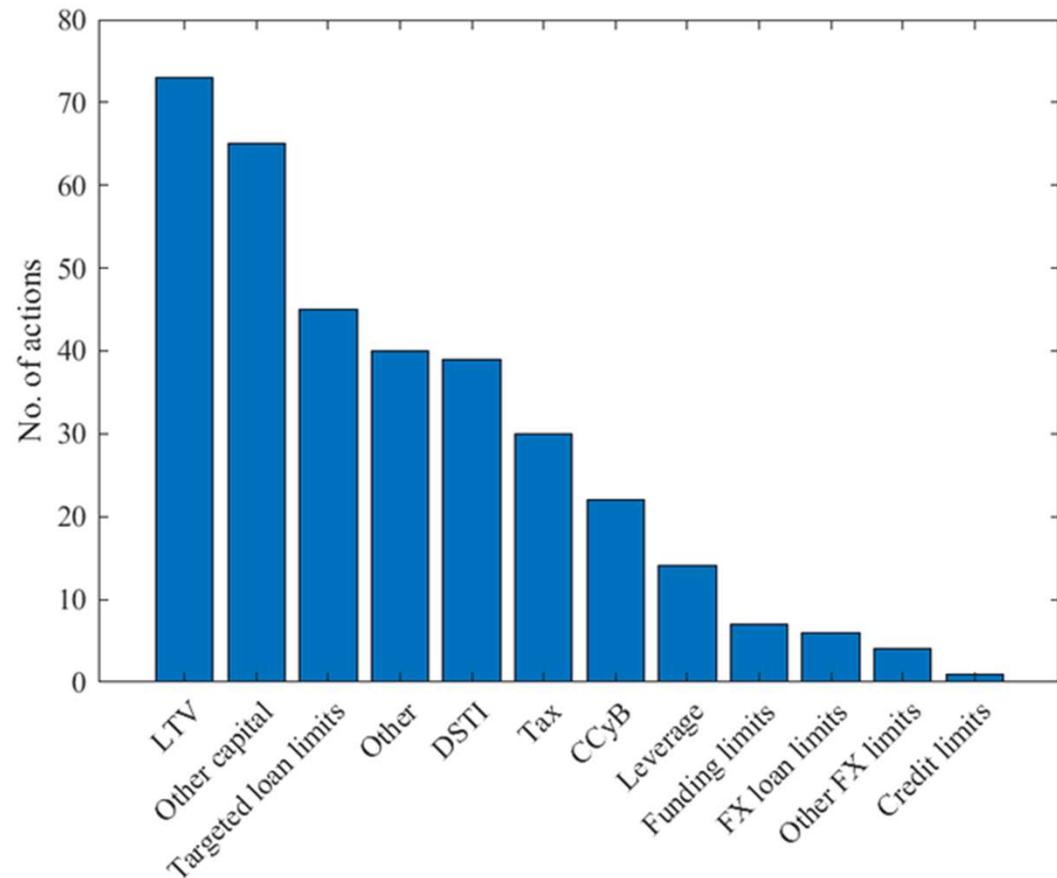
Note: Excludes capital conservation buffer, LCR, SIFI buffer, provisioning, and reserve requirements

As a reference, there were 18 monetary policy ratio actions on average per country over this period (excludes QE)

## Which are the most commonly-used tools?

- LTVs and “other capital requirements” (aka risk weights) most commonly used
- Outright credit ceilings rare
- Very diverse; core tools (capital, mortgage debt) comprise only around 1/3

