

## 9. Assessment of capital adequacy

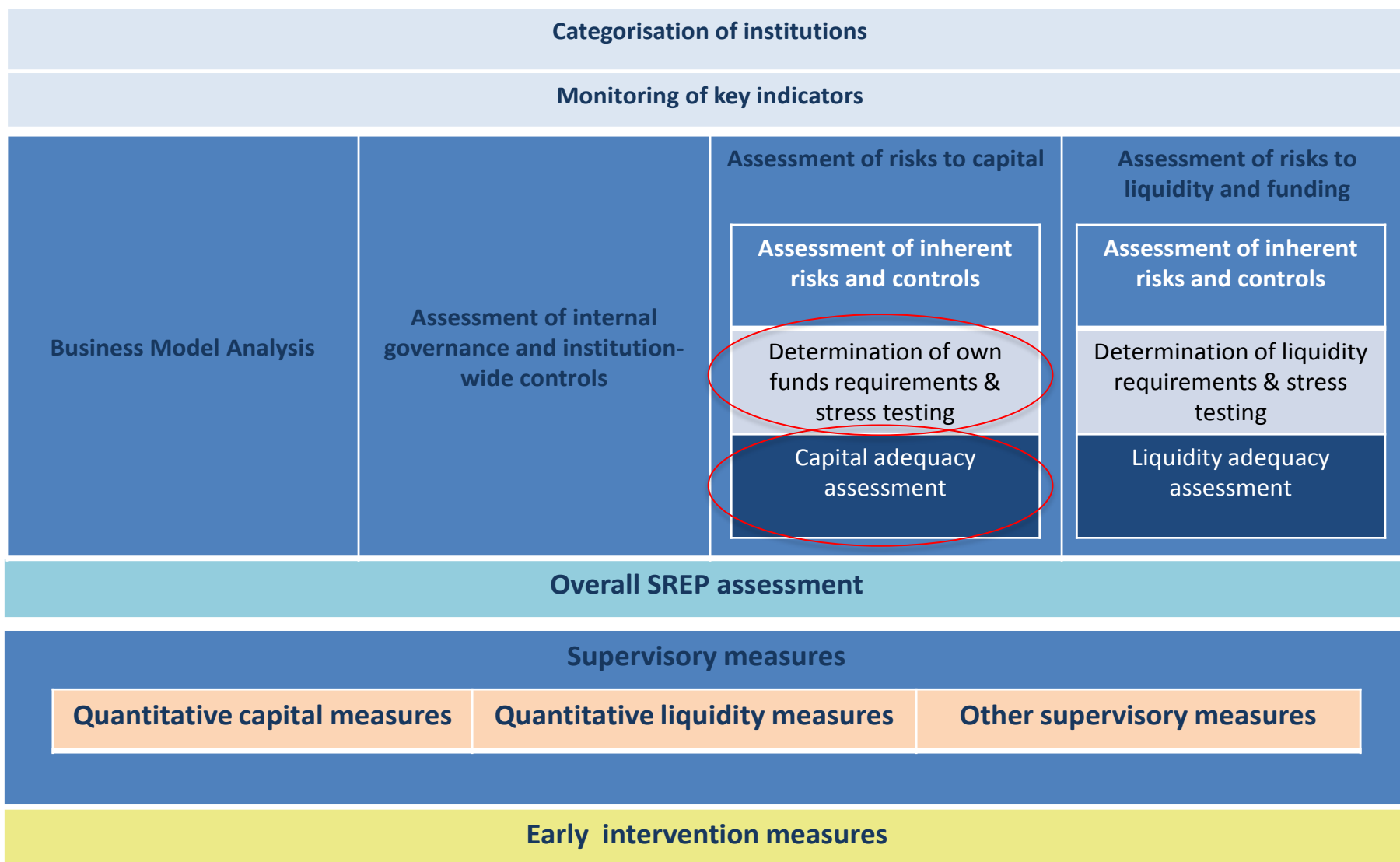
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10-11 June 2015 | EBA Seminar on SREP Guidelines

