

# THE MACROPRUDENTIAL DIMENSIÓN OF FINANCIAL STABILITY

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II COURSE ON FINANCIAL STABILITY

Webex

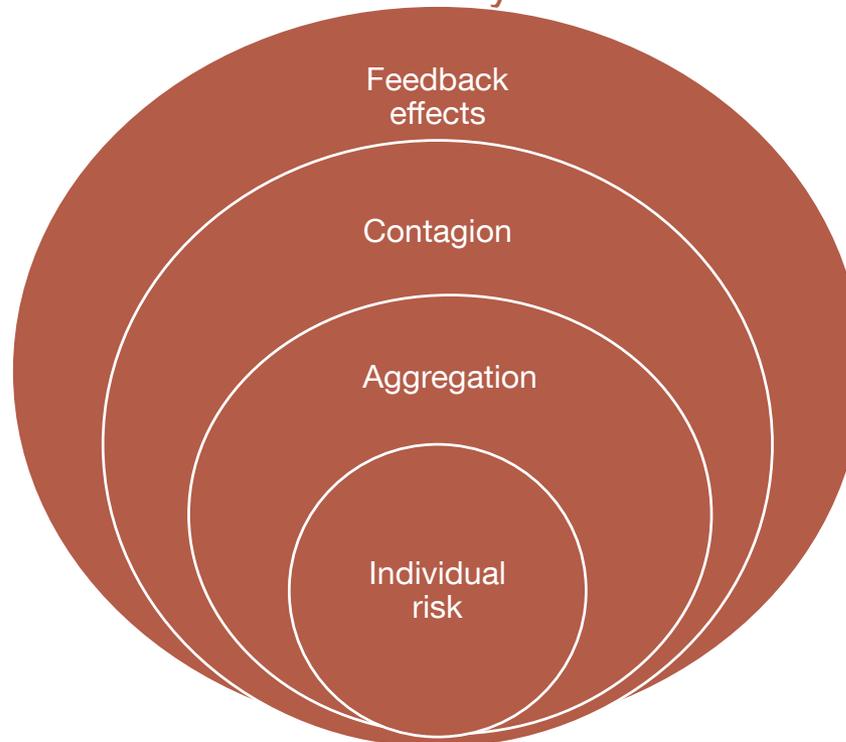
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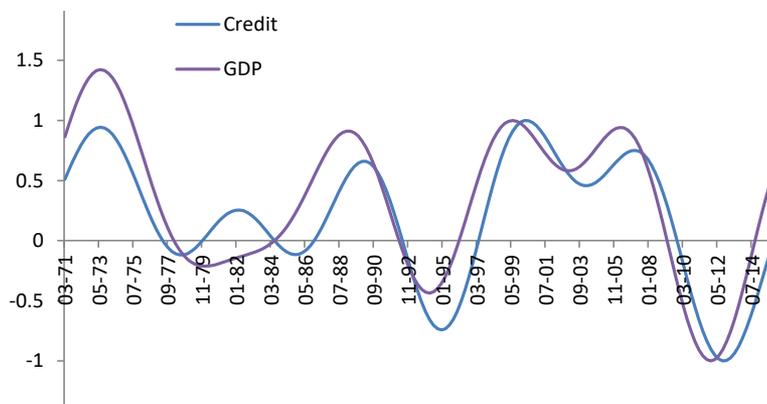
“The ultimate objective of macroprudential policy is to contribute to the safeguard of the stability of the **financial system as a whole**, including by strengthening the **resilience** of the financial system and **decreasing the build-up of systemic risks**, thereby ensuring a sustainable contribution of the financial sector to **economic growth**” (ESRB 2011 3)



- Aggregate risk: difficult to assess its level, both for institutions and supervisors
  - E.g.: How to assess whether there is excessive credit growth or too large maturity transformation imbalances?
- Contagion risk and interconnectedness: institutions do not internalize the impact of their actions on other agents
  - E.g.: Impact of failure or stress in systemic institutions