Frequency of actions by tool, advanced economies 2009-2018

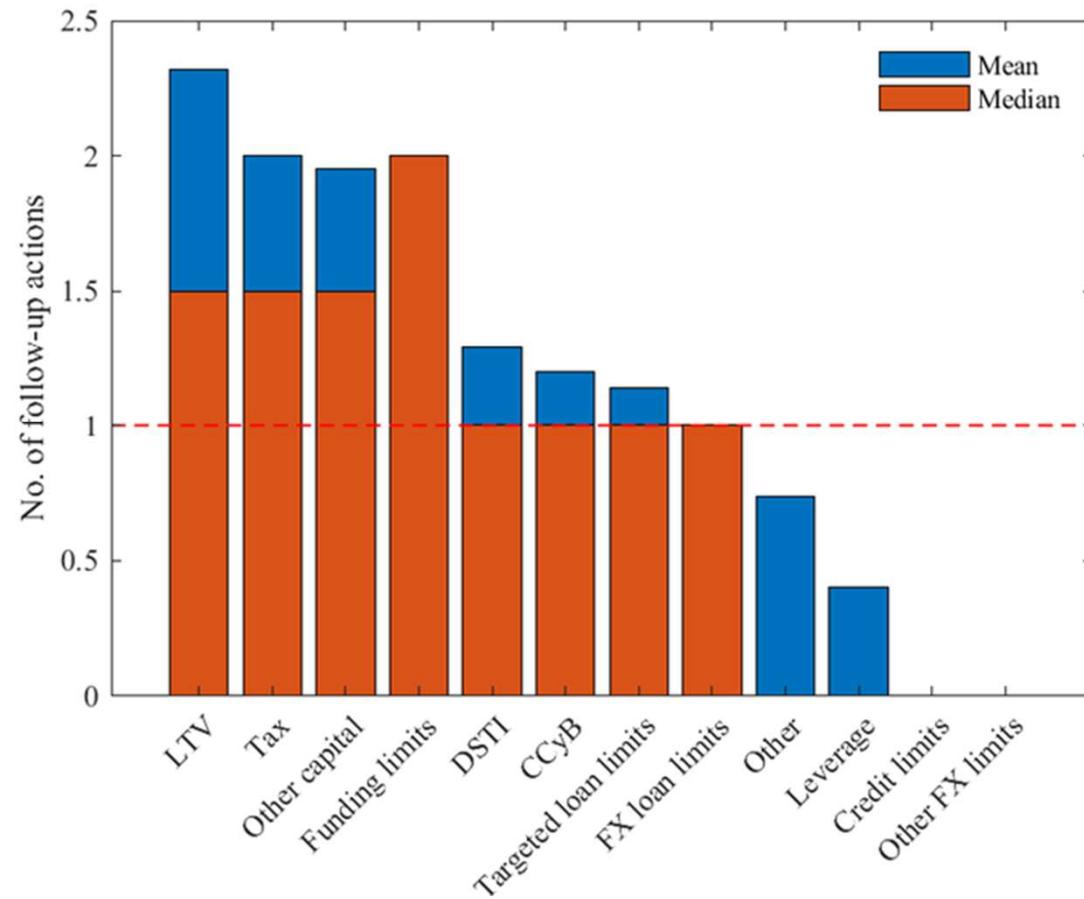


Source: IMF iMaPP Database

## Which tools are “cyclical” and which are “structural”?

- 7 cyclical tools: LTV, taxes, risk weights, stable funding requirements, DSTI limits, CCyB and targeted loan limits
- 3 structural tools: leverage ratio, FX lending limits, “other”

Average number of follow-up macroprudential actions by tool category



## Most frequently used tool combinations

- Which package of policy tools is most frequently used by countries in this database?
- For 3-tool packages, the most commonly appearing combinations are:
  - {CCyB, LTV, Targeted loan limits}
  - {CCyB, LTV, Leverage ratio}
  - {CCyB, Tax, Targeted loan limits}

## Summary of the assessment

- A large number of macroprudential policy actions have been taken over the past decade
  - Some countries especially active: HK, Scandinavia
  - But average country has taken only 1 action per year
- Diverse set of tools in use – little evidence of a commonly-agreed core toolkit emerging , although the most common combination is CCyB, LTVs and risk weights
- Tools focused on nonbank leverage missing

## CCyB

- Not being used as intended. Some prominent countries did not activate at all prior to Covid (US, China). Those that did often used the CCyB as a surrogate for higher structural buffers (UK, HK, Scandinavia)
- What have we learned from this experience?
- 2 revised operating approaches:
  - Ditch the idea of countercyclical adjustment and focus instead on a structural (ie fixed) buffer
  - Adopt a quantitative rule to guide default adjustments in the CCyB. Cannot rely on judgement as there will always be a reason to postpone decision

Q4. What **impact** has macroprudential policy had?

## Impact of macroprudential policy

- Large literature assessing the impact of macroprudential policy on credit and house prices conditional on policy actions
  - Typical finding: there is at least a short-run effect on these variables
- The vast majority of policy changes in these studies are LTV tightenings
- This is distinct from assessing whether macroprudential policy has influenced overall financial system resilience and system dynamics

## Mixed picture

- Outside of some cases (Ireland, Sweden), hard to see that macroprudential policy has had a large impact on financial cycle dynamics
  - Capital buffers have been too small and were “unused”, and claims that bank performance during Covid vindicates the post-crisis regulatory framework are absurd given the scale of govt/central bank support
  - Resilience in the nonbank financial sector was exposed to be weak in March 2020
  - Household debt limits (LTI, LTV) were designed as insurance measures to bind only in a housing boom, although they have perhaps had some impact on particular cohorts of borrowers
- Softer measures taken by macroprudential authorities have probably been more effective
  - Bank stress tests during Covid as confidence-boosting measures
  - FPC’s Brexit checklist

## Overall summary

- **We lack of clear operational objectives for macroprudential policy** to guide central banks/regulators – this creates risks of an accountability/legitimacy gap, “framework hysteresis”, and opportunities to water down regulatory standards
- **Risk monitoring has generally worked well**, eg vulnerabilities in non-bank financial institutions highlighted extensively in FSRs before Covid crisis
- But **policy actions have generally been timid**, and lacking entirely in tackling identified issues in non-bank financial institutions – have we learned that it’s too difficult to operate a countercyclical regime?
- **Difficult to argue macroprudential policy tools have had significant impact;** softer measures have probably been useful