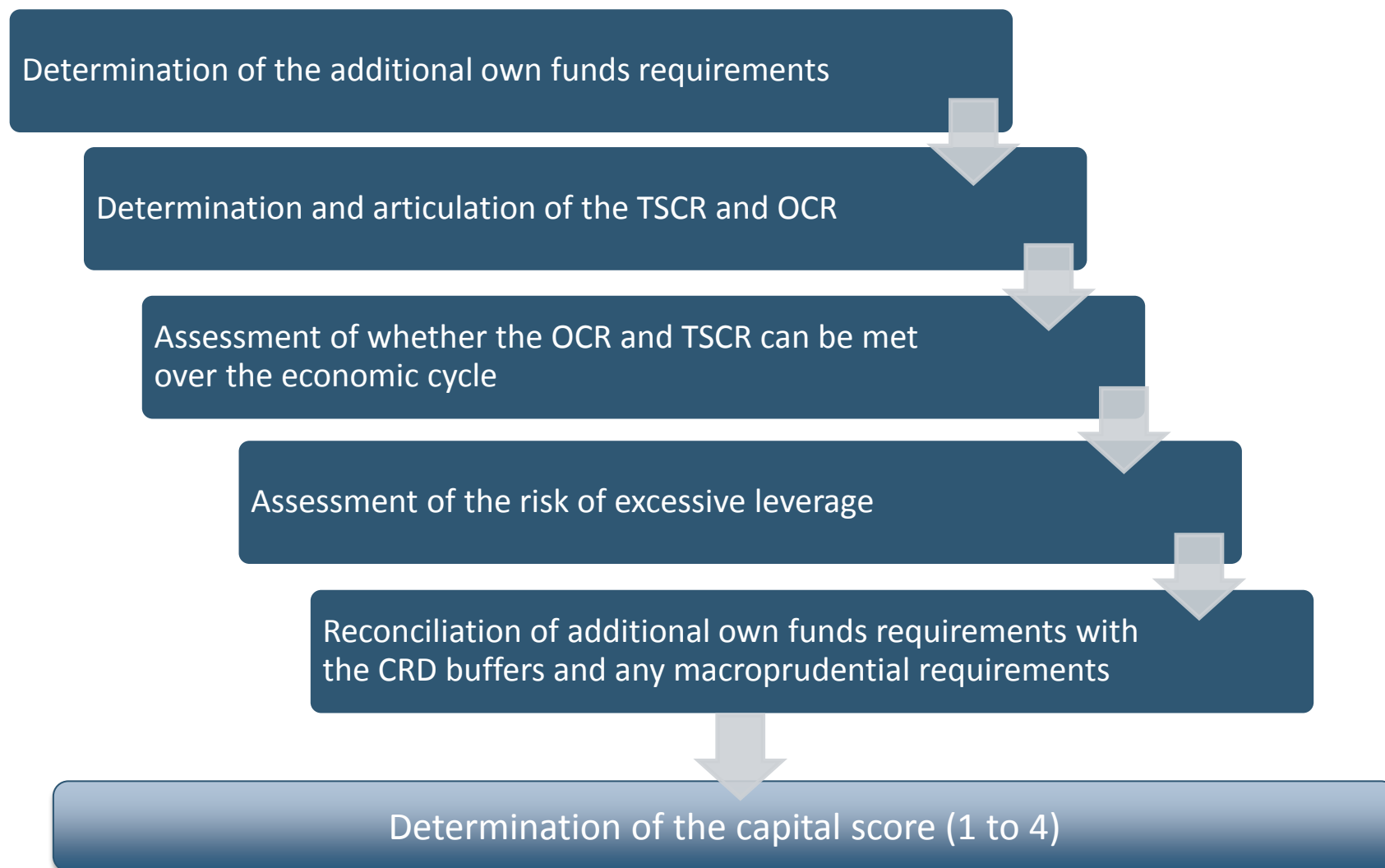
# Outline

1. Capital adequacy assessment overview
2. Determination of additional own funds requirements
3. Determination and articulation of TSCR and OCR
4. Meeting the requirements over the economic cycle – stress testing
5. Reconciliation with CRD buffers and macroprudential measures
6. Scoring