Economic and financial cycles



## Time dimension

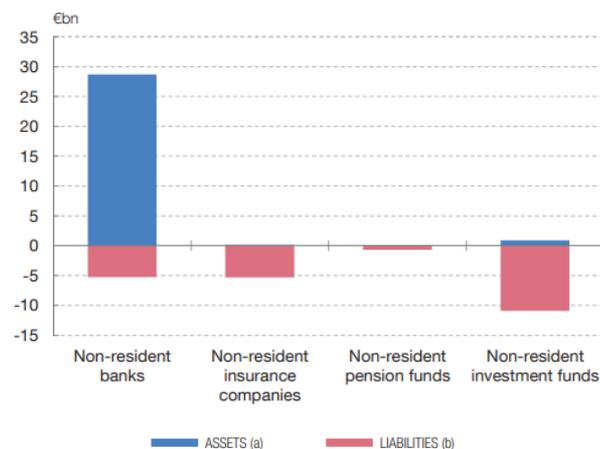
Macroprudential policy seeks to tackle the emergence of systemic risk over the credit cycle (the **time dimension**) ...

and, that arising from the size, complexity and interconnectedness of banks (the **structural cross-sectional dimension**)

## Structural dimension

Direct cross-border interconnections

1 RESIDENT BANKS



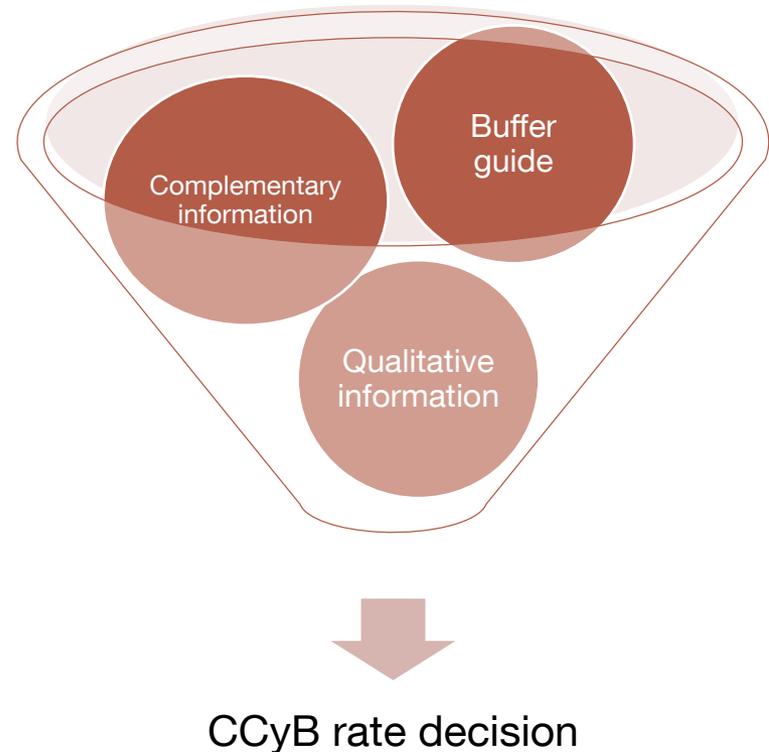
- In 2011, the EU established the **European Systemic Risk Board (ESRB)** as a coordinating body gathering the relevant national authorities (central banks and financial supervisors) plus the ECB, Commission and ESAs
- The implementation of **EU Capital Requirements legislation (CRR/CRD IV)** has provided the basis for a set of macroprudential instruments, including the CCyB and capital buffers for systemic institutions
- In 2014, together with the **SSM**, the **ECB** was conferred macroprudential powers on top of those of national authorities under the CRR/CRD IV
- A **new EU Capital Requirements legislation (CRRII/CRD V)** has been recently approved, with some significant enhancements to the macroprudential toolkit
- In parallel, many EU countries have introduced additional macroprudential instruments through national legislation

| Instrument   | Description   |
|--|---|
| Countercyclical capital Buffer (CCyB)                            | Additional capital buffer built up in expansions to absorb losses in recessions   |
| Systemically important institutions                              | Additional capital buffer for externalities caused by global systemically important institutions (G-SIIs) and domestic systemically important institutions (O-SIIs) |
| Systemic Risk Buffer (SRyB)                                      | Capital buffer to prevent and mitigate systemic risks not covered by the CCyB and G-SII/O-SII buffers. It can be applied sectorally.                                |
| Flexibility package  | Stricter requirements on capital, capital conservation buffer, liquidity, large exposures, disclosure and risk weights.   |
| Higher risk weights on real estate loans (Standardised Approach) | Only for standardised approach  |
| Higher minimum LGDs (internal models)                            | Only for internal models  |