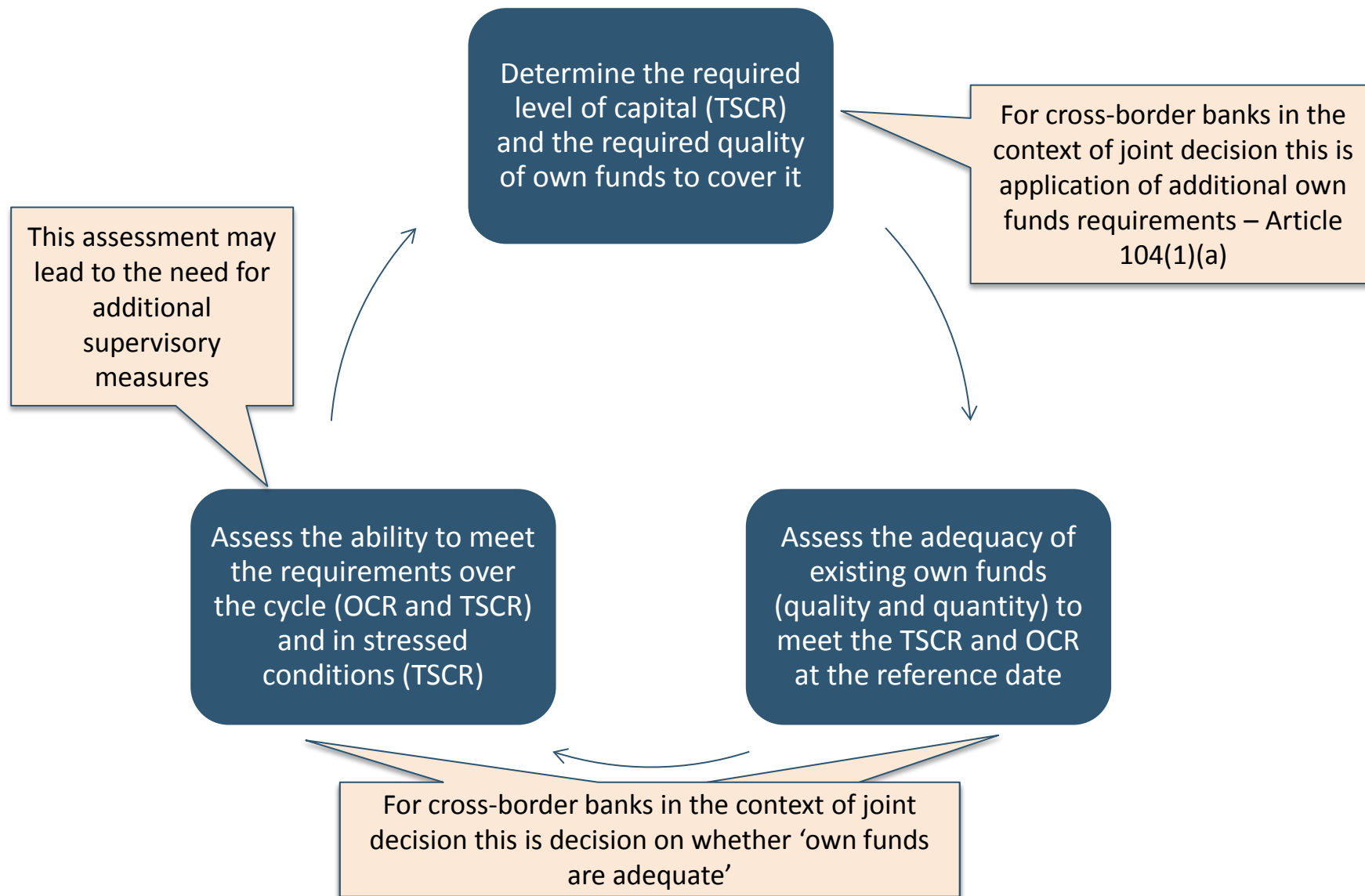
# Capital adequacy assessment in the SREP framework



## SREP capital adequacy assessment process (1/2)



## SREP capital adequacy assessment process (2/2)



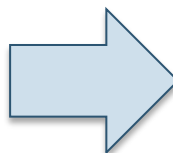
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# SREP determination of capital requirements (1/2)

SREP would lead to binding additional own funds requirements for:

1. Risk of unexpected losses over 12 months period not covered by minimum requirements
2. Risk of expected losses over 12 months insufficiently covered by provisions
3. Risk of underestimation of risk due to model deficiencies
4. Risks arising from governance deficiencies



- Risk-by-risk basis
- ICAAP calculations as starting point, if assessed as reliable or partially reliable
- Outcomes of supervisory benchmarks (to challenge ICAAP calculations or as alternative starting point)
- Other relevant inputs, including outcomes of risk assessment, peer-group comparisons, IRB and market risk benchmarks published by EBA etc.

- Intra-risk diversification allowed, with P1 requirements being a minimum on a risk-by-risk basis
- No inter-risk diversification allowed

# SREP determination of capital requirements (2/2)

SREP would lead to binding additional own funds requirements for:

## 1. Risk of unexpected losses over 12 months period not covered by minimum requirements

- Examples: IRRBB, (credit) concentration risk, pension risk

## 2. Risk of expected losses over 12 months insufficiently covered by provisions

- Examples: expected losses on other material risks (e.g. IRRBB) not covered by minimum requirements

## 3. Risk of underestimation of risk due to model deficiencies

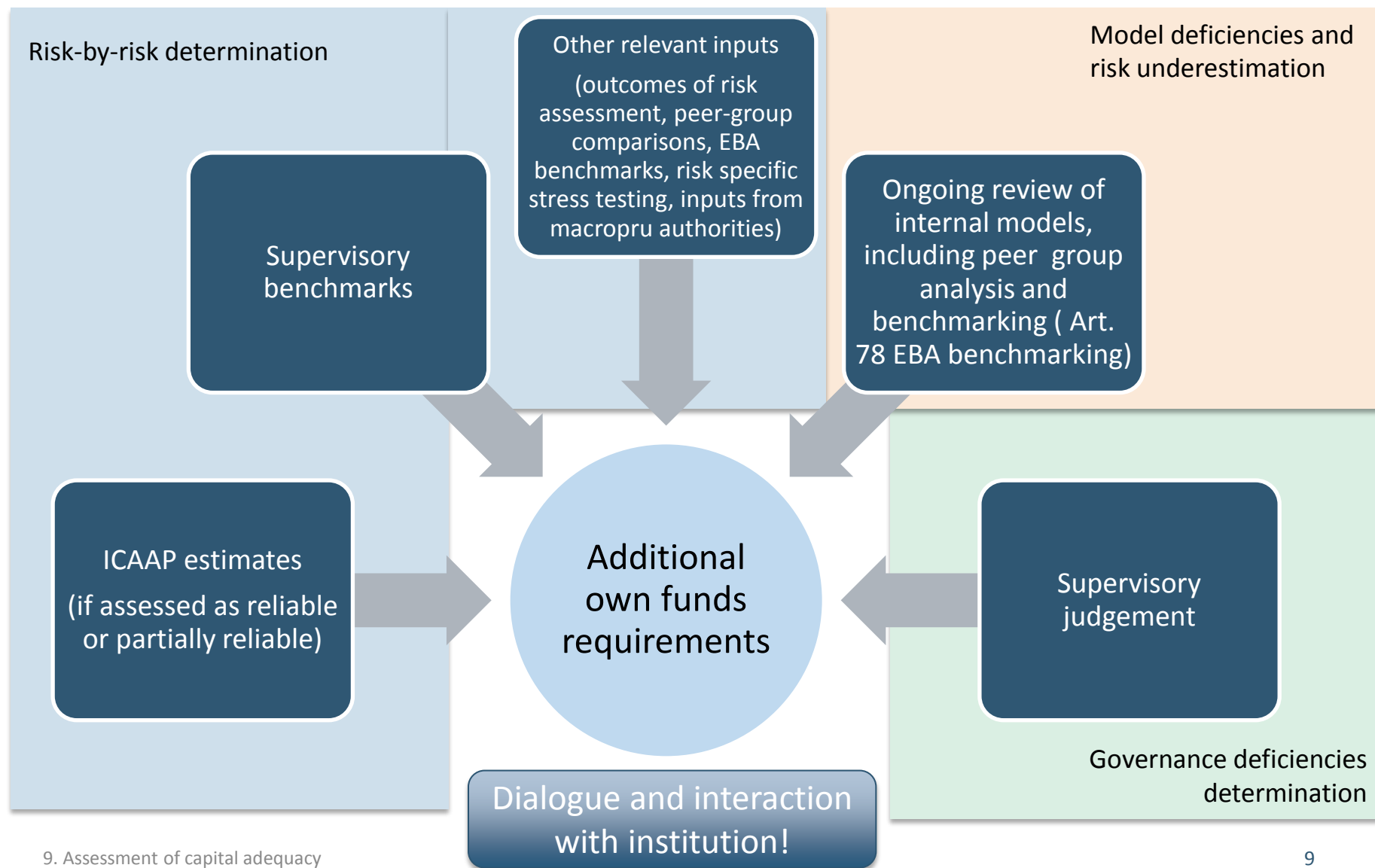
- Examples: deficiencies in already approved IRB models leading to underestimation of risk due to calibration, parameterisation, data quality etc.
- Based on the findings from the ongoing model review, or peer analysis based on EBA benchmarking
- Additional own funds requirements would be usually seen as a temporary measure until actual deficiencies are addressed

## 4. Risks arising from governance deficiencies

- Primarily findings from the assessment of internal governance and institution-wide controls, if other measure would not have immediate desired effect
- Additional own funds requirements would be usually seen as a temporary measure until actual deficiencies are addressed



# Inputs into the determination



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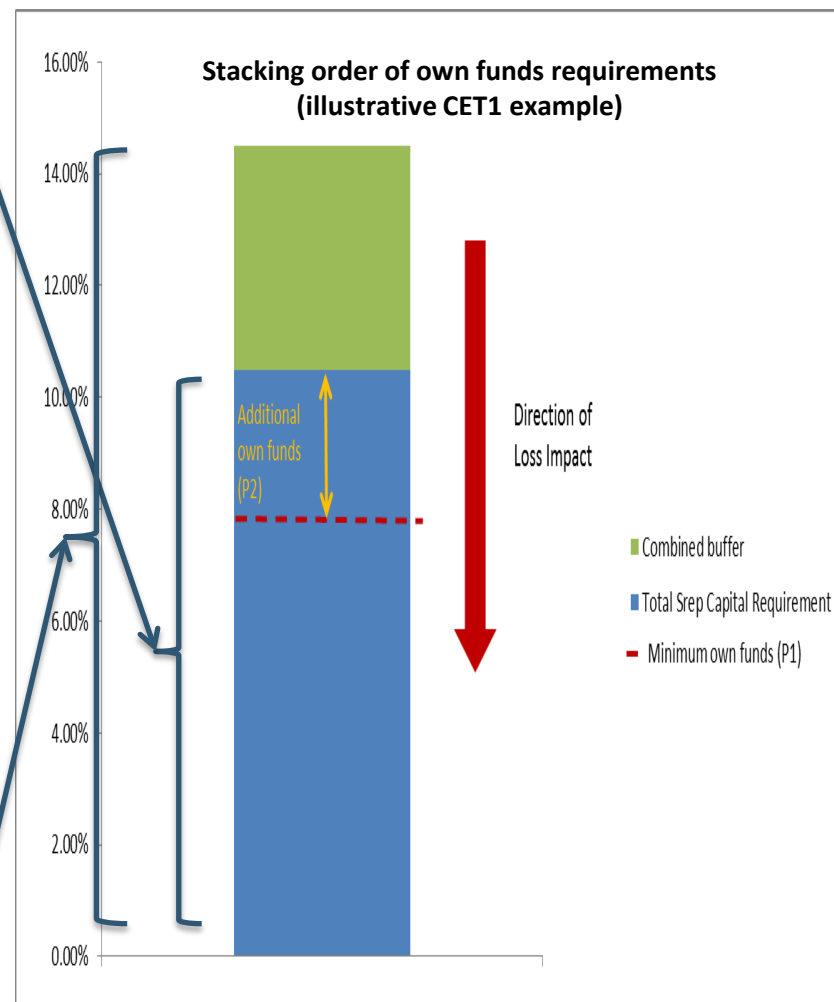
## Determination and articulation of TCR and OCR (1/2)