- Additional instruments:
  - Sectoral CCyB
  - Sectoral limits to concentrations in sectors of economic activity
  - Borrower-based limits, potentially including LTV, LTI, DSTI, Maturity,...
- National instruments are not subject to top-up by the ECB
- Pending secondary-level legislation (“Circular”) to make these new instruments fully operational

## Countercyclical Capital Buffer (CCyB):

- The CCyB was developed by the BCBS in 2010
- CCyB decisions follow a “guided discretion” approach, where, in addition to qualitative information and expert judgment, specific quantitative indicators (primarily the credit-to-GDP gap) are used as a guidance
- The CCyB is in place since 1 January 2016 in Spain, and it is reviewed quarterly
- The Spanish *provisiones dinámicas* are widely held to be a precursor of the CCyB



## Global Systemically Important Institutions (G-SIB/G-SIIs):

- Identification through a global annual exercise coordinated by the BCBS/FSB
- Identification leads to capital buffer-setting based on a pre-defined scheme
- Buffers rates range between 1.0% and 2,5% of total RWAs.

## Other Systemically Important Institutions (D-SIB/O-SIIs):

- Annual identification by national authorities
- Buffers rates are flexibly set between 0% and 2.0% of total RWAs, subject to some ECB floors

Final buffer:  
 $\max\{G-SII, O-SII\}$

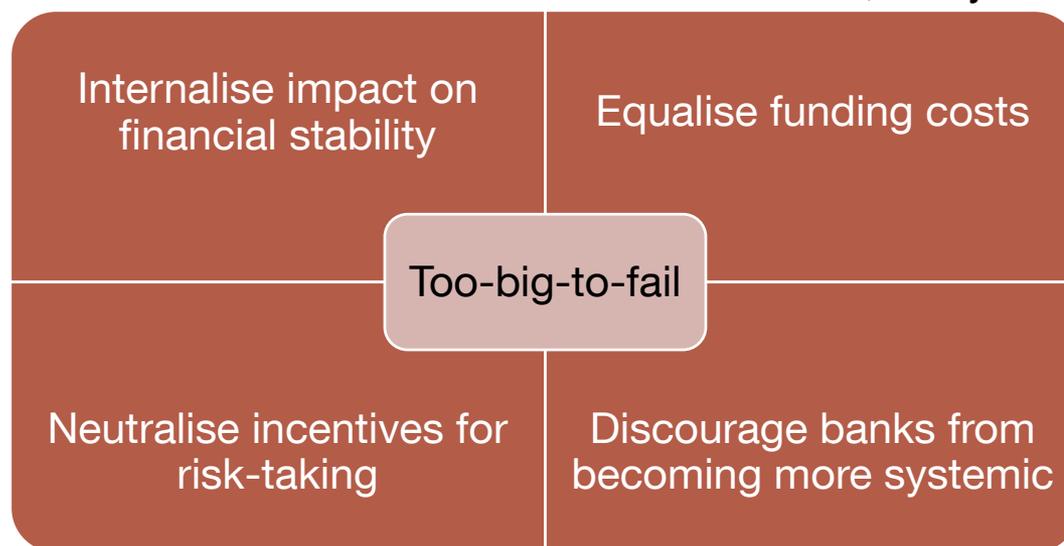


Chart 1  
LTV, LTP AND PROBABILITY OF MORTGAGE FORECLOSURE (a)