Total SREP Capital Requirements (TSCR) = minimum (Pillar 1) + additional (Pillar 2) own funds requirements that are binding and need to be met at all times

$$TSCR \text{ ratio} = 8\% \times \frac{TSCR \times 12.5}{TREA}$$

- Only regulatory own funds are allowed to cover TSCR
- Minimum composition (56% CET1 and 75% T1 for most of the risks)

Overall Capital Requirement (OCR) = TSCR + CRD buffers + macroprudential requirements



## Example of TSCR articulation

As of DATE and until otherwise directed, INSTITUTION is required to hold a TSCR of X% of the TREA:

- 8% (comprising at least x% CET1 and x% T1) represents own funds requirements specified in Article 92 of Regulation (EU) No 575/2013;
- X% represents additional own funds in excess of the requirements specified in Article 92 of Regulation (EU) No 575/2013, of which:
  - X% (comprising at least x% CET1 and x% T1) is to cover unexpected losses identified through the SREP, and
  - X% (comprising at least x% CET1 and x% T1%) is to cover OTHER [e.g. governance concerns] identified through the SREP

## Example of OCR articulation

As of DATE and until otherwise directed, INSTITUTION is required to hold an overall capital requirement (OCR) of X% of the TREA, of which at least X% should be CET1 and at least X% should be T1

Of this X% OCR:

- X% represents the total SREP capital requirement (TSCR), which must be met at all times, of which:
  - 8% (comprising at least x% CET1 and x% T1) represents own funds requirements specified in Article 92 of Regulation (EU) No 575/2013;
  - X% represents additional own funds in excess of the requirements specified in Article 92 of Regulation (EU) No 575/2013, of which:
    - X% (comprising at least x% CET1 and x% T1) is to cover unexpected losses identified through the SREP, and
    - X% (comprising at least x% CET1 and x% T1) is to cover OTHER [e.g. governance concerns] identified through the SREP.
- X% represents the combined Directive 2013/36/EU capital buffer (100% CET1) requirement applicable to INSTITUTION, of which:
  - 2.5% represents the capital conservation buffer requirement;
  - X% represents the OTHER [e.g. counter-cyclical capital buffer (CyCB) and O-SII] requirement

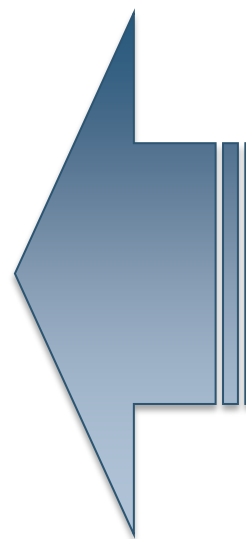
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# Meeting requirements over the economic cycle (1/2)

Range of stress tests used that can be used to determine whether capital requirements are met over the cycle:

1. Outcomes of institutions' own ICAAP stress tests under severe, but plausible scenario
2. Outcomes of supervisory stress tests (Article 100 of CRD):
  - Prescribing institutions to run a specific scenario ('anchor' scenario) or specific assumptions
  - Conducting system-wide stress test under consistent methodologies and scenarios that can be run either by:
    - institutions
    - competent authorities



[Future] Revised Guidelines for stress testing would specify requirements for all types of such stress testing, including:

- Severity of scenarios
- Time horizon
- Managerial assumptions and intervention actions
- Etc.