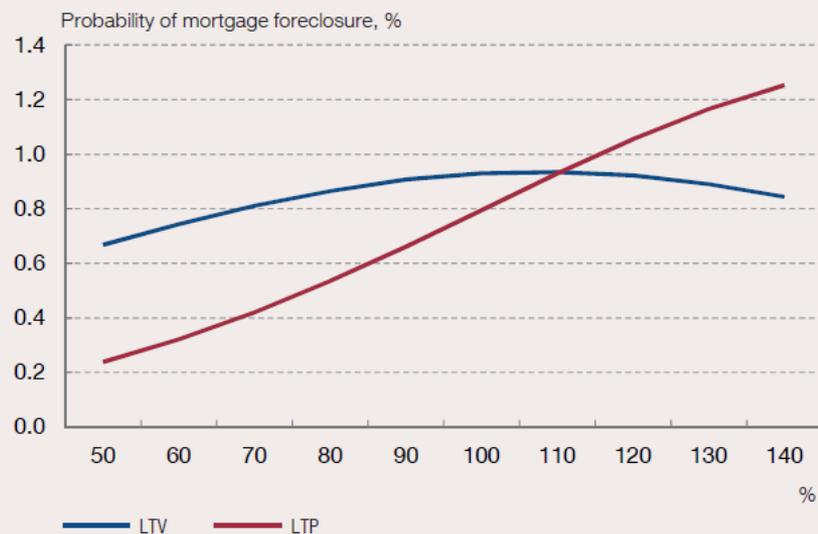
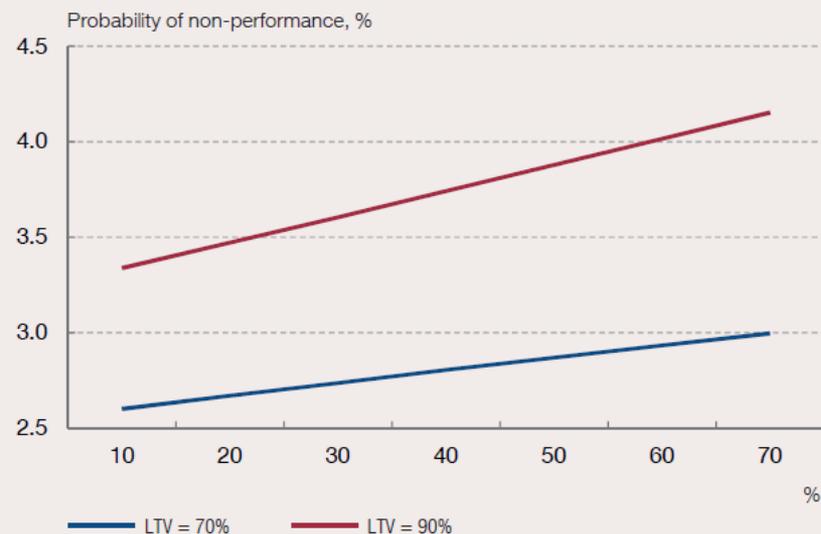


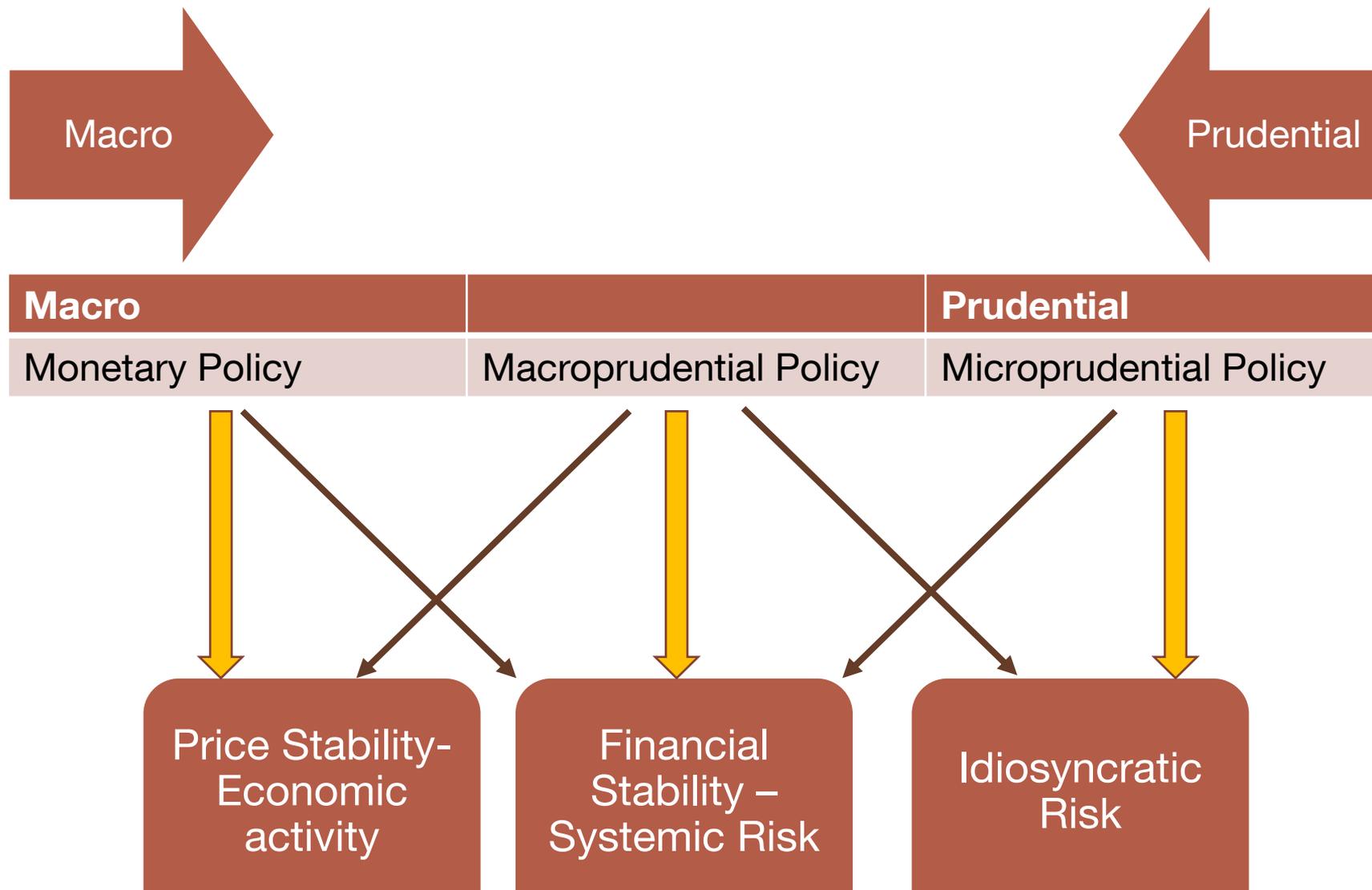
Chart 2  
INTERACTION BETWEEN LSTI AND LTV AND PROBABILITY OF NON-PERFORMANCE (a) (b)