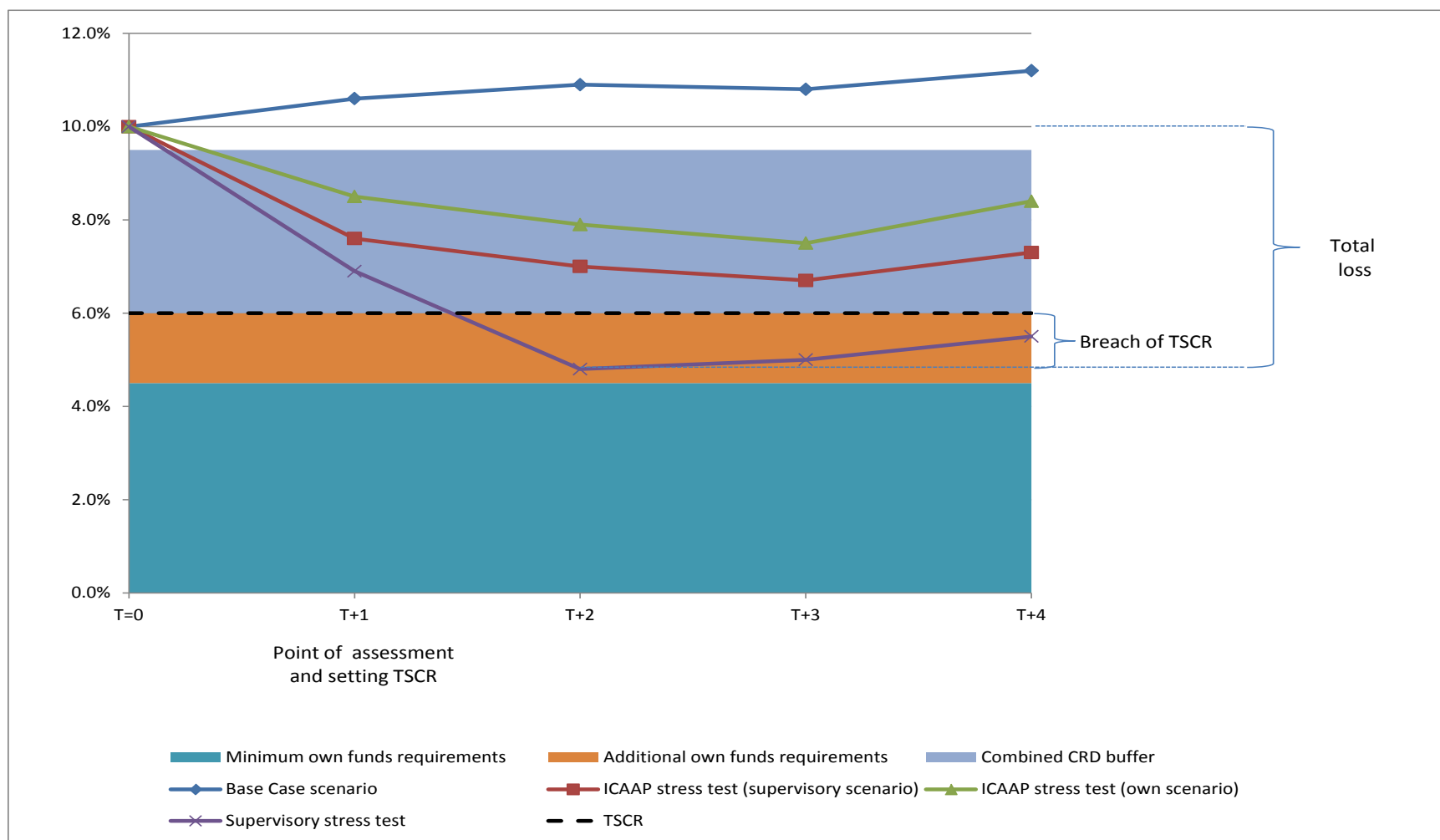
## Meeting requirements over the economic cycle (2/2)

Issues to keep in mind when reviewing the outcomes of the stress tests:

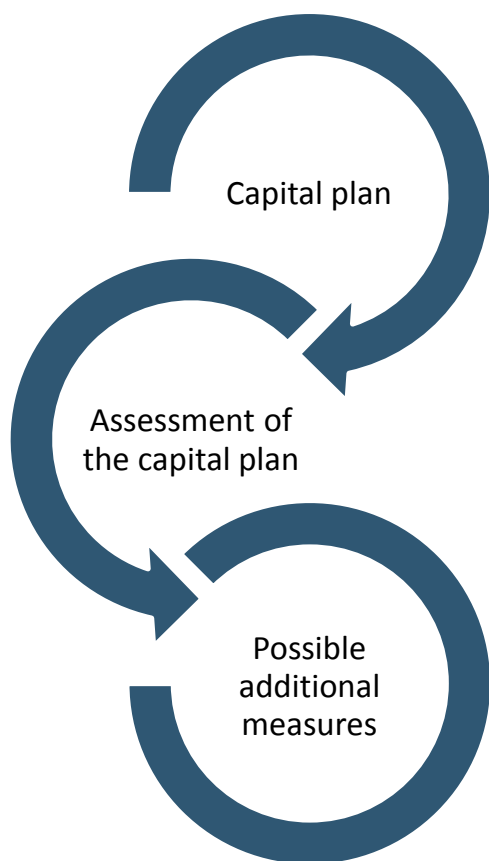
- The starting point for resources should be the institution's available own funds at the start of the stress
- To identify a breach of the OCR, any assumptions with regard to macroprudential requirements (e.g. changes in the level of requirements or which buffers can be used) over the scenario horizon should be agreed with the macro-prudential (designated) authority, however:
  - General assumptions that CRD buffers (major part of OCR) can be breached under the adverse scenario, but not under the baseline



# Illustrative example



## Supervisory reaction (1/2)



- Capital plan to be requested, in case outcomes of stress test reveal breaches of TSCR or target ratio set by the competent authority in the system-wide stress test
- Capital plan should contain institution's proposal of mitigating management actions, including setting aside additional capital buffers, where relevant
- Competent authorities should review and consider the plan and appropriateness of credible mitigating management actions in the context of:
  - legal and reputational constraints of the institution, noting the extent to which they are already stated in public documents (e.g. dividend policies) and the institution's business plan and risk appetite statements
  - broader macro-economic considerations

The assessment of the plan may results in the agreement with it, or may necessitate additional supervisory actions

## Supervisory reaction (2/2)

1. Competent authority assess the credibility of the capital plan and mitigating actions
2. If further needed, consider additional measures:
  - Use of net profits to strengthen capital
  - Dividend restrictions
  - Specific treatment of assets
3. Consider additional own funds requirements, resulting in the review of TSCR when there is an imminent risk of the breach of TSCR
4. Consider additional own funds requirements for systemic risk (where target ratio is set above TSCR and stress test reveals its breach)

### Things to consider

- Time horizon, occurrence of the breach compared to the starting point
- Magnitude of breach compared to the starting point
- Magnitude of absolute and relative decrease compared to the starting point
- Observed evolution of macro-economic conditions, actual level of capital
- Position of macro-prudential authorities on breaches of CRD buffers under the assumed scenario

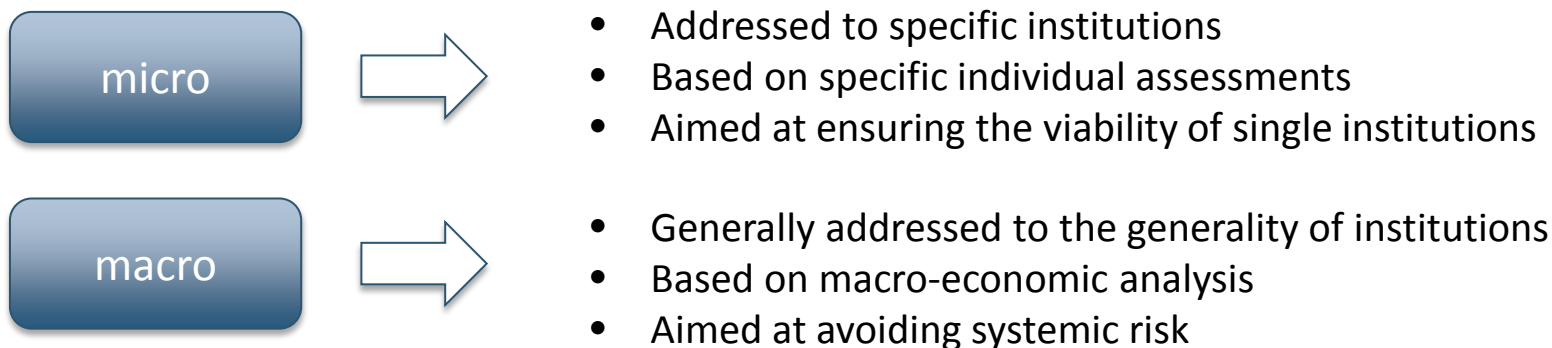
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# Micro- and macroprudential supervision

Both micro- and macroprudential supervisions aim at the stability of the financial system

The main difference is in the scope, instruments adopted and nature of measures



**Coordination** between authorities is crucial

- Micro measures can lead to overshooting macroprudential objectives
- Macroprudential measures can influence the business models and in some cases may reduce the ability of competent authorities to discriminate

# SREP and macroprudential requirements

When determining the additional own funds or other capital measures, competent authorities should take into consideration the existence of macro-prudential requirements