**SOURCES:** Spanish Association of Registrars (*Colegio de Registradores*) and European DataWarehouse.

- a** The probability of occurrence of the stress event (mortgage foreclosure or non-performance) is estimated for loans which in theory have the same characteristics and which only change in the value of their LTV, LTP, maturity or LSTI, depending on the chart. Except in the case where the LTV ratio is above 80%, the confidence intervals of these estimates are small, so the changes in probability are statistically significant.
- b** The LTP ratio is plotted on the horizontal axis.

Source: Banco de España, Financial Stability Report, Autumn 2019



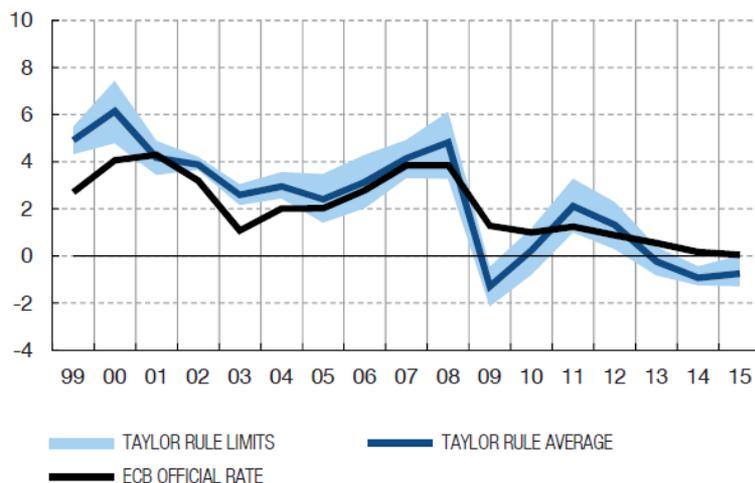
## Complementarities and interactions

- Macroprudential policy is particularly relevant in monetary unions, where it may allow national authorities to tackle the undesired effects of a common monetary policy
- However, they do not operate on the same dimensions
  - Monetary policy can actually change the innerent loans PDs, by changing interest rates
  - Macroprudential policy can limit the growth of systemic risk, or smooth the effects of its materialisation

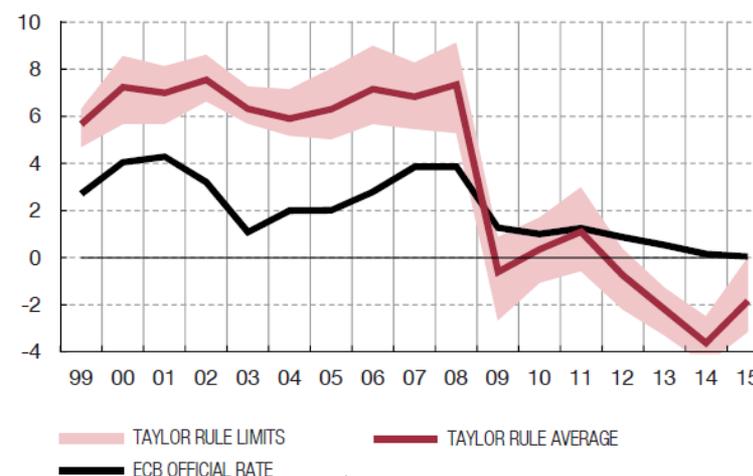
THE TAYLOR RULE

CHART 2

A EURO AREA



B SPAIN



Source: Estrada and Saurina (2016)

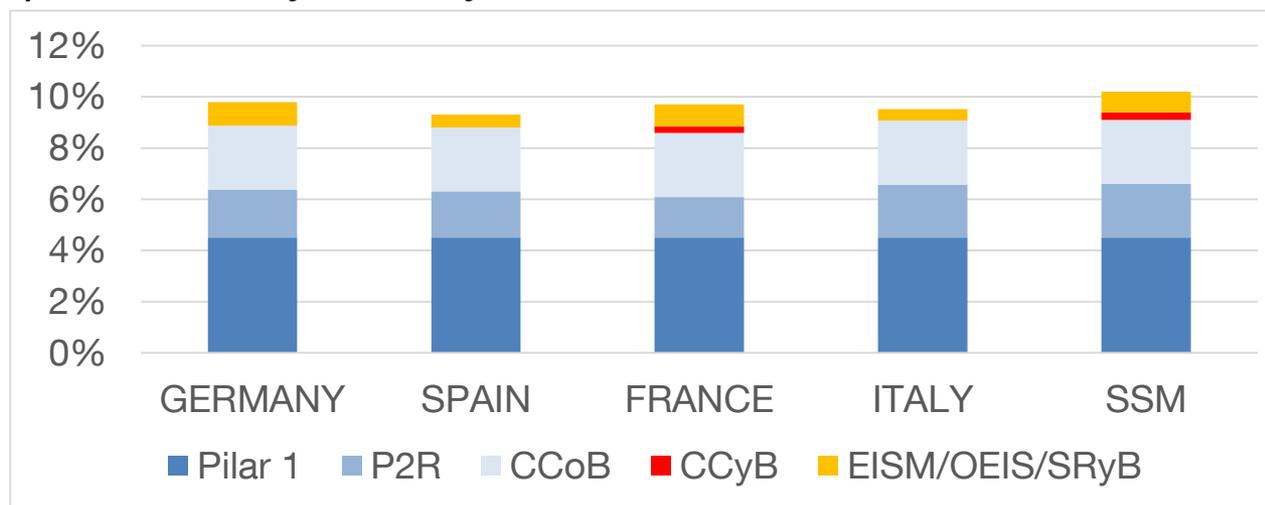
## Different goals

- **Microprudential (idiosyncratic):**
  - Limit the risk of failure of individual institutions, best justified in terms of depositor/investor protection
  - The behaviour of individual institutions does not affect the aggregate evolution, which is taken as given
- **Macroprudential (systemic)**
  - Limit the costs of financial distress on the economy
  - Aggregate risk depends on the collective behaviour of institutions (endogeneity)
  - Fallacy of composition: some actions could appear individually rational but, in aggregate terms, result in undesirable outcomes, owing to the externalities involved

## Buffer usability and lessons from the Covid-19

- Most countries have faced the current crisis with very limited macroprudential buffers, as the covid-19 pandemic has been an exogenous shock against which the current macroprudential framework was not designed
- This significantly reduces the capacity of macroprudential policy to mitigate the economic effects of the pandemic
- Going forward, we should revise the framework to make it more robust against all potential shocks (i.e.: endogenous and exogenous). This may involve a larger weight for countercyclical buffers in normal times

### Capital requirements by country before the outbreak of the Covid-19 pandemic



Source: ESRB, ECB and own calculations

Work in progress...still a long way to go

- A full analytical framework has yet to be developed with well-defined and quantifiable final objectives and a set of indicators and instruments of sufficiently tested effectiveness
- Uniform criteria are lacking as to the institutional arrangements governing the definition and application of macroprudential policy and, in particular, as to the role the central bank, the micro-prudential supervisor and the government authorities should play
- New crises show us additional failures in the framework



ILLUSTRATIONS BY GIULIA SAGRAMOLA

THANK YOU FOR YOUR ATTENTION