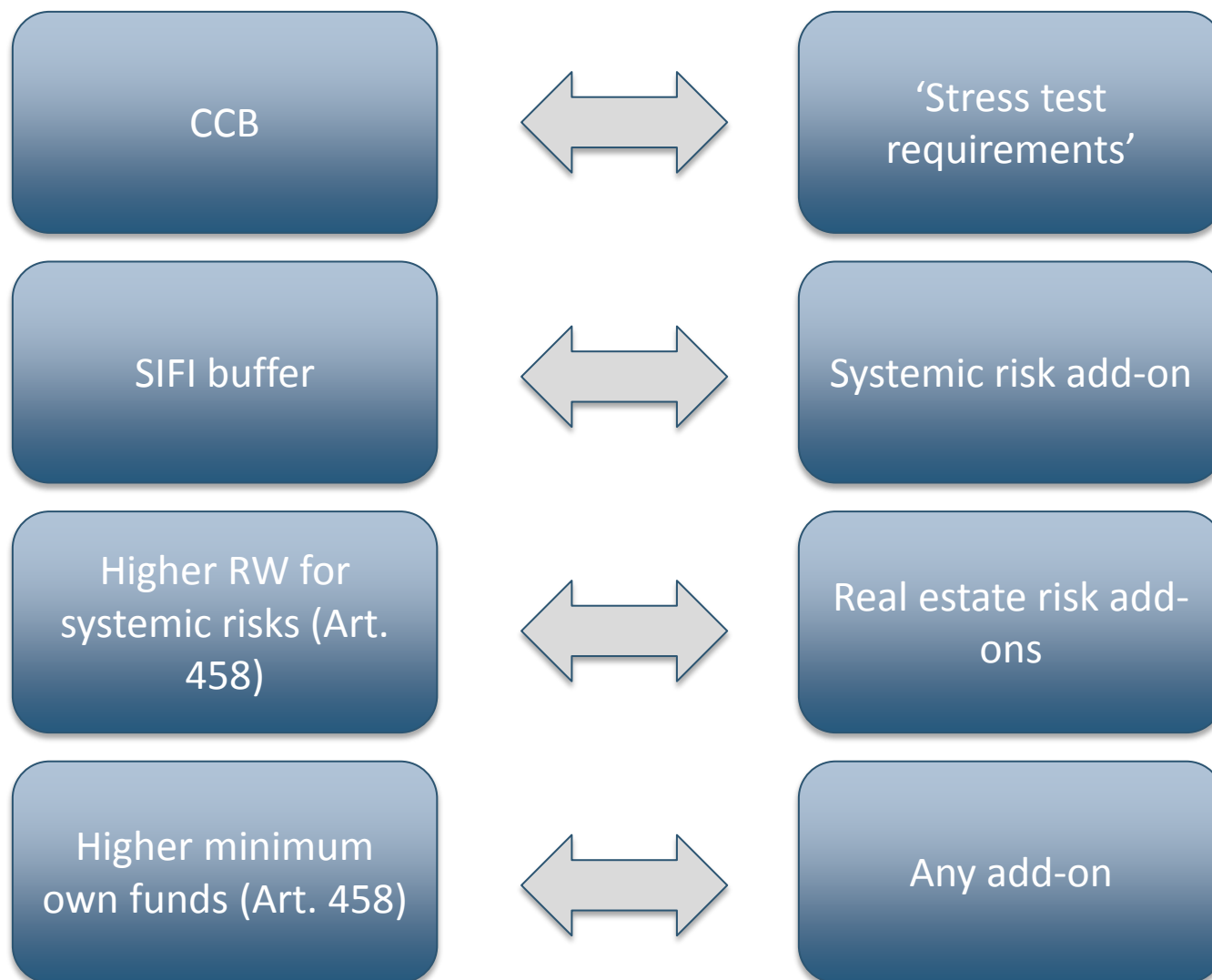
**No additional own funds requirements (or other capital measures)** should be imposed **where the risk is already covered by capital buffer requirements** and/or additional macro-prudential requirements

CRR and CRD envisage several ‘macroprudential’ measures in terms of capital requirements

CRD	CRR
<ul style="list-style-type: none"> <li>• SIFI (Art. 131)</li> <li>• CCY (Art. 138)</li> <li>• SRB (Art. 133)</li> <li>• CCB (Art. 129)</li> <li>• Other measures (Art. 103)</li> </ul>	<ul style="list-style-type: none"> <li>• LGD (Art. 164)</li> <li>• RW (Art. 124)</li> <li>• Others (Art. 458)</li> </ul>

- Some are imposed by **competent authorities** and others by **designated authorities**

## Examples of possible overlaps



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# Scoring the capital adequacy

Competent authority should form a view on whether existing own funds resources provide sound coverage of the risks to which the institution is or might be exposed, summarise it and support the viability score

Score	Supervisory view	Considerations
1	The quantity and composition of own funds held pose no discernible risk to the viability of the institution.	<ul style="list-style-type: none"> <li>The institution holds a level of own funds comfortably above the OCR and is expected to do so in the future.</li> <li>Stress testing does not reveal any discernible risk regarding the impact of a severe but plausible economic downturn on own funds.</li> <li>The free flow of capital between entities in the group, where relevant, is not impeded, or all entities are well capitalised above supervisory requirements.</li> <li>The institution has a plausible and credible capital plan that has the potential to be effective if required.</li> <li>The institution's leverage ratio is comfortably above any regulatory minimum and there is no discernible risk of excessive leverage.</li> </ul>
...	...	...
4	The quantity and composition of own funds held pose a high level of risk to the viability of the institution.	<ul style="list-style-type: none"> <li>The institution is near to breaching its TSCR.</li> <li>Stress testing reveals that the TSCR would be breached near the beginning of a severe but plausible economic downturn. Management actions will not credibly address this.</li> <li>The free flow of capital between entities in the group, where relevant, is impeded.</li> <li>The institution has no capital plan, or one that is manifestly inadequate.</li> <li>The institution's leverage ratio is near to breaching any regulatory minimum. There is a high level of risk of excessive leverage.</li> </ul>